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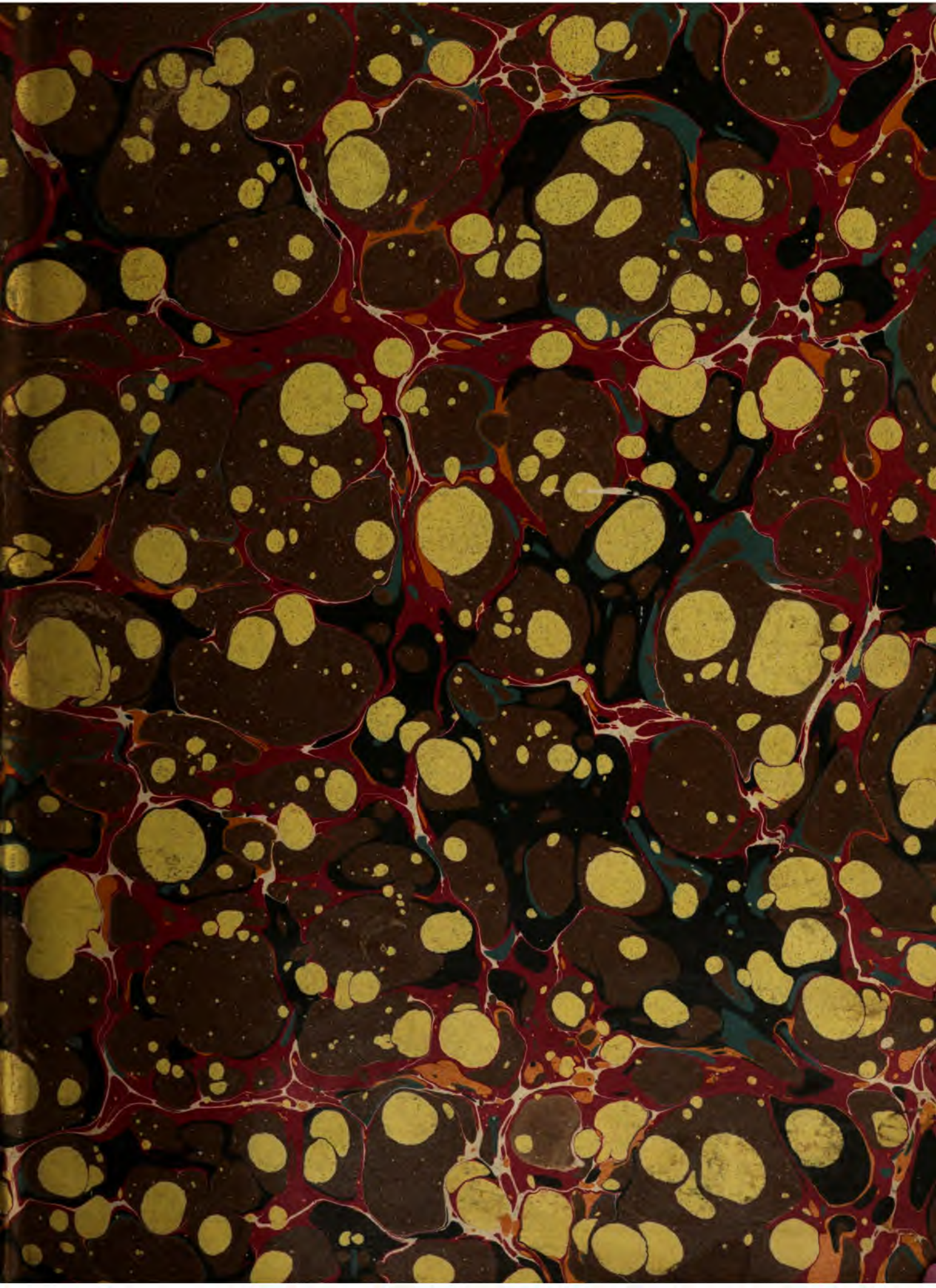
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BIOGRAPHY

OR

Third Division of "The English Cyclopædia,"

CONDUCTED BY

CHARLES KNIGHT.

SUPPLEMENT.

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NOTICE.

THIS SUPPLEMENT comprises many hundreds of additional Memoirs of persons of eminence, which were of necessity—owing to the price and limits of the ENGLISH CYCLOPÆDIA—omitted in the Original Edition. Memoirs of Living Persons, of historical importance, who have attained distinction since, have also been freely introduced; as well as Supplementary Notices of those who were included in the Cyclopædia as Living Persons, but who have since passed away.

BIOGRAPHY.

SUPPLEMENT: PART I.

The abbreviations E.C. and E.C.S. signify the *English Cyclopædia* and the *English Cyclopædia Supplement*.

The asterisk * prefixed to the name indicates that the subject of the memoir is still living.

1 AA, CHRISTIAAN KAREL HENDRIK VAN DER.

ABBADIE, JAMES, D.D.

2

A

AA, CHRISTIAAN KAREL HENDRIK VAN DER, an eminent divine of the Lutheran Church at Haarlem, was born on the 25th August, 1718, at Zwolle, of which town his father was an assistant minister. He studied theology successively at Leyden and Jena; in 1739, was called to the pastorate of the Lutheran Church at Alkmaar, and three years after to that of Haarlem. Here he remained until his death, which took place in the night between the 22nd and 23rd September, 1793. In the previous year, 1792, he had celebrated the jubilee or fiftieth anniversary of his ministry at Haarlem, in commemoration of which festival a silver medal was struck by J. G. Holtzhey, an artist of reputation. His portrait, engraved by Vrijdag, is given in Chalmot's 'Biographisch Woordenboek der Nederlanden.' His motto, "God is Love," was the constant rule of his pastoral conduct, and the motive of a system of divinity which had the characteristic of liberality. As a preacher he had a distinguished reputation. His chief claims to general consideration rest, however, on his connection with the Scientific Society, 'Hollandsche Maatschappij van Wetenschappen,' which he largely contributed to establish at Haarlem, in 1752. He continued, to the time of his death, one of the most zealous and enlightened secretaries of this Society, to the Transactions of which he contributed several articles in Natural History; and in which he was mainly instrumental in instituting, in 1778, a separate branch (*Oeconomischen tak*) for the furtherance of Economical Science.

AA, HILDEBRAND VAN DER, a Dutch engraver who flourished in the early part of the 18th century. He was the brother of Pieter Van der Aa, the celebrated bookseller of Leyden, noticed below, for whose publications he engraved numerous plates. Many of these are unsigned, and are coarsely executed—business rather than artistic works. Among the best known plates to which he put his name are the set of twelve portraits of members of the Visconti family; the portrait of Archbishop Otho in the 'Illustrium Virorum Imagines,' and Adrian Pars' frontispiece to the 'Index Batavicus,' 1701.

AA, PIETER VAN DER, a celebrated jurist, known also under the Latinized form of Petrus Vanderanus, was born at Louvain about the year 1530, and died at Luxembourg in 1594. His parentage is unknown; but it has been claimed for him that he was of an ancient family of Brabant, several of whose members had been variously distinguished for their position and patriotism. His first work, published when the author "had scarcely ceased to be a learner," was called 'Prochiron sive Enchiridion Judiciarum, libris quatuor; cum ampla et utilisima Præfatione de Ordine Judiciario apud Veteres usitato,' Lovanii: typis Steph. Valerii, 1558, 8vo. Van der Aa took his degree as *Utriusque Juris Doctor* on the 3rd of October, 1559; and the next year published his small but suggestive and influ-

ential treatise, entitled, 'De Privilegiis Creditorum Commentarium,' Antwerpæ; apud Johannem Bellerum, 1560, 8vo. The principal topics discussed in this work are,—The Origin and general Doctrine of Privileges; what Creditors are privileged; Forms of Procedure, by which Creditors can claim their Rights; what Heirs are liable to the Creditors of a Person deceased. In the year 1562, Van der Aa succeeded John Ramus as Professor of the Institutes in the University of Louvain. He was appointed assessor to the Supreme Court of Brabant at Mechlin, in 1565; and in 1574 was promoted to an office which he held till his death twenty years after, the Presidency of the High Court of Justice in Luxembourg. He does not appear to have interested himself greatly in the politics of his age and country. His life was rather practical and professional; and, with the exception of the three years during which he lectured on the Institutes at Louvain, he was occupied in the discharge of his judicial functions.

AA, PIETER VAN DER, was a distinguished geographer and bookseller of Leyden, where he commenced business about the year 1682. Of his death nothing is known more precisely than that it took place some time between the years 1729 and 1735. It is probable that he was the grandfather of the Lutheran pastor and savant, Chr. K. H. Van der Aa, noticed above. Among the works published by Pieter Van der Aa are the great collection of Gronovius on Greek Antiquities, 'Thesaurus Antiquitatum Græcarum,' (Lugd. Bat. 1697,) in thirteen volumes; that of Grævius on Roman Antiquities, 'Thesaurus Antiquitatum Romanorum,' (Traj. ad Rhen. 1694,) in twelve volumes; that by Grævius and Burmann on the Antiquities and History of Italy, 'Thesaurus Antiquitatum et Historiarum Italiæ,' (Lugd. Bat. 1704-23), which consists of nine parts in thirty volumes. He also published a similar work, with a similar title, by the same editors, on Sicily, in fifteen volumes (Lugd. Bat. 1723-5); and Leclerc's edition of the works of Erasmus, in eleven volumes (Lugd. Bat. 1703-6). All these works comprise eighty-six volumes in folio, of standard books, a number which no publisher before or since has equalled. Towards the close of his life he published, under the title of the 'Pleasant Gallery of the World,' 'La Galerie Agréable du Monde,' (Leide), a work in sixty-six thin folio volumes, often bound in thirty-three or twenty-two, consisting almost entirely of copper plates, and made up in a very inartificial manner from reprints of the embellishments scattered through many of his previous publications. He was, moreover, the publisher of several works in Dutch, devoted to an illustration of modern geographical enterprise and travels in various parts of the world. The works of Van der Aa are now rather remarkable for their voluminousness, than trusted for their accuracy.

ABBADIE, JAMES, D.D., Dean of Killaloe, was a native of

France, having been born at Nay, in the Basses-Pyrénées, in 1658. His parents being very poor, some of the wealthier members of the Protestant community at Béarn, whose attention had been drawn to the boy's talent, raised a fund for his support at school and college. He studied at Saumur, Paris, and Sedan, where he took the degree of doctor of divinity. The times being unfavourable to his settlement in France, he, about 1681, accepted an invitation to become the minister of a French Protestant church at Berlin, founded by the Elector of Brandenburg, Frederick William I. Here he wrote his '*Traité de la Vérité de la Religion Chrétienne*' (Rotterdam, 1684), which on the Continent quickly acquired a great reputation as well among Roman Catholics as Protestants. On the death of the Elector, in 1688, Abbadié accompanied Count Schomberg to Holland, and thence, in the suite of the Prince of Orange, to England. In the following year he went to Ireland with Schomberg, an important section of whose army, it will be remembered, consisted of French refugees. Returning to London after the battle of the Boyne, Abbadié was made minister of the French church in the Savoy. But London did not agree with his health, and William, whose favour he had won by a spirited vindication of the revolution of 1688, '*Défense de la nation Britannique*,' written in answer to Bayle's '*Avis important aux Réfugiés*,' and who esteemed him as the friend of Schomberg, gave him the deanery of Killaloe, his ignorance of the English language being considered a bar to his holding the richer deanery of St. Patrick's, and no doubt to preferment in the English Church. The rest of his days were spent in writing, preaching, and the performance of the ordinary duties of his office, varied by frequent visits to England and Holland, where most of his books were printed. On one of these visits he was taken ill and died in London, September 25, 1727. His principal writings are—the treatise on the truth of Christianity, mentioned above; '*Traité de la Divinité de Jésus Christ*,' 1695, which he wrote as the conclusion of that work, and which met with nearly equal success, and '*L'Art de se connoître Soi-même*,' 1692, translated in 1694 under the title of '*The Art of Knowing Oneself*.' These books had a prodigious circulation and were long regarded as standard authorities. He also wrote '*La Vérité de la Religion Réformée*,' which was translated by Dr. Lambert, Bishop of Dromore, for circulation among Roman Catholics, and some other vindications of Protestantism, sermons, &c.; besides '*L'Histoire de la Conspiration dernière d'Angleterre*' (London, 1696), and '*Panegyriques*' on the Elector Frederick William (1684) and on Mary II. of England (1694), which are charged with extreme adulation. The history of the Conspiracy of 1696 was written at the request of William III., by whose direction the Earl of Portland and Secretary Trumbull supplied the author with materials: it is extremely scarce.

ABBOT, LEMUEL FRANCIS, a distinguished portrait painter, was born in Leicestershire in 1762. He was the son of a clergyman, and at a very early age was placed as a pupil with Francis Hayman, R.A. But he could have learned little from Hayman, who died in 1776, and he seems to have had no other master. On Hayman's death he is said to have returned into the country, but he was early established in London as a portrait painter and met with much success. The chief attraction in his portraits was their fidelity. He never attempted anything but portraits and seldom ventured beyond the bust. In artistic power and the expression of the subtler and finer phases of intellect, Abbot was far inferior to Reynolds, Gainsborough, and Romney, and perhaps to some other of his contemporaries, but in catching the ordinary everyday aspect he was almost unequalled: and to secure this faithfulness of resemblance he spared no labour. His heads of Nelson, of Cowper, and of Northcote (the last in the National Portrait Gallery) are the most faithful likenesses we possess of those remarkable men; though the nervous exalted expression of the poet, verging on insanity, is rendered with inimitable force in Romney's head of Cowper. Abbot painted Cowper in 1792, and the poet writes to Lady Hesketh that the artist came from London for the purpose, and that he has "been sitting these ten days," the result being that "the likeness is the closest imaginable." With female heads Abbot was less successful. But he had a large practice, and the anxiety produced by his inability to execute his numerous commissions (and he would not employ an assistant), combined with family troubles, preyed on his mind and he became insane. He died in 1803.

ABBOT, ROBERT, Bishop of Salisbury, celebrated amongst the first controversialists of his age, was the eldest brother of Archbishop Abbot, and the son of a cloth-worker at Guildford,

in Surrey, where he was born in the year 1560. He received his first education at the Grammar School of his native town, whence, in 1575, he was sent to Balliol College, Oxford. In 1582, he took his M.A. degree, and, entering into orders, presently acquired considerable reputation as a preacher. Fuller compares the style of the two brothers:—"George was the more plausible preacher, Robert the greater scholar; George the abler statesman, Robert the deeper divine; gravity did frown in George, and smile in Robert." Although comparatively late in arriving at his ultimate dignity, he appears in the earlier part of his career to have taken preferment by storm. A single sermon preached at Worcester procured for him the lectureship of that city, and afterwards the rectory of All Saints' there. Another, preached at Paul's Cross, brought him, through favour of John Stanhope, Esq., one of his auditors, and the patron of the living, the rich benefice of Bingham, in Nottinghamshire. During the time of his retirement in this parish, he laid the foundation of his fame as a polemic, by publishing, with a dedication to Archbishop Whitgift, his '*Mirror of Popish Subtilties*,' 4to, London, 1594. In 1597, Abbot was admitted to the degree of D.D., and, in 1601, published '*The Exaltation of the Kingdom and Priesthood of Christ*, in certain Sermons on the 110th Psalm,' 4to, London. On the accession of King James I. he was appointed Chaplain in Ordinary to his Majesty, who was so much delighted with Abbot's '*Antichristi Demonstratio; contra fabulas Pontificias, et R. Bellarmini de Antichristo Disputationem*,' 4to, London, 1603, that he was graciously pleased to command his own royal and "savoury" Meditations on the Apocalypse to be incorporated with the second edition, 8vo, 1608. Dr. Abbot's masterpiece in the way of controversy was his '*Defence of the Reformed Catholic of Mr. W. Perkins, against the Bastard Counter-Catholic of Dr. Bishop, Seminary Priest*,' Three Parts; 4to, London, 1606, 1607, and 1609; a work which was followed up, in 1611, by a further reply to Bishop, entitled, '*The True Ancient Roman Catholic*; being an Apology against Dr. Bishop's Reproof of the Defence of the Reformed Catholic,' 4to, London.

Through the influence of Bancroft, Archbishop of Canterbury, and Chancellor of the University of Oxford, Abbot was elected to the Mastership of Balliol College, March 5, 1610; two months after was appointed one of the fellows of the College of Chelsea, then newly founded as a school of controversial divinity; and later in the same year (November 27) was admitted a prebendary of Normanton in the collegiate church of St. Mary, Southwell. As Master of Balliol he dignified his position by the success with which he combined suavity with discipline, and furthered amongst the students at once the practice of study, piety, peace, and self-restraint. On the death of Dr. Holland, the merits of Dr. Abbot, fortified by the influence which his brother, the Archbishop, enjoyed with the king, procured for him, March 25, 1612, the Regius Professorship of Divinity in his university. In this office he acquired great reputation for the learning and ability displayed in his lectures, which are characterised by Wood as more moderately Calvinistic than those that had for some time previous been heard from the divinity chair. Yet he appears to have opposed himself to Laud and his opinions with quite as much thoroughness as his brother; and the records of one notable instance of this opposition are preserved in a letter of complaint from Laud to his friend, Dr. Richard Niel, or Neale, at that time (1614) Bishop of Lincoln.

In the year 1615, Dr. Abbot was appointed to his ultimate preferment, the Bishopric of Salisbury, to which see he was consecrated at Lambeth on the 3rd of December, by his brother, the Primate. The king was moved to bestow this promotion upon Dr. Abbot partly by the perusal of his treatise against Garnet, the Jesuit, which was dedicated to his majesty, and entitled, '*Antilogia adversus apologiam Andree Eudæmon-Joannis, pro H. Garneto, Jesuita*,' 4to, London, 1613; and partly by the fame of a course of lectures on the Royal Supremacy, delivered by Abbot as Regius Professor, and published after his death, with the title of '*De Suprema Potestate Regia contra R. Bellarminum et Fr. Suarez*,' 4to, London, 1619. Amongst the first cares of Abbot's episcopate was the repair of his cathedral, which had been suffered to fall into decay through the cupidity of the Chapter. Nor was he more careful for the dead walls than for the living members of the Church, visiting his entire diocese in person, and preaching every Sunday so long as the state of his health permitted. His humility was proverbial, and his hospitality was as large as it was discriminating; so that his chief pleasure in this kind was to provide entertainment for such poor as had no chance of tasting meat but at his table. His incumbency of the diocese of Salisbury was, however, of little more

than two years' duration, being abridged by his unsparing studies and his various activities. His sufferings from stone, the "scholar's disease," were great; but he met his death, which occurred March 2, 1618, with calm dignity and assurance. On the very day of his decease, he is said to have completed his posthumously published treatise against the semi-Pelagian doctrines of Richard Thomson, 'In Ricardi Thomasoni Angli-Belgici Diatribam, de Amissione et Intercisione Justificationis et Gratiae, Animadversio Brevis;' 4to, London, 1618.

Bishop Abbot left many works behind him beside those enumerated above. Of these some have been published, whilst others have been allowed to remain in MS.; and of all a full and classified list is given by Dr. Featley, his chaplain and his biographer in Fuller's 'Abel Redivivus.' The most important of his inedited works is "his most accurate 'Commentary in Latin upon the Epistle to the Romans,' of which he run through all, not with brief notes as others, but large sermons upon every verse; in which he handled, as his text gave him occasion, all the controverted points of religion at this day, and he enclosed the whole magazine of his learning; and great pity it is that the Church should be deprived of such a treasure." This work, in four folio volumes, was presented by Dr. Corbet to the Bodleian Library.

*ABDU-L-AZIZ, 32nd and reigning sultan of Turkey, the second son of Mahmud II. [E. C. vol. iv. col. 48], was born February 9, 1830. As next brother of the late sultan he succeeded to the throne on the death of Abdu-l-Mejid, June 25, 1861. His infancy and boyhood, as was customary with the royal princes of Turkey, were passed in strict seclusion within the walls of the harem; but he appears to have been more fortunate in his European teachers than his elder brother, since he learned to speak English and French, and obtained some familiarity with the condition of western civilization and politics. Even when arrived at manhood he was not permitted to play any part in public affairs; but he formed a model farm at Scutari, the first established by a native, in which he was seen to take much interest; was fond of yachting and shooting; and rumour attributed to him the qualities of economy, temperance, activity, and firmness,—qualities in which his brother was lamentably deficient; and he was supposed to be strictly attached to the older forms of Mohammedanism, which had long been neglected by the court. He had thus come to be regarded with hope, not only by the people at large, but also by the old or orthodox party,—the party which, insisting on the literal interpretation of the Koran, steadily opposes, as a dangerous novelty, everything not mentioned there;—and his accession was hailed with general favour, the only exception being the native Christians, who feared, from his reputation for orthodoxy, a return to the former intolerance.

His earliest measures displayed vigour, firmness, and intelligence. The finances were in utter disorder. Abdu-l-Aziz directed a strict inquiry to be made into the public expenditure, and the minister of finance to be arrested and tried for embezzlement; reduced the civil list to a fifth of the amount at which it stood during the last years of his brother's reign; recalled the depreciated notes, and substituted for them a metallic currency; and ordered the surplus property of religious and charitable corporations to be sold. At the same time he confirmed the hatt-i-sheriff promulgated by his brother at Gulhané, in November, 1839 [E. C. vol. i. col. 13], and announced his full resolve to maintain the equality of all races and creeds in the eye of the law. Abdu-l-Aziz had himself but one wife and a son, and, whilst he placed his family arrangements on a moderate footing, he pensioned off all the members of his brother's harem, except the sultanas or mothers of the princes; and instead of keeping his nephews in confinement, as was the custom, he allowed them entire liberty, naming the eldest of them Pasha, and placing the others in the military school of Constantinople.

His good intentions were only partially successful; and his personal expenditure has become as lavish as it was at first moderate. The officials were corrupt and demoralized, and beyond Constantinople reforms were disregarded. With education wholly neglected; a country almost without roads; with no manufacturing industry, and agriculture backward and unproductive; overburdened with debt, and with a revenue apparently incapable of adequate extension, permanent improvement might well appear chimerical, and futile attempts at amelioration be followed by misgiving and apathy. The reorganization of the army, and the creation of a new naval force, became the objects on which the Sultan seemed, after a time, to have concentrated his purpose; and though other subjects have of late

engaged much of his attention, he has never lost sight of this as his main object. The result is that he has formed a fleet which includes several powerful iron-clads fitted with the latest and best armaments and warlike appliances, while his army has been entirely remodelled according to European plans, the men armed with breech-loaders, and the artillery furnished with rifled cannon, including some powerful Armstrong guns. It is said that Abdu-l-Aziz could, at short notice, place in the field an army of 800,000 efficient; but this may well be doubted; and it is certain that neither arms nor army materials could be provided, nor competent officers found for them. He has military schools and European teachers, but the weak point of his naval and military service will long be his officers. The strain which this enormous military organization has produced on the finances has been hard to meet, and its infliction is not to be justified; but the Sultan's object in it, as in several other recent acts of questionable propriety, has evidently been to raise Turkey in the scale of nations. By the Crimean Treaty, Turkey was recognised as a member of the European system; but Abdu-l-Aziz was conscious that her admission was little more than nominal, and that under the mismanagement of the last years of his brother's reign the country had come to be regarded as utterly worn out, neighbouring powers watching the moment of approaching dissolution that they might possess themselves of their share of the reversion. His purpose was, therefore, to prove that there was yet vitality and vigour. He must have an army strong enough to hold his own against any opponent. He put forward his title to a place in the European system by formally acknowledging the kingdom of Italy, without waiting an invitation or following the lead of other European powers. He would visit the mightiest sovereigns of Europe in their own dominions, or receive them in his, as an equal meeting equals. Having proved that he could move freely among his brother potentates, he would show the world that he was not to be enthralled by oriental tradition and etiquette. It would be a lesson to his own subjects, if it failed to impress foreigners.

The first rude shock given to the etiquette of the palace was by the visit he made, in defiance of all precedent, to Ismail Pasha of Egypt, in 1863. Ismail had received investiture at Constantinople in the February of that year, and Abdu-l-Aziz announced that he came to Egypt, not to exercise authority, but as a visitor to his friend; but he took care to let it be seen that he was master in Egypt as well as in Turkey, by the issue of several edicts and the reversal of some important measures of the Viceroy, one being the grant of a large tract of land to the Suez Canal Company, and another the permission to employ forced labour in the construction of the canal, both of which he peremptorily forbade. The same policy with reference to the Viceroy of Egypt has been repeated by Abdu-l-Aziz quite recently, evidently in order to prevent any assumption of the appearance of independence by the Viceroy, on occasion of the opening of the Suez Canal. [ISMAIL PASHA, in E. C. S.] The difference between the Sultan and the Viceroy has been arranged by the submission of the latter. This determination to force a quarrel with his most powerful and almost independent subject, might appear to be an error in policy on the part of Abdu-l-Aziz; but it must be remembered that the Sultan is not merely the sovereign of Turkey, but the head of the Mohammedan Church, and Commander of the Faithful; and that while what seemed like the assumption of equality on the part of the Viceroy might, if allowed to pass unrebuked, really lower the Sultan in the eyes of good Mussulmans, he would be sure to be sustained by them in resenting it. Whether it is an equally safe policy to impose such harsh terms as he is understood to have done, upon the Viceroy's submission, must be left to time to determine.

In visiting Egypt the Sultan had sorely tried Turkish prejudices; but he set them entirely at defiance by visiting Europe in 1867. The plea was the International Exhibition which was held that year in Paris. He entered Paris July 1, and was magnificently received; had the Palace of the Elysée placed at his service; was sumptuously entertained by the Emperor; and witnessed with seeming interest the various spectacles provided for him in that splendid capital. He afterwards came to London, July 12; was received by the Queen; lodged in Buckingham Palace; enjoyed the hospitality of the Lord Mayor and other public authorities; and was present at a grand naval review at Spithead, and decorated by the Queen with the Order of the Garter. The Sultan was deeply gratified by his reception, and on his arrival at Constantinople his subjects testified in the liveliest manner their delight at the honour which had been paid him, and their joy at his safe return. In the spring of

1869 the Sultan had the further pleasure of receiving the Prince and Princess of Wales at Constantinople, and we need hardly recall the manner in which he played the part of host, the scenes rivalling the wildest tales of oriental romance he provided for their entertainment, and the more than royal provision he made for their comfort. On this occasion he again broke through the formalities of Eastern etiquette, by presiding at a banquet in their honour, and by being present at a grand ball,—both events without precedent in the routine of Turkish sovereignty. A few months later, in connection with the completion of the Suez Canal, he entertained with equal magnificence the Empress of the French, the Emperor of Austria, the Crown Prince of Prussia, and other royal and puissant personages.

His visits to Europe, his observation of the countries he passed through, and his familiar intercourse with sovereigns and statesmen, seem to have deeply impressed him with the conviction of the backward state of his own country, and the urgent need of great changes and improvements, and, if health and mental energy be continued to him, may have important results. The most promising has appeared in the form of an Edict on Public Instruction, issued in 1869. This important document, which contains 198 articles, provides that for the whole empire there shall be five classes of Public Schools: primary, upper, and preparatory schools; lyceums and special schools. Each quarter in a city and every village must maintain a primary school if the population be Mussulman, but if the population be mixed, a school for Mussulmans and one for non-Mussulmans. Children are to receive instruction in the religious book of their persuasion, attendance being compulsory, except in specified instances, during four years, from the age of six to ten for girls, or to eleven for boys. A superior primary school, or two if necessitated by religious differences, is to be instituted, at the charge of the vilayet, in every town of 500 houses. The course in these will likewise extend over four years, and will include Turkish, Persian, and Arabic grammar, arithmetic, book-keeping, geography, history, geometry, and one local language. Preparatory schools are to be open to Mohammedans and others alike. The course of three years will include French, political economy, and natural history. Those Ottoman subjects who have passed an examination in the preparatory schools will be admitted for three years as boarders to the lyceum of each chief town of a vilayet. The highest class of educational establishments includes a normal school; the upper schools of arts and sciences; and the University of Constantinople. The normal school, destined to supply teachers, who must be all Ottoman subjects, will receive 100 students at a time, with certificates from the lower establishments. A corresponding institution will provide female instructors. The University is to contain three faculties—for letters, law, and physical science. There will be instituted at the capital a Council of Education, and an Academic Council in each chief city of a vilayet. The new law likewise contains provisions for the control of private educational establishments throughout the Ottoman Empire.

Should this programme be carried out with any approach to completeness, its effect upon the future of Turkey cannot but be of surpassing importance. The difficulty, however,—beyond the primary, and, as it would seem, almost insuperable one, of overcoming the inertia of officials, and providing a sufficient body of competent teachers,—is the ever-recurring one of finding pecuniary means. The finances of Turkey have been getting from bad to worse, and now the only means of paying interest on the successive loans which press on the Government, is by incurring new loans, which are obtained with increased difficulty, and of course on always harder terms.

But the Government of the Sultan has unquestionably gained greatly in influence and power. The relations of Turkey with its dependent states, with the exception perhaps of Egypt, have been in a great degree disentangled. The insurrection in Crete, which threatened to become chronic, or to end only with its severance from the parent country, has been finally suppressed. Even the quarrelsome little kingdom of Greece seems to have become at last convinced that its safest policy is to be, or profess its desire to be, on terms of amity with its more powerful neighbour. *Abdu-l-Aziz* has yet a difficult and tedious task before him, but he grasps his sceptre with a firmer hand than his predecessors; his country possesses an immense field of undeveloped resources; and the people are beginning to feel renewed confidence in themselves and their ruler.

ABDU-L-MEJID, 31st Sultan of Turkey [E. C. vol. i. cols. 13—15]. The memoir of *Abdu-l-Mejid* was brought

down to nearly the close of the war in the Crimea. A General Treaty of Peace was signed by the representatives of the several powers at Paris on the 30th of March, 1856, and the ratifications were exchanged there on the 27th of the following month. By this treaty (Art. iii.) Russia undertook to restore all parts of the Turkish territory of which it then held possession; and the contracting powers then engaged (Art. vii.) severally to respect the independence and territorial integrity of the Ottoman Empire, and to guarantee in common the strict observance of that engagement; and further to consider any act tending to its violation as a question of general concern. In anticipation of the convention the Sultan had issued (Feb. 18, 1856,) a *hatti-sheriff*, or *firman*, which placed the Christian and non-Mussulman portion of his subjects in a much more secure position than they had ever before held in Turkey, allowing them the free exercise of their religious worship, and putting all classes and sects on an equality in the eye of the law. This important *firman*, the terms of which were understood to have been suggested by the British Ambassador, Lord Stratford de Redcliffe, was referred to, and "its high value recognised," in a distinct article (ix.) of the Treaty of Peace, and it was declared to be "clearly understood that it cannot, in any case, give to the said powers the right to interfere, either collectively or separately, in the relations of his Majesty the Sultan with his subjects, nor in the internal administration of his empire." The effect of the war had thus been to admit Turkey into the general European system, to guarantee its integrity, and, by securing it from external interference, to afford it free scope for social and political improvement. Both were much needed. The country was almost disorganised; the finances were in utter disorder; and dissatisfaction was spreading everywhere. The Sultan made decided promises of reform and retrenchment. But, always feeble and inert, he seemed to have lost the little vigour he ever possessed. Though pressed on all sides by financial difficulties, he gave himself up more and more to indolence and self-indulgence. At length a formidable conspiracy was organised among the partizans of the old or orthodox Mohammedans and many prominent politicians, with a view to seize the Sultan, compel him to abdicate, and place his brother on the throne. The plot was to have been carried out on September 17, 1859, but two or three days earlier the secret was betrayed; the leading conspirators were arrested, and, after a regular trial, several of them were condemned to death or long terms of imprisonment. But the Sultan remitted the sentence of death in every case, commuted most of the punishments, and only banished the leaders. At the same time he promised afresh to initiate a system of administrative reform and strict financial retrenchment.

Soon after this the attention of Europe was drawn to the outbreak of hostilities between the Druses and Maronites in Syria, in which the Turkish troops sent to quell the disturbances openly or covertly aided the fanatical Druses in their outrages. The Great Powers protested, but the Sultan was unwilling or unable to act with the necessary decision, and, having acknowledged his inability to restore tranquillity, a conference was held in Paris, and a convention signed by the representatives of Great Britain, France, Austria, Russia, and Turkey, by which it was agreed that a force of 12,000 men, half to be furnished by France, should be sent to Syria, under the command of a French general, Beaufort D'Hautpont, to suppress the insurrection, Turkey undertaking on her part to punish the guilty leaders, as well as the governor of the province and the military commanders by whose connivance the atrocities had been perpetrated. The character of the country, the tactics of the Druses, who, too crafty to meet the thoroughly disciplined European troops in the open country, took to the mountains, where it was impracticable to bring them to an action, and where pursuit was almost useless, and to a certain extent the want of efficient support from the authorities, rendered the campaign much more tedious and unsatisfactory than was anticipated. Open hostilities, however, were brought to an end, and the European soldiers were withdrawn. The success was but partial, and the security of the Christians was but ill-assured; but the Great Powers were able to enforce the grant of a new constitution for Lebanon, and the appointment of a Christian governor, who was to be assisted by a Consultation Council chosen from each of the religious communities. The measure was perhaps necessary, but the Turks felt that their country had been humiliated. The erection of the united provinces of Moldavia and Wallachia into what was virtually an independent principality, with a single ruler, though nominally under

the suzerainty of the Porte, had been forced upon Turkey by the Great Powers in 1858, and now the same powers had extorted the quasi-independence of another section of the kingdom. Insurrections broke out in the Herzegovina and elsewhere, in which the Turkish troops met with several reverses. The financial difficulties increased, official corruption and incapacity became daily more apparent, whilst the reckless extravagance of the court seemed to be constantly augmenting. The discontent was general and profound, and matters appeared to be hastening to a crisis, when Abdu-l-Mejid died, June 25, 1861. He left six sons, but, according to the law of Turkey, he was succeeded by his brother, Abdu-l-Aziz, the subject of the preceding article.

A'BECKETT, SIR WILLIAM, brother of Gilbert A'Beckett, [E. C. vol. vi. col. 965.] and eldest son of Mr. W. A'Beckett, solicitor, of Golden Square, London, where he was born in 1806. He was educated at Westminster School; studied law, and was called to the bar at Lincoln's Inn in 1829. His professional avocations leaving him considerable leisure he wrote a good deal for newspapers and literary journals; was one of the authors of 'The Georgian Era,' of which he wrote the larger part; and edited a Universal Biography, in 3 vols. 8vo. In 1829 he went to Australia, having been nominated Solicitor-General of New South Wales, and afterwards Attorney-General. Later he was appointed to a judgeship at Port Phillip, and in 1852 he was promoted to be Chief Justice and Judge of the Admiralty Court, Victoria, and received the honour of knighthood. In 1863 he returned to England. He died at his residence, Upper Norwood, on the 27th of June, 1869.

* ABEL, FREDERICK AUGUSTUS, F.R.S., a chemist who has devoted special attention to the application of chemistry to warlike purposes, was born in 1828. He was one of the original students at the Royal College of Chemistry, under Professor Hofmann. Having received the appointment of junior assistant at that college in 1846, he was promoted to the post of senior assistant, which he held a few years. In 1849 he commenced the instruction of military officers and cadets in chemistry at Woolwich. In 1851 he was appointed demonstrator of practical chemistry at St. Bartholomew's Hospital. Mr. Abel succeeded Professor Faraday as lecturer on chemistry at the Royal Military Academy, Woolwich, in 1852. In 1854 he was appointed ordnance chemist, on the first creation of that office; member of the Ordnance Select Committee in 1855; chemist of the war department (on the abolition of the old ordnance office) in 1856; and examiner in experimental sciences to the Council of Military Education in 1859.

Connected with the study of chemical science on the one hand, and with the military departments of the Government on the other, Mr. Abel has been intimately concerned in researches bearing on the subject of military pyrotechny. He has served as a member of Government committees on gunpowder, on gun-cotton, on floating obstructions, on torpedoes, and other subjects. He elaborated and improved the application of tension-electricity to the explosion of mines. He invented electrical fuzes for use in the military and naval services. He effected various improvements in connection with war *matériel*; one of which was a system of manufacturing gun-cotton by pulping and compression. Mr. Abel has made various researches in organic, inorganic, and metallurgic chemistry, the results of which have been published in the Journal of the Chemical Society; and has written papers, reports, and lectures on the application of electricity to the explosion of land and submarine mines, and on the application of chemistry to the improvement of warlike appliances. Numerous distinct scientific reports were written by him and sent in to the Government. The 'Philosophical Transactions' of the Royal Society also contains memoirs and papers by Mr. Abel on cotton, and on the history of explosive agents. One of the important investigations in which Mr. Abel has been concerned was carried on at Portsmouth in November, 1869. Some of the fortified lines at that place being under process of demolition, it was determined to expedite the work by electro-blasting; and it was at the same time seen that the operations would afford the means of testing the comparative action of gunpowder and gun-cotton under both equal and unequal conditions of locality and amount of work, the relative advantages of discs and cylinders of gun-cotton, the advantages and disadvantages of combining gun-cotton with gunpowder in the same explosion, and the relative merits of the Bickford fuze and the Abel fuze, under varying circumstances.

Mr. Abel was appointed Bakerian lecturer to the Royal Society in 1867; and has served on the council of the same society. He

has also filled the offices of vice-president, treasurer, and foreign secretary of the Chemical Society.

ABEL DE PUJOL, ALEXANDRE-DENIS, French painter, was born January 30, 1785, at Valenciennes, and received his early instruction in art at the School of Design in that city. Afterwards he went to Paris, where he studied under David, upon whose manner he formed his own. He obtained the second prize in painting in 1810, and the grand prize in 1811. From Rome he sent to the Salon in 1814 a picture, 'The Death of Britannicus,' which attracted much attention, and was purchased for the Dijon Museum. In 1817 he produced his 'St. Stephen Preaching,' for the church of St. Etienne-du-Mont. It was crowned, and thenceforward his time was pretty much occupied by government commissions. Among his more important works in this class were the representation of the Renaissance of the Arts on the ceiling of the grand staircase of the Louvre, demolished in 1856, but repeated in 1857 on the ceiling of the library; 'Egypt saved by Joseph,' on the ceiling of the Musée de Charles X., in the same palace; a series of frescoes in the chapel of St. Roch; the decorations en grisailles on the ceiling of the Bourse; the Danaïdes for the Gallery at Fontainebleau; a vast allegory for his native city, 'Valenciennes encouraging the Arts,' in which he has introduced his own portrait; 'Benevolence,' another immense allegory for the Hospice Boulard at Saint Maudé, besides a host of religious pictures for churches, and classical and historical subjects for public galleries, such as 'Cæsar proceeding to the Senate on the Ides of March,' for the Palais Royal; 'Achille de Harlay on the day of the Barricades,' for the gallery at Versailles. His easel pictures were less numerous, but were similar in character. Abel de Pujol enjoyed a great reputation, but there is little genuine inspiration or imagination in his works. They are pompous and academic after the David type; clever, but thoroughly artificial in composition; displaying great facility of drawing, and skill of execution, but without power to interest the feeling or to delight the eye by striking combinations, or by brilliancy of colour. Abel de Pujol succeeded Baron Gros as member of the Academy in 1835; and in the same year was made officer of the Legion of Honour. He died at Paris, September 28, 1861.

ABERDEEN, GEORGE HAMILTON GORDON, fourth Earl of, [E. C. vol. i. col. 21]. From his resignation as premier in February 1855, the Earl of Aberdeen ceased to take an active or prominent part in public affairs. In recognition of his services the Order of the Garter was conferred upon him on his retirement, and he had previously received the appointment of Ranger of Greenwich Park. He died December 13, 1860. He was succeeded as fifth Earl by his only son GEORGE JOHN JAMES, LORD HADDO, born 1816, who died March 21, 1864. The fifth Earl of Aberdeen was a man of fervid religious feelings and benevolent purpose, and his early death caused much regret: a Memoir of him by the Rev. E. B. Elliott was printed for private circulation in 1866, but afterwards (1867) published and passed through three or four editions; and in 1869 appeared a new memoir of him and of his second son, a young man of promise, who was killed by the accidental discharge of his rifle at Trinity College, Cambridge, where he was a student, 1868—under the title: 'The True Nobility. Sketches of the Life and Character of Lord Haddo, fifth Earl of Aberdeen; and of his son, the Hon. J. H. Gordon.' By Alexander Duff, D.D., LL.D., &c., 8vo. The present (sixth) Earl, George Hamilton Gordon, eldest son of George, fifth Earl, was born in 1841.

ABILDGAARD, NIKOLAY ABRAHAM, a celebrated Danish painter, born at Copenhagen in 1744, was the son of Søren Abildgaard, also an artist of note in his day. On leaving the Academy of Copenhagen in 1772, Nikolay went to Italy, where he remained five years closely occupied in studying the works of the great masters. He chiefly employed his pencil on historical subjects; acquired the reputation of being the best and most learned painter Denmark had produced, and was commonly spoken of as the Raffaele of the North. He was appointed painter to the king, and in that capacity executed a series of great works, the chief being four large pictures personifying Europe at its four chief historical epochs, for the palace of Christianburg. But these works perished in the fire which destroyed that palace in 1794, and the loss so affected Abildgaard that he scarcely touched his pencil afterwards. His other more important works were 'Orpheus'; 'the Mother of Messalina mourning over her Daughter'; 'Philoctetes wounded,' and other classical subjects, with several from Ossian. In his day he was regarded as a great colourist, but his colour is deficient in brilliancy and transparency, and his manner is academic. For several years he was professor of painting in the Academy of

Copenhagen, and for two years its director, and several of the best of the succeeding generation of Danish artists, including Thorwaldsen, ascribed their success to his instruction. He died at Copenhagen June 4, 1809.

*ABOUT, EDMUND-FRANÇOIS-VALENTIN, popular French author, was born February 14, 1828, at Dieuze, department of Meurthe. At the Lyceum Charlemagne he gained the prize in philosophy; proceeded thence to the École Normale, and in 1851 went to complete his studies at the French Academy, Athens. Whilst in Greece he wrote a monograph, 'l'Île d'Égine,' which appeared in 1854, shortly after his return. But the work by which he became known was one of a more popular character, 'la Grèce contemporaine,' 1855, which met with remarkable success, due as much to the unsparing manner in which he dealt with the modern Greeks, as to the lightness and brilliancy of the style. Almost at the same moment his facile pen threw off without apparent effort, in successive numbers of the 'Revue des Deux Mondes,' the romance of 'Tolla,' a work that was none the less popular for meeting with sharp strictures from the critics. The same year he published a small volume of art-criticism, 'Voyage à travers l'Exposition des Beaux-Arts,' the first of several series of notices of contemporary art written with the easy assurance of a light-hearted man of the world who had evidently never given a serious thought to the subject, but was familiar with the talk of the ateliers; shallow and flippant, but amusing from their light, mocking tone, and having a certain value as reflecting the current gossip of the Parisian art-circles. In 1856, his first play, an unsuccessful comedy in three acts, 'l'Éfronté,' altered subsequently to 'Guillery,' was produced at the Théâtre Française. He now became a regular contributor to 'Figaro' and the 'Moniteur,' in the latter of which appeared the series of short stories, afterwards published under the title of 'Les Mariages de Paris.' In the 'Moniteur' also appeared, as the result of a residence in Rome, part at least of 'la Question Romaine,' the first of several keen attacks upon the papacy, which culminated in the 'Rome Contemporaine' (8vo, Paris, 1860). From this time he has always been a welcome and effective contributor to the journals, and most perhaps of his contributions have been afterwards published separately. Of this class the volume of 'Causeries,' Paris, 1865 (originally published in the 'Opinion Nationale'), is a good example of his light writings, as 'la Nouvelle Carte d'Europe,' and 'la Prusse,' in 1859, are of his more serious compositions. His romances and novels have been very numerous, of course very various in value, but always readable and almost always amusing. Of the skill with which he can sustain the interest in a series of trifling yet improbable events, and of his singularly easy half-mocking style of narrative, one of his latest novelets, 'Étienne,' first published in the 'Revue des Deux Mondes,' is a favourable example, while 'Le Roi des Montagnes,' as a prime favourite, has been published in an edition illustrated with many vignettes by Gustave Doré, and is now being modelled as a libretto by the author himself. But busy as he has been as a journalist and a romance writer, he has been almost as busy as a dramatist, hardly a year having passed without the production of a comedy or farce by him—though in this line he has been by no means invariably successful. During 1869 he has published two romances, 'Les Mariages de Province,' and 'Le Fellah,' in the latter story aiming, as would seem, to do for Egypt what he had previously done for Greece and Rome, but with more apparent artifice and less vigour. M. About has as yet only written trifles, and the writers of trifles are very numerous in Paris, but he is the first of his class, and in his way inimitable. His style is clear, rapid, and pungent, yet adroit; and though perhaps superficial, he is a shrewd observer. His writing is always that of a scholar and a man accustomed to the best society of the French capital.

ABRABANEL, DON ISAAC, the most famous of the Spanish Rabbis, was born at Lisbon in 1437. Of a family that had been ennobled in Spain, Abrabanel was yet prouder of his Hebrew descent, being as he boasts in the Preface to his 'Commentary on the Later Prophets,' of the blood royal of the House of David. His education was the best that could be obtained, and he studied with such success that at the age of twenty, he was allowed to expound the Book of Deuteronomy in the synagogue. But along with his biblical studies he practised business, and acquired so much reputation as to be employed in financial matters by the king, Alphonso V. On his death, however, in 1481, Abrabanel was, with the other ministers, banished from Portugal, and his property confiscated. He fled to Spain, and again engaging in mercantile transactions, acquired a large

fortune. In 1484 he is said to have been consulted by Ferdinand and Isabella, and to have been held in high regard by them; but he was not exempted from the decree of 1492, by which the Jews were driven from Spain, and their property sequestrated. Abrabanel took refuge with his family in Naples, where he was received into the royal favour, but was once more compelled to fly on the capture of Naples by the French in 1494. After various wanderings, he settled in Venice, where he died in 1508. A life like this, when at rest deeply engaged in business, or assisting the councils and providing for the monetary wants of the sovereigns under whom he lived, but for a large part of his time an exile and a wanderer, would hardly seem the best adapted for the production of voluminous and learned theological dissertations. Yet Abrabanel is esteemed one of the most profound as well as brilliant of rabbinical expositors. In truth he wrote everywhere, and he had a fluent pen. His works are a 'Commentary on the Pentateuch,' written in 1495, but first published at Venice, folio, 1579; 'A Commentary on the Earlier Prophets'; 'A Commentary on the Later Prophets'; 'Maajene Hajeshuah,' a commentary on Daniel; 'The Preacher of Salvation,' a defence of Hebraism against Christianity; 'Jeshuoth Meshicho,' an exposition of the Talmudic doctrine of the Messiah; 'Rosh Amana,' the principles of the Jewish Religion; 'the Sacrifice of the Passover'; 'the Inheritance of the Fathers,' a treatise on Jewish antiquities; and several others. His works are written in Hebrew, but Buxtorf, Mayer, and others, have translated many of them, wholly or in part, into Latin.

(Mai, *Dissert. hist. phil. de orig. Vita et Scriptis Isaaci Abrabanielis*, Alt. 1708; Bartoloccus, *Bib. Mag. Rabb.*, iii. 874, &c.; *Biog. Dict. of Soc. for Diff. of Useful Knowledge*, where is given a full list and partial analysis of Abrabanel's writings.)

ABRAHAM A SANTA CLARA, the most famous German preacher of the 17th century, whose real name was Ulrich Megerle, was born July 4th, 1642, at Mösskirch in Suabia, and educated at the grammar schools of Mösskirch, Ingolstadt, and Salzburg. In 1660 he entered the order of Augustins at Maria-brunn in Austria; went thence to study theology and philosophy in the convent of his order at Vienna, and in 1662 was ordained and made doctor of theology. For some time he officiated as priest and preacher in the Maria monastery at Taxa in Bavaria, and then returned to Vienna, where his eloquence attracted the attention of the Emperor Leopold I., who nominated him court-preacher, an office he filled for 20 years. During this long period he was the most popular preacher in the city. His sermons, full of vigour, earnestness, and religious zeal, expressed in the clearest vernacular, and seasoned with the most outspoken directness of appeal and with frequent proverbs and stories of a humorous and occasionally burlesque description, somewhat after the fashion of our own Latimer's, found equal acceptance with all classes. Succeeding generations fancied their language inelegant and the allusions and illustrations coarse, and they fell into neglect; but of late years their popularity has revived, and they have been extensively read by Protestants as well as Catholics.

During his residence at Vienna, Abraham a Santa Clara rose step by step through the different grades of his order till he became prior provincialis and definitor of his province, exhibiting in every office the greatest diligence and probity. In 1689 he went as prior provincialis to the general chapter of his order at Rome, where he preached several times with great effect, and was presented by the Pope, Innocent XI., with a consecrated cross. He died at Vienna on the 1st of December, 1709.

The writings of Abraham a Santa Clara are full of striking and powerfully expressed thoughts, and display great originality, imagination, and knowledge of character, as well as considerable learning. They consist of treatises on points of practical morality and divinity as well as popular sermons. The collections published by himself are:—(1.) 'Judas der Erzscheim, für ehrliche Leut, oder eigentlicher Entwurf und Lebensbeschreibung des Ischariotischen Bosenichts,' 4 vols. Salzburg, 1688—95; 7 vols. Passau, 1834—36; and 7 vols. Lindau, 1856. (2.) 'Reim dich oder ich liss dich,' 4to, Salzburg, 1687. But many of his productions are in neither of these collections. The character of his mind may be guessed from the titles of some of his discourses—'Huy und Pfuy der Welt' (On and shame the world); 'Heilsames Gemisch-Gemasch,' (a wholesome mess, or Mish-mash); 'Sterben und Erben' (To die and to inherit). A collected edition of Abraham a Santa Clara's works 'Sämmtliche Werke,' was published in 21 vols. Passau, 1835—54. Several selections have appeared at different times; the best are perhaps 'Quint-

essenzen aus Abraham's a Santa Clara Werken,' Berlin, 1822—3; and 'Abraham a Santa Clara: Das Gediegenste aus seinen Werken,' 7 vols. Heilbrunn, 1840—44.

ABSALON, or AXEL, Archbishop of Lund, the most remarkable man produced by Denmark in the 12th century, was born in 1128 at Finnestöe in Zealand, and was a descendant of Slagus, who founded the town of Slagelse. He received his early education with his relative Prince Waldemar, and completed his studies at Paris. Having entered the Church, he was in 1158 made Bishop of Roskild, and in 1178, much against his will, Archbishop of Lund. But though he is said to have laboured to improve the condition of the religious institutions of Denmark, he was more distinguished as a statesman and a warrior than as an ecclesiastic. He was the chief adviser of Waldemar I. and his successor, Knud, or Canute VI., surnamed the Great, and it was to his wise counsels and energy that Denmark owed her independence and the consolidation of the kingdom. He not only repressed the encroachments of the great vassals, but entirely subjugated the Wendish and other Slave tribes who had hitherto only admitted a nominal dependence on Denmark, and now made a desperate effort to throw off the yoke entirely. Bishop Absalon commanded the army and fleet, which in 1169 reduced the island of Rügen. Having taken Arcona, the Wendish capital, Absalon destroyed the pagan idols, and compelled the inhabitants to adopt Christianity. He also in a great sea-fight defeated Bugislav and his fleet of 500 vessels; and in 1170 took Julin, the northern entrepôt of a great trade with Persia, Asia Minor, and India. From this time the title of King of the Wendes has been borne by the kings of Denmark. The code of Waldemar was drawn up at the suggestion of Bishop Absalon, and partly by himself. The famous Annals of Denmark were written by Saxo Grammaticus at his command, and in founding the monastery of Sorøe he made it one of the rules that these annals should be continued by the learned members of the house. About 1168 Absalon built himself a palace, Axelhuus, on the eastern coast of Zealand, by a little fishing village, but which has since grown to be the capital of the kingdom. He is thus regarded as the founder of Copenhagen, though the first mention of the town is nearly a century later. Archbishop Absalon died in 1201, and was buried in the church of Sorøe. A skull in the Copenhagen Museum used to be shown as that of the archbishop, but on his grave being opened by command of the king in 1827, the skeleton was found to be intact. His sword, crossier, and some relics found in the grave, are preserved in the museum. Estrup's 'Life of Absalon: Hero, Statesman, and Bishop' (Sorøe, 1826) was translated into German, with additions by Mohnike.

(Illgen's *Zeitschrift für Hist. Theol.* b. i. p. 1, 1832).

ABSCHATZ, HANS ASSMANN, BARON VON, German poet, was born at Würbitz, in Silesia, February 4, 1646. From the public school of Liegnitz he went to Strasbourg and Leyden, where he studied jurisprudence. He afterwards travelled in Holland, France, and Italy; was appointed Governor of the principality of Liegnitz; and deputy to the diet of Breslau. As a statesman he obtained some distinction, and also as Silesian ambassador to the emperor at Vienna. His last years were spent in retirement. He died, April 22, 1699. Abschatz was one of the most esteemed poets of his time, and his works were collected after his death under the title of 'Poetische Uebersetzungen und Gedichte,' 2 vols. 8vo. Leipzig and Breslau, 1704. After a long interval of neglect, the poems of Abschatz have of late gained some notice; but though there is much feeling and power in many of them, they are for the most part disfigured by the faults and affectation of the time, and are not likely to retain any hold of the public mind, except in selections. Some of his hymns have a place in the church-service books. Among his works is a translation of Guarini's 'Il Pastor Fido,' which was at one time very popular.

ABU-ABDALLAH, MOHAMMED [ALMOHADES, E. C. vol. i. col. 165].

ACCIAJUOLI, DONATO, a distinguished Italian statesman and scholar, born at Florence in 1428, was descended from the same family as the seneschal Niccolo Acciajuoli. He was the friend of Piero and Lorenzo de' Medici; was gonfaloniere of the republic, and employed in several important missions. In one of these, whilst on his way to Paris as ambassador from the Florentines to Louis XI., he was seized with illness, and died at Milan, 1478. The news of his death caused general grief; he was decreed a public funeral; his family were declared exempt from taxes, and his daughters were apportioned from the public treasury. Donato was celebrated as an orator and a writer as well

as a politician. He translated and remodelled Leonardo Bruni's 'History of Florence' (Venice, fol. 1476); some of 'Plutarch's Lives' (Florence, fol. 1478); and wrote commentaries on the ethics and politics of Aristotle.

ACCIAJUOLI, NICCOLO, a distinguished Italian statesman, was born at Florence, September 12, 1310, of a good, though not noble family. He was sent by his father to Naples, where he had extensive business transactions, but Niccolo resolved to push his fortune at court, where he ingratiated himself with the Princess of Taranto, and was entrusted with the education of her three sons. After the death of King Robert, 1343, he secured the favour of Queen Joan, whose confidence he retained till his death. On the murder of her husband, Andreas of Hungary, it was Acciajuoli who procured her marriage with his old pupil, Prince Louis of Taranto; baffled the vengeance of King Louis of Hungary, the brother of Andreas; and obtained the sanction of the Pope to the coronation of Joan and Louis in 1352. Acciajuoli was now created grand seneschal, and became the virtual ruler of the kingdom. King Louis having died in 1362, the seneschal procured the marriage of Joan in the following year with James, Prince of Minorca. Acciajuoli died in 1366, and was interred by order of Joan in the Church of the Certosa, near Florence, of which he was the founder, and where a splendid monument to his memory was erected from the designs of Orcagna, with sculpture in low relief by Donatello. Acciajuoli was a sagacious and vigorous statesman, and thoroughly devoted to Joan. He was wealthy, ostentatious, and haughty, but he appears to have been generous, and wished to be esteemed a patron of men of learning and genius. Petrarch felt flattered by his condescension; Zanobi di Strada received substantial favours at his hands; and Boccaccio was invited by him to Naples, but soon retired in disgust.

(Palmieri, *Vita di Nic Acciajuoli*, Florence, 1588; Pignotti, *Storia della Toscana*, vol. iv.)

ACCOLTI, BENEDETTO, Italian lawyer and historian, born at Arezzo in 1415, studied law at Florence and Bologna; was made professor of law at Florence; on the death of Poggio in 1459 was elected Chancellor of the republic, and died in 1466. He was regarded as one of the ablest jurisconsults of his time, and as an accomplished writer. His chief work was a history of the crusade under Godfrey of Bouillon, in four books. Written in Latin, and inscribed to Piero de' Medici, it afforded to Tasso the materials for his 'Jerusalem Delivered.' It was first printed at Venice, 4to, 1532, and reprinted at Basel, 8vo, 1544. The last edition was Groningen, 8vo, 1731. It has been translated into Greek, Italian, and French. He also wrote a dialogue in Latin, 'De præstantia virorum sui ævi,' printed for the first time at Parma, 8vo, 1689, and 12mo, 1692; at Augsburg, 8vo, 1691.

CARDINAL BENEDETTO ACCOLTI, grandson of the above, has been by more than one writer mistaken for the author of both the history and the dialogue. He was born at Florence in 1497; studied at Pisa and Florence; was made successively Bishop of Cadiz and of Cremona, and Archbishop of Ravenna; was secretary to Pope Clement VII., who created him cardinal in 1527; played a leading part in ecclesiastical politics; was imprisoned in 1532 by Paul III. for an unknown offence, but released on payment of a heavy fine; retired from Rome, and died at Florence in 1549. Cardinal Accolti wrote some much-praised Latin verse, and was the patron of learned men.

ACCOLTI, BERNARDO, named l'UNICO, from the grace of his versification and his skill in improvising verses to a musical accompaniment, was the son of the historian, Benedetto Accolti. Neither the year of his birth nor death is known; he was still living in 1534, though he is supposed to have died shortly after. As a young man he was attached to the Court of Urbino; later he gained the favour of Leo X., who made him one of his apostolic secretaries. At Rome, according to the testimony of his contemporaries, Cardinal Bembo, P. Cortese, and Aretino, he acquired unbounded popularity. Aretino says that "when it was known in Rome that the celestial Bernardo Accolti intended to recite his verses, people shut up their shops, and all hastened to participate in the pleasure. On these occasions he was surrounded by the bishops and principal persons of the city, and attended by a numerous body of the Swiss guard." Even the Pope was carried away by the general enthusiasm, and addressed him as the incomparable (*l'Unico*, the only). But his verses by no means sustain the admiration of his contemporaries. Roscoe wrote that "one circumstance only is wanting to his glory—that his works should have perished along with him;" and the passage is quoted with approbation by Sismondi, who says that "his style is hard and poor, his images are affected, and his taste

perverted by affectation." But Tiraboschi had long before described him as a mediocre poet. It was the fascination of his manner and the effect of fashion that wrought the charm. His poems were printed for the first time at Florence in 8vo, 1513—"Virginia Comedia, Capitoli e Strambotti;" and 'Opera Nuova,' Venice, 1519; and they have been many times reprinted. The comedy of Virginia, founded on one of the novels of Boccaccio, written in ottavo and terzo rima, was one of the earliest Italian dramas.

ACCOLTI, FRANCESCO, called, like others of his family, Aretinus, one of the most famous jurists of the fifteenth century, was the younger brother of Benedetto Accolti, the historian, and was born about 1418. He studied literature under Francesco Filelfo (Philadelphus), and, according to Mazzuchelli, jurisprudence, under Antonioda Pratovecchio and Lodovico Pontano, while others say he learnt law from Mincuccius. Accolti was appointed professor of law in the university of Bologna in 1440; and in 1445 professor of civil law at Ferrara. In 1455 he went to Siena, but returned to Ferrara in 1457 as professor of the civil and canonical law. In 1461 he was induced to enter the service of Francesco Sforza, Duke of Milan, as secretary—an office he held for about five years. By Sforza he was sent on an embassy to Rome to compliment the new Pope, Paul II., and the oration he delivered on this occasion was afterwards printed. In 1466 he was elected to the chair of jurisprudence at Siena, which he retained till 1479. Whilst here he pronounced strongly in favour of Florence and Lorenzo de' Medici in opposition to the claims of the Pope, in consequence of which the Duke of Calabria, as papal general, made a formal demand of the magistracy of Siena for his surrender, but was refused. In 1478 he was made senior professor of law at the university of Pisa. According to Fabbrucci and Manni, as cited by Tiraboschi, Accolti died in 1483 at the baths of Siena, whither he had gone in hope of relief from calculus, with which he was afflicted; but other authorities say that on account of his increasing infirmities he was allowed to retire from his professorship in 1484, retaining his salary, and that he died at Siena about the end of 1485. Francesco Accolti had the reputation of being the greatest and most erudite jurist, one of the ablest orators, and the most successful advocate of his time. But he is said to have been avaricious, and he died enormously rich. He intended to leave his wealth for the foundation of a college, but, dying intestate and unmarried, it passed to his natural heirs, among others, Cardinal Accolti, the subject of the following article. The only legal works he published were his 'Commentaria super Lib. II. Decretalium,' Bol. 1481 (reprinted at Pavia in 1496 and at Venice in 1581); 'Consilia seu Responsa,' Pisa, 1481; and 'Repetitiones aliquae Libelli.' But subsequently appeared—printed, it is said, from notes taken at his lectures—his 'Lectura in Codicem,' Pavia, 1502; 'Lectura in Digestum Vetus,' 1514; 'Lectura in Digestum Novum,' 1514; and 'Lectura in Infirmitatum,' 1514. He also translated the letters of Philaris from the original Greek into Latin. Erasmus refers disparagingly to a translation he had read by Accolti of Chrysostom's Homilies on the First Epistle to the Corinthians; some sonnets by him are printed by Crescimbeni in 'L'istoria della volgar Poesia,' while others are said to exist in manuscript in the libraries of Strozzi and Chigi; and a manuscript translation of the 'Iliad' in the library of the Vatican is ascribed to Accolti and L. Valla jointly. He also wrote or edited a treatise on the Baths of Puzzuoli, Naples, 4to, 1475.

ACCOLTI, PIETRO, known as Cardinal of Ancona, son of the historian Benedetto and nephew of the famous jurist Francesco Accolti, was born at Florence, March 15, 1455. His father died when Pietro was only eleven years old, but he was carefully brought up by his mother, received a good education, and studied law at the University of Pisa. He then practised for awhile as an advocate; was appointed professor of law at Pisa; afterwards settled at Rome and was appointed auditor of the rota by Alexander VI. Having taken ecclesiastical orders, his wealth, connections, and ability rendered his path smooth. He was elected Bishop of Ancona in 1505, and on his resigning the bishopric in favour of his nephew, in 1511, he was made Cardinal and at the same time Bishop of Cadiz, but on the opposition of the King of Spain he was transferred to the French bishopric of Mailleza. Later he was made Bishop of Arras; in 1524 Archbishop of Ravenna, but exchanged it with his nephew Benedetto for the bishopric of Cremona, and some months later became successively Cardinal Bishop of Albano, of Palestrina, and of Sabina. He filled at various times the offices of cardinal legate, secretary of the papal briefs, and cardinal vicar of Rome, and had im-

mense influence in the papal councils: according to Pallavicino the Bull against Luther, dated June 15, 1520, was drawn up by Cardinal Accolti. He died at Florence in 1549. A treatise against the heresy of Luther is ascribed to him, but does not appear to have been printed. He also wrote on the papal rights, and one or two legal essays.

ACCORSO, BUONO, or Buonaccorso Pisano, as his name is frequently written, a celebrated Italian scholar, born at Pisa about the middle of the 15th century. He was for a time professor of elocution at Ferrara, and afterwards founded a school of rhetoric at Milan. He acquired great celebrity by the publication of a series of commentaries on Greek and Latin authors, commencing with Cæsar, Ferrara, 1474, and closing with the Familiar Epistles of Cicero, Milan, fol. 1485. He also published a Greek and Latin Lexicon; but his name will probably be longest preserved as having been the first to give to the world the printed text of a Greek author. This was Planudes' collection of Æsop's Fables, which Accorso accompanied with a Latin translation. It is without date, but was published at Milan, about 1478, and bears the colophon *Accurstus impressit*, the only one of his books so marked.

ACHARIUS, ERIK, a Swedish physician and botanist, was born at Gefle, October 13, 1757. After studying in his native town, and then under Linnæus at Upsal, he was employed by the Academy of Sciences at Stockholm to prepare drawings on Natural History subjects, to be engraved for their Transactions. He received a degree in Medicine in 1782; was appointed physician to the town of Landskrona in 1785; physician to the province of East Gothland in 1789; and professor of Botany at the Wadstena Academy in 1801. He was an active and successful physician, but is chiefly remembered for his researches on cryptogamic botany, especially the family of lichens. In 1798 he published 'Lichenographiæ Suecicæ Prodomus,' which, with two other works in 1803, paved the way for his chief publication, 'Lichenographia Universalis,' Göttingen, 4to, 1810. In this he traced the physiology, structure, and relations of all lichens then known, classifying them into 41 genera and more than 1300 species; his system was founded on the structure of their reproductive organs. In 1814 he published 'Synopsis Methodica Lichenum,' a sort of epitome of his great work. He had also numerous papers on lichens and other natural-history subjects in the Transactions of the Stockholm Academy. Acharius died October 13, 1819, at Wadstena, in East Gothland.

ACHEN, HANS VAN, German painter, was born in 1552 at Cologne, where he learned painting under Jerrigh. He afterwards went to Italy, where, under Rems, he acquired the secrets of Venetian colouring, and then completed his studies at Florence and Rome. A 'Nativity' which he painted for the Church of the Jesuits at Rome was greatly admired, and Achen was invited by the Elector of Bavaria to visit Munich. Here he remained several years and painted some of his best works, notably a 'Crucifixion' for the Kreuz Kapelle. He accepted an invitation from the emperor Rudolph II. to go to Prague, where, with the exception of visits to Augsburg and Munich, he remained the rest of his life, and died in 1615. Sixteen of his pictures are in the Vienna Gallery, one of the most celebrated is a 'Bathsheba, Bathing.' Achen acquired great temporary fame from having been one of the first of the German painters to break away entirely from the hard manner of the mediæval artists, but his works are tasteless and affected. Several of his classical and religious subjects and some portraits, have been engraved by the best German engravers.

*ACHENBACH, ANDREAS, German painter, was born at Cassel, September 29, 1815. He studied painting under Schadow, but from the commencement of his independent practice devoted himself to landscape, and soon took a foremost place among the landscape painters of Germany. His pictures are however seldom mere views of places. Incidents of some kind are almost invariably introduced, and generally very effectively. At one time he painted coast scenery most frequently, and his representations of the sea have more truth and feeling than those of most of his countrymen. He also depicts architecture very skilfully. In woodland scenery he appears less at home. His range of subjects is shown by the titles of a few of his more successful works:—'Coast of Sicily—fair weather'; 'A Stormy Sea on the Coast of Sicily'; 'Ostend Quay at High-water'; 'A Village Festival by Moonlight'; 'Dutch Festival.' Herr Achenbach is a member of the Royal Academy of Berlin; honorary member of the Academies of Antwerp, Amsterdam, and Philadelphia; and a knight of the French Legion of Honour. His brother, *OSWALD ACHENBACH, born at Düsseldorf in 1827, is also dis-

tinguished as a landscape painter. He was educated in the Dusseldorf Academy, and formed his style on that of his brother, but gradually adopted a more independent manner. Among his works are 'Pilgrims approaching Rome'; 'A Mass in the Campagna', and the like; but they are more often merely 'an Italian Landscape', a 'View near Naples', or other views of places.

ACHENWALL, GOTTFRIED, termed the founder of the science of statistics, was born at Elbing, Prussia, October 20, 1719; studied in the universities of Jena and Leipzig, 1738-43; and then resided for three years at Dresden as tutor to the sons of Baron von Gersdorf. In 1746 he was admitted as extra professor (privatdocent) at Marburg university, where he lectured on history, international law, and social science, giving in outline the views which he afterwards elaborated into a system. His teaching having attracted the notice of Münchhausen, the Hanoverian minister, he was offered and accepted a chair in the new University of Göttingen, where he remained from 1748 till his death, which occurred on the 1st of May, 1772. He was nominated professor of philosophy in 1753, of law in 1761. From the commencement of his teaching at Göttingen he made statistics, or as it was then called states-science (*Wissenschaft der Staaten*), the subject of his principal course, and in 1749 published his 'Abriss der neuesten Staatswissenschaft der vornehmsten europäischen Reiche und Republiken,' (Outline of recent Statistics of the principal European Kingdoms and Republics). His views were more fully developed in his constitution and condition of the European kingdoms ('Staatsverfassungen der europ. Reiche im Grundrisse,' Gott., 1752), of which he published revised editions in 1762 and 1768. To collect materials for these later editions he made journeys in successive years in England, Holland, France, and Switzerland, and the last edition may be taken as the complete expression of his idea. Achenwall was not the first to teach statistics, still less was he the originator of the science; but he was the first to give it a distinct form, to define its purpose, to develop its capabilities, to impart to it clearness of purpose and precision of method. With him statistics (the title was invented by him, *scientia statistica*), was not applied merely to the collection of facts and figures, but made to embrace the entire social condition, political organisation, and economical resources of a state. As it has been neatly put, Achenwall "defines politics as the theory of what a state ought to be, statistics the account of what it really is, and civil history as the account of how it has become what it is." On all these subjects Achenwall sought to obtain sound knowledge and clear views, and he made all of them the subject of his teaching. Great as was the influence of his writings, that of his oral instruction was probably even greater. His other published works include a Theory of Law ('Elementa Juris Naturæ,' Gott., 1758); Theory of Politics, 1761; and others on European state-rights, politics, and diplomacy. His wife, SOPHIE ELEANORE WALTHER, a woman of unusual learning and ability, wrote poetry and essays: and her collected works were published in five volumes, Göttingen, 1751.

ACHERLEY, ROGER, a political writer of some notoriety during the first half of the 18th century. Of his life little is known. Born probably near the close of the 17th century, he was a barrister, and describes himself as "of the Middle Temple, Esquire." The work by which he became known was entitled 'The Britannic Constitution, or the Fundamental Form of Government in Britain, demonstrating the Original Contract entered into by King and People; wherein is proved that the placing on the throne King William III. was the natural fruit and effect of the Constitution;' fol. London, 1727. The hypothesis of an original contract was not of course new, but Acherley regarded it as a positive historical fact, the result of a convention held for the purpose by the inhabitants of Britain not long after the Flood. The work is that of an enthusiast, and, apart from the history, is consistent throughout. It was written against, laughed at, and defended, but probably convinced nobody. Acherley was a devoted supporter of William and the Revolution of 1688; and in the reign of Anne he showed equal devotion to the House of Hanover, at the same time that he stoutly upheld the rights of the legislature, in a work entitled 'Free Parliaments; or an Argument on their Constitution; proving some of their powers to be independent: to which is added an Appendix of Original Letters and Papers which passed between the Court of Hanover and a Gentleman at London, touching the right of the Duke of Cambridge [afterwards George I.] to reside in England and sit in Parliament;' 8vo, London, 1731. He is also the author of the tract entitled 'Jurisdiction of the Chancery as a Court of Equity re-searched,' of which a third edition appeared in 1736;

BIOG. DIV.—SUP.

and 'Reasons for Uniformity,' 1741. A second edition of his 'Britannic Constitution' was published in 1759. Acherley is believed to have died some time previously.

(*Biographical Dictionary of the Society for the Diffusion of Useful Knowledge*.)

ACHERY, DOM JEAN LUC D', a learned Benedictine, was born in 1609, at St. Quentin, in Picardy; professed at the Benedictine monastery in that town, but quitted it in 1632 to enter the abbey of La Ste Trinité at Vendôme, belonging to the congregation of St. Maur, where the rule was more strict. In 1637 his health rendered a residence near Paris desirable, and he removed to the abbey of St. Germain des Prés, where he spent the remainder of his days. He was the librarian of the abbey, and he re-arranged, greatly increased, and catalogued the books. The Popes Alexander VII. and Clement X. held him in high esteem, but the feebleness of his health, and the laborious nature of his studies, confined him close to his abbey, and made him regardless of honours. His piety, his learning, and his gentleness caused him to be much consulted in religious and literary difficulties. His studies were mainly directed to the early history of the Church, in which his researches were of great value. He published editions of the Catholic Epistles of St. Barnabas in Greek and Latin, with the notes of P. Ménard, 4to, 1645; the works of Lanfranc, with a life and appendix, Paris, fol. 1648; the Life and Works of St. Guibert, Paris, fol. 1651; the early ascetic writings, 'Asceticorum vulgo Spiritualium, Opusculorum, quæ inter Patrum Opera reperiuntur, Indiculus,' &c., Paris, 4to, 1648; and several other learned works, but his great works are the two following: 'Veterum aliquot Scriptorum, qui in Galliæ Bibliothecis, maxime Benedictinorum, latuerant Spicilegium,' Paris, 13 vols. 4to, 1655-77, an immense collection of documents, memoirs, and papers of all kinds, illustrating the history, theology, and literature of the middle ages, drawn from many of the monastic libraries, put together without any attempt at classification, but with a preface to each volume explaining its contents. The 2nd edition by La Barre, Paris, 3 vols. folio, 1723, is more convenient for reference; but the prefaces, in which are much of D'Achery's peculiar erudition, have been cruelly abridged. Even this great work was outdone by the 'Acta Sanctorum ordinis S. Benedicti in Sæculorum Classes distributa,' Paris, fol. 1668, &c. Seven volumes of this vast work were published during D'Achery's life. Of these the materials were for the most part collected and arranged by D'Achery, but the notes, observations, and tables, as well as the learned prefaces, were by Mabillon, who had also assisted D'Achery in the compilation of his 'Spicilegium,' [MABILLON, E. C. vol. iv. col. 1]. D'Achery died at St. Germain des Prés, April 29, 1685.

ACKERMANN, RUDOLPH, printseller and publisher, was born at Stolberg, in the Saxon Harz, April 20, 1764, the son of a coach-builder and harness maker, who removed his manufactory in 1775 to Schneeberg, in the public school of which town Rudolph received his education. At the age of 15 he entered his father's workshop, but after a little time gave his chief attention to drawing, and became an expert draftsman and designer. On the completion of his apprenticeship he visited several German towns, and then stayed for awhile at Paris as pupil and assistant to Carrossi, then the leading designer for coach-builders. From Paris he came to London, where he found ample employment at a time when a carriage was regarded as a work of art: among his designs were the state carriage of the Lord-lieutenant of Ireland, 1790, and that of the Lord-mayor of Dublin, 1791. Having saved some money and married an English wife, he, in 1795, took a house in the Strand, No. 96, and commenced the business with which his name is chiefly associated, of a print-seller and fine-arts publisher. The following year he removed to larger premises, No. 101, Strand, and, along with his proper business, reopened the rooms known as Shipley's Drawing School, as a school of art, which he continued with success till 1806. Later he commenced holding in his large room weekly evening gatherings, for social intercourse, of artists, literary men, and persons of taste, at which the new prints, pictures, and artistic nick-nackeries were exhibited, and which are described as having contributed greatly to the promotion of a love of art and acquaintanceship with artists. But it was as a publisher of illustrated works that he was best known, and had most influence on the public taste. Although many of his publications were almost necessarily addressed to the passing modes of thought, many were at once costly and of permanent value. Chief among these were the various series illustrating the universities and grammar schools, public build-

ings, and picturesque localities. Such were the 'University of Oxford, portraits of the founders, and costume,' in all 133 plates by Pugin, Mackenzie, and Uwins; a companion volume of Cambridge University, with 111 plates after the same artists; the colleges and schools of Eton, Harrow, Winchester, Westminster, &c.; Westminster Abbey, 84 plates after Pugin and Mackenzie, 1813; 'Palace of Brighton,' by Nash, 1826; and 'Picturesque Tours,'—of the English lakes, with plates after Fielding and Walton; of the Thames with plates after Westall and Owen; of the Seine with plates after Pugin and Gendall; of the Rhine, after Von Gerning; and other series of South America, India, &c. Another important class of illustrated books was that to which belonged 'The Microcosm of London,' 3 vols. 1809-10, with 104 plates after Pugin and Rowlandson, a very different work from Pyne's 'Microcosm,' 120 plates, 1822; 'Select Views of London,' 76 plates, 1810-15; 'Views of Country Seats of the Royal Family, Nobility, and Gentry,' 'Views of Cottages and Farm Houses of England,' 52 plates, after Chalon, Prout, Cristall, Varley, &c., 1816. Books like Blake's designs to Blair's Grave (engraved by Schiavonetti), 1818; 'Albert Durer's Prayer Book,' 45 plates, 1817; and 'Subjects from the Works of T. Stothard, R.A.,' 61 plates, 1830—were among those published by him. He also published, and for the most part suggested, those books which owed their extraordinary popularity to the exuberant pencil of Rowlandson rather than to the pen of his literary colleague, Combe, and of which the Tours of Dr. Syntax and Johnny Newcome, may be cited as the representatives. Several of his more expensive illustrated works were published in parts, but besides these Mr. Ackermann initiated the publication of an illustrated art periodical, in 'the Repository of Arts, Literature, Fashions, &c.,' which he continued for about 20 years, 1809—28. 'The Poetical Magazine' was another periodical started by him, but it did not last long. Another, 'The World in Miniature,' was continued through 43 volumes. The elegant but flimsy Christmas or New-Years' *Annals* which for some years enjoyed so extraordinary an amount of public favour, owed their origin to Mr. Ackermann, who in 1822 brought out his 'Forget-Me-Not,' and was quickly followed by numerous imitators. We have named these as characteristic examples of Ackermann's illustrated publications, but they are only a very few out of many; a tolerably full list may be seen in 'Notes and Queries,' 4th series, vol. iv. pp. 111, 129, &c. Mr. Ackermann was the first to render lithography practically available in England. Struck by its capabilities he set up presses, and opened an establishment for carrying out the various processes of the art; translated Senefelder's 'Manual,' and induced Prout and some other skilful artists to turn their attention to its practice; and when mechanical and other difficulties proved serious obstacles to its success, he went to Germany to discuss them with Senefelder, and in 1822 gave to artists the benefit of his investigations in a 'Complete Course of Lithography.' He also spent much time and money in endeavouring to improve the process of aquatinta, a process by which the plates of many of his publications were executed. Nor was his interest confined to inventions connected with art. His was one of the first houses in London lit with gas, he having had works for its manufacture erected on his premises, and liberally assisting the inventor in his experiments. In 1815 he published 'Accum's Treatise on Gas Lighting.' He also laid before Government a scheme for applying balloons in time of war. Waterproofing of woollen-stuffs, leather, &c., was another project at which he laboured, having waterproofing works for some time in successful operation at Chelsea. By his countrymen he was, however, most esteemed for his philanthropy, he having been the promoter and secretary of the subscription (1813) for the sufferers by the war in Germany, which raised a sum of £100,000, besides the vote of a similar sum by Parliament. He was likewise earnest and successful in assisting the distressed French and Spanish exiles, and in procuring them opportunities for turning their talents to account. He continued actively engaged in business till 1830, when he was disabled by an attack of paralysis. He removed to Finchley, where he died March 30, 1834.

ACONTIUS, JACOBUS (ACONZIO, GIACOMO), distinguished as a philosopher, jurist, theologian, and engineer, was born at Trent, early in the 16th century. The year 1566 is ordinarily, and it would seem with propriety, assigned as that of his death; and this statement is greatly fortified by the testimony of Grasserus, who in an edition of the 'Stratagemata Satanae,' of Acontius (1610), says that the author died soon after its first publication in 1566. It is probable, therefore, that Francis Cheynell was mistaken in his assertion ('The Divine Triunity,' London,

1650, p. 443) that Acontius "was living in the year 1613." He himself states that he was educated for the profession of the Law; and it is further said, on evidence less conclusive, that he subsequently spent several years in a Court. Literary activity was the adoption of a later period. In 1557, he abandoned the communion of the Church of Rome; and became, with others, an exile from his native country, for the sake of enjoying a wider liberty of theological speculation. At first he took refuge in Switzerland; afterwards at Strasbourg; and finally, about 1558, came over to England, where he spent the remainder of his life. His abilities as an engineer recommended him to the favour and patronage of Queen Elizabeth, from whom he enjoyed a pension. An interesting record of his activity in this capacity is preserved at varying length in the 'Statutes at Large,' in Dugdale's 'History of Imbanking,' and in Hasted's 'History of Kent.' It was represented to Parliament, in the fifth year of Queen Elizabeth (1563), that two thousand acres of land in the parishes of Erith, Plumstead, and Leases, which in former times were good pasture grounds and meadows, had lain waste during thirty years owing to the breaches in the river walls, and the consequent inundation of the Thames. It was further represented that "one Jacobus Acontius, an Italian, and servant to the Queen, had undertaken at his own charges their recovery, in consideration of a moiety of them for his charges." An Act of Parliament was necessary for the undertaking, on account of the opposition of many of the proprietors whose interests seemed to be threatened by the project; and it was accordingly enacted that "the said Jacobus and his assigns, and their servants, &c., should at his cost and charges, after the 10th of March, 1563, during the term of four years next following, inne, fence, and win the said grounds, or any parcel of them," the recompense to be as already stated. A commission, issued in the seventh year of Queen Elizabeth, gave in a report on the last day of the following January, to the effect that six hundred acres had been won and 'inneed,' and walls, banks, and other defences thrown up to protect them from the water and flood of the river Thames, according to the tenour of the Act. From another act of the eighth year of Queen Elizabeth, it appears that Acontius farmed out his privilege to John Baptista Castilion and others whose names are repeated in the powers granted or confirmed to them in a further act of the twenty-third of Elizabeth; and assigned to them the part—the East Marsh—which had been allotted to himself. It is fair to infer that failing health alone could have induced a man of the energy and ingenuity of Acontius to relegate to other hands the continuance of such a task; and thus we are again brought to the probable conclusion that his death happened, according to Grasserus and the generally received account, in the year 1566.

Acontius expresses his obligations to the Queen in a dedication to her Majesty of his work on the Devices of the Devil, 'Stratagemata Satanae, Libri Octo,' 12mo, Basilæ, 1565; of which three other editions were published at Basel, 1582, 1610, and 1620, and one at Amsterdam, 1624. An octavo edition issued from Oxford in 1631, with a letter addressed by the author to J. Wolfius. An English translation of the first four books appeared in 1648, under the title of 'Satan's Stratagems; or, the Devil's Cabinet-Council Discovered,' 4to, London; and another, in 1651, entitled, 'Darkness Discovered; or, the Devil's Secret Stratagems laid open; whereby he labours to make havock of the people of God by his wicked and damnable designs for destroying the kingdom of Christ. Wherein is contained an exquisite method of disputation about religion, and putting an end to all controversies in matters of conscience. Written by Jacobus Acontius.' Editions of this work appeared, with more or less promptness after its first publication, in the leading languages of Europe. The 'Stratagemata Satanae' was the occasion of much controversy, and Peltius speaks of its author as "clandestinus Socinianorum assecla;" whilst Cheynell says that "he gives the right hand of brotherly fellowship to the Socinians." On the other hand, Arminius calls him "divinum prudentiæ et moderationis lumen;" and it has been more recently affirmed that some of the finest passages of Milton's 'Areopagitica' may be traced to Acontius. It is, at least, conceded on all hands, as well by orthodox as by heterodox readers, that the author of this book was an Antitrinitarian.

Acontius was a member of the Dutch Church in Austin Friars; and as, in the words of Strype ('Life and Acts of Archbishop Grindal'), a suspicion arose that he was "touched with Anabaptistical and Arian principles," proceedings were instituted against him, in 1560, before Grindal, then Bishop of London, and *ex officio* "superintendent of the Foreigners' churches in

London." Dr. Grindal gave judgment against Acontius; and Strype says that the latter was "withheld by the bishop's sentence from receiving the holy sacrament, forbidding both the Dutch or any other Church to admit him; for which he wrote a long expostulatory letter to the said Dutch Church, which is extant [1710] in the library of the said Church of St. Augustin's." The principal works of Acontius, besides the one already mentioned, are a treatise on method, 'De Methodo; hoc est, de recta investigandarum tradendarumque Artium ac Scientiarum ratione Libellus,' 12mo, Basilæ, 1558; 8vo, Genève, 1582; 18mo, Lugd. Bat. 1617; and another on fortification, 'Ars Muniendorum Oppidorum,' Genève, 1585.

ACUNA, CRISTOVAL DE, Spanish Jesuit, was born at Bruges in 1597; entered the order of Jesuits in 1612, and was sent as a missionary to the Indians in South America. After several years thus employed, he was made rector of the college of Cuenca. In 1639, it being decided to send Pedro Teixeira, the Portuguese traveller, to make a new and more thorough exploration of the Amazon river, Acuña and another Spanish Jesuit, Andres de Arteida, professor of Theology at Quito, were directed to accompany him, in order to draw up a report to send to Spain. The expedition, which consisted of 45 canoes, with 70 soldiers and 1200 native rowers and slaves, embarked at Archidona, February 16, 1639, and reached Para in ten months, but several months were spent in attacks on the Indians, whom the Portuguese treated with great cruelty. Having to remain there some months while waiting for a ship for Spain, Acuña availed himself of his enforced idleness to write an account of the voyage and observations on the country. The book was published at Madrid in 1641 under the title 'Nuevo Descubrimiento del gran Rio de las Amazonas.' Acuña writes in the third person, briefly, and well. He estimates the length of the river from what he supposed to be its source at 1356 Castilian leagues; states the number of tribes inhabiting its banks to be about 150, each speaking a different tongue; and gives ample particulars about the race of Amazons, respecting whom he made very particular inquiries, and of whose existence he fully convinced himself. Acuña strongly urges the King of Spain to take possession of the country, with a view particularly to the conversion of the natives, volunteering himself and his order for the undertaking. But the times were unpropitious, and nothing was done; the king it is said even sought to suppress the book, with a view to preventing the Portuguese from availing themselves of the information afforded by it respecting the country. Certain it is, the book became excessively rare, though it was translated into French by Gomberville ('Relation de la Rivière des Amazones,' 4 vols. 12mo) in 1682, and from the French into English, one vol. folio, in 1698. Southey has given a summary of Acuña's account in his 'History of Brazil' (vol. i. chap. xviii.). Failing in his hopes of exciting the royal sympathy, Acuña proceeded to Rome as procurator of the Jesuits; served some time in Spain as censor of the Inquisition, and eventually returned to South America. He was living in Lima in 1675, and died there probably shortly after.

(*Bibliotheca Scriptorum Soc. Jesu Opus inchoatum*, Rome, 1677; Rodriguez, *El Marañon y Amazonas*, Madrid, 1684; Southey; Denis, in *Nouv. Biog. Générale*; T. Watts, *Biog. Dict. of U. K. S.*)

ACUÑA, HERNANDO DE, an eminent Spanish poet, was born near the beginning of the 16th century. His family, of Portuguese origin, was of noble rank, and Hernando himself entered the army, in which he rose to a good position, distinguishing himself particularly in the expedition of Charles V. against Turin, in 1535. By some Spanish critics Acuña's verse is preferred to that of Garcilaso de la Vega, especially in his translations; he is, however, seldom read now. His first work was a poetic translation, made at the request of Charles V., of Olivier de la Marche's 'Chevalier délibéré,' but much altered; it was published at Antwerp in 1553, 4to, with 20 engravings on wood, and several times reprinted. None of his other writings were published during his life. He died in 1580 at Granada, whither he had gone to prosecute his title to the countship of Buendia. His widow published his remaining works at Madrid, in 1591, under the title of 'Varias Poesias,' in which are included an original poem of 92 stanzas in octave verse on the story of Narcissus, numerous sonnets and short pieces, and several translations from Ovid.

ACUNA, DON PEDRO BRAVO DE, governor of the Philippines, born towards the middle of the 16th century, was of the family of the Counts of Buendia, and, according to the custom of Castile, assumed his mother's name (Acuña) in addition

to that of his father (Bravo). Adopting the profession of arms, he distinguished himself in the campaign of Lepanto against the Turks, 1572; in the wars of Naples and Portugal, and in resisting the attack of Drake upon Cadiz in 1587. In 1593 he was appointed Captain-General of the province of Carthage and Tierra Firme, and in 1602 Governor of the Philippines. Here he was for some time occupied in repelling the aggressions of certain English and Dutch buccaneers, and then in quelling an insurrection of the Chinese who had settled in the suburbs of Manila. This last he put down with merciless severity, having slaughtered at least 23,000. This was the number given in the official report, but it is said to have been understated, in order that it might not appear that a larger number of Chinese had been allowed to settle there than the royal orders directed. From the first Acuña had determined to dispossess the Dutch of the Moluccas, and he was now able to direct all his energies to this purpose. In January, 1606, he sailed at the head of a large force, and on the 1st of April attacked and took Ternate, after a desperate resistance. Having captured the King of Ternate, Acuña compelled him to swear homage to the King of Spain, and grant a monopoly of the spice trade to the Spaniards. Taking the King of Ternate with him, Acuña returned to Manila, which he reached on the 9th of June. He was received with unbounded joy by his partisans, but a small though powerful section who had predicted the failure of the expedition, continued their enmity, and his death, which occurred on the 1st of July, was attributed to them. No evidence of this has, however, been brought forward, and the charge of poisoning was in those days as often made without as with cause.

ADAM, ADOLPHE CHARLES, a prolific French musical composer, was the son of Jean Louis Adam, a composer of pianoforte music. He was born at Paris on the 24th of July, 1803; studied solfeggio and the pianoforte under his father; and in 1817 entered the organ class at the Conservatoire de Musique. He now studied composition and counterpoint under Reicha; and pursued further musical studies under Boieldieu, whose style greatly influenced him in after years. He became known to the public as the composer of songs for vaudevilles, many of which were very popular. His engagement as pianoforte accompanist at the Théâtre Gymnase facilitated his introduction to singers and players. About this time Adam composed a number of fantasias and variations on airs in popular operas by Auber, Rossini, Boieldieu, &c. After composing the music for several trifling operettas, for the Gymnase, Vaudeville, and Nouveauté theatres at Paris, he advanced to regular comic opera, in which his first production was 'Pierre et Catherine' (1829). To this rapidly succeeded 'Danilowa' (1830); three in 1831, viz., 'Trois jours en une heure,' 'Le Morceau d'Ensemble,' and 'Le Grand Prix'; 'His First Campaign,' for Covent Garden Theatre, London (1832); 'Le Proscrit,' and 'Une Bonne Fortune,' (1833); 'Le Châlet' (1834). In 'Le Proscrit' he first clearly showed Boieldieu to be his favourite master, and this was further shown in 'Le Châlet.' Adam continued to compose comic operas until the number exceeded forty. The best known, in addition to those above-named, are 'Le Postillon de Longjumeau,' 'Le fidèle Berger,' 'La Reine d'un Jour,' 'Le Brasseur de Preston,' 'Le Roi d'Yvetot,' 'La Bouquetière,' 'Richard en Palestine,' and 'Giralda.' He also composed the music for many of the grand ballets so popular in Paris—including 'Faust,' 'La Jolie Fille de Gand,' 'La Fille du Danube,' 'Giselle,' 'Le Diable à Quatre,' 'La Filleule des Fées,' and 'Le Corsaire.' Two masses, composed by him in 1847 and 1850, have been much played at the Paris churches. Adam invested his accumulated means in building a new opera house, the Théâtre National, at Paris; but it occasioned him a direct loss of 80,000 francs, and liabilities for 60,000 more. He afterwards wrote musical criticisms in the 'Constitutionnel' and 'L'Assemblée Nationale.' Adam (who was one of the members of the Académie des Beaux Arts and Professor of Composition at the Conservatoire) used to admit to friends that, in composing for a living, he composed too rapidly for fame. He was found dead in his bed on May 3rd, 1856. A posthumous work by him, 'Souvenirs d'un Musicien,' was published in 1857.

ADAM, LAMBERT SIGISBERT, eminent French sculptor, was born at Nancy in 1700. From his father Jacob Sigisbert Adam (born at Nancy in 1670 and died there 1747), a sculptor of more than local celebrity, he acquired the elements of his art; at the age of 18 went to Metz, where he was employed some months; and then proceeded to Paris, 1719, and entered the schools of the Academy. Having won the grand prize by a bas-relief of Joachim, he was sent in 1723 as royal pensioner to

Rome. Here he remained ten years, and executed, among other things, a Mars and Venus for the King, Louis XV.; and a design for the fountain of Trevi, which was selected from its competitors by Pope Clement XII., but was not executed, owing, as is affirmed, to the intrigues of the Italian sculptors. Adam's chief employment whilst at Rome appears to have been what is called *restoring* antique sculpture found in Rome and its vicinity. For Cardinal de Polignac he added missing members to a large number of statues, and he purchased many more statues to carry back with him to Paris. This restored collection was purchased, in 1742, by Frederick II. of Prussia for Sans-Souci, but unhappily the works mischievously renovated by Adam are not confined to that gallery. Adam was elected a member of the Academy of St. Luke, Rome, in 1733, and the following year of that of St. Clement, Bologna. He returned to Paris in 1733, and was at once employed upon a colossal group in stone, of the 'Junction of the Seine and the Marne,' under the figures of a river-god and a nymph, which was placed above the cascade at St. Cloud. Louis XV. admired the work and engaged Adam to execute other groups for the gardens of Choisy; the 'Triumph of Neptune and Amphitrite' for Versailles, and several other works. A group emblematic of Fishing was presented by Louis XV. to Frederick the Great for the gardens of Sans-Souci. Among the more admired of Adam's works was a statue of St. Jerome, executed for the Invalides, and a bust of Louis XV. as Apollo. Adam was a clever sculptor in the manner of Bernini, but his style was affected and meretricious. He was elected into the French Academy in 1737, and professor in 1744. In 1754 he published a 'Recueil de Sculptures Antiques, Grecques et Romaines,' folio, engraved after his own drawings. He died in 1759. Two of his brothers also excelled as sculptors.

FRANÇOIS-GASPARD ADAM, born at Nancy, 1710, worked with his brothers at Rome, acquired some reputation, and obtained the appointment of court-sculptor to Frederick II. of Prussia. He died at Paris in 1759.

NICOLAS-SEBASTIEN ADAM, born in 1705, was instructed like his brothers by his father; worked at Paris and Montpellier; afterwards proceeded to Rome, assisted his brother Lambert during several years; but executed a 'Prometheus,' the mausoleum of the Queen of Poland, and other important works on his own account; was elected member of the Academy and professor of sculpture; and died in 1778.

ADAM, MELCHIOR, a German biographer, who, as Bayle remarks, for the indefatigable diligence with which he selected, arranged, and published the lives of a very great number of learned men, deserves that a like service should be rendered to him, was born in the latter part of the 16th century at Grotkau in Silesia; studied for many years at the gymnasium of Brieg, where he became thoroughly imbued with Protestant ideas; in 1598 proceeded to Heidelberg, where in 1601 he was made magister philosophiæ and laureate; and was soon after appointed teacher in the Heidelberg gymnasium. In 1606 he was made conrector of the gymnasium, and subsequently received other promotion, but of what nature is not clear. He died in 1622. Melchior Adam published 'Dissertatio de Virtute Morali,' 4to, Heidelberg, 1602; 'Apographum Monumentorum Heidelbergensium,' 4to, Heid. 1612; 'Parodiæ et Metaphrasæ Horatianæ,' 8vo, Frankfurt, 1616; and one or two other things, but the great work of his life was his 'Vitæ Germanorum Philosophorum,' &c., which appeared in four series, 8vo, Frankfurt, 1615—20, devoted respectively to eminent philosophers, divines, physicians, and jurists, a fifth decade being assigned to memoirs of twenty divines who were not Germans. All the persons commemorated are Germans or Flemings, and all the theologians Protestants. The series were several times reprinted separately, and in 1705 published together in one folio volume, which has, however, the reputation of being very inaccurate. Adam's biographies were charged by the Roman Catholics with unfairness, by the Lutherans with partiality. To readers of the present day they seem sufficiently free from intentional unfairness. Adam spent every spare hour in collecting and digesting the materials for his biographies, but like too many industrious students, found himself unable to work up more than a comparatively small portion of what he had so laboriously accumulated. All subsequent investigators have found his Lives an ample treasury.

ADAMI, ADAMO, Bishop of Hierapolis, was born in 1610 at Mühlheim on the Rhine. In his eighteenth year he became a member of the order of St. Benedict in the abbey of Brauweiler, near Cologne. In 1633 he received the priestly ordination, and in the following year was appointed rector of

the College of the Benedictines at Cologne. He now took the degree of D.D., and in 1637 was elected Prior of the Benedictine Convent of St. James, near Mainz. Thence he was transferred, in the same capacity, to the abbey of Murhart in Suabia, in order that he might there support, by his writings and personal influence, the intentions of the Emperor Ferdinand III., who wished to recover from the conquered Protestants the property they had formerly taken from the Catholics. The negotiations which in 1643 took place successively at Osnabrück and Münster, and which preceded the Treaty of Westphalia, by which the Thirty Years' War was brought to a conclusion, opened up for Adami a field of still more brilliant activity; for he acted at these negotiations as the representative of the abbots and administrators of the monasteries of the Duchy of Wirtemberg, and greatly facilitated the business of the commissioners by the fulness and variety of his information, and the prudence of his advice. His conduct, indeed, so won the admiration and esteem of Cardinal Chigi, that when, two years after he was sent to Rome to bring back with him the *pallium* for the Archbishop of Cologne, the Pope, Innocent X., acting on the cardinal's representations, appointed Adami Bishop of Hierapolis. Under this title it was, that for nearly ten years he administered the diocese of Hildesheim, giving proofs of his virtue and his zeal for the good discipline of the Church. He died March 1, 1663, leaving behind him the reputation of having fulfilled his various offices with honesty, boldness, tact, and ability. His literary productions are all but confined to a 'History of the Congress of Westphalia,' a work which he had composed in the first instance for his own use and that of his friends, and which, although printed in 1698, was not published till 1707, 4to, Frankfurt-on-the-Main. Another edition, under the care of J. G. de Meiern, appeared in 1737, with the title of 'Adami Episcopi Hierapolitani relatio Historica de Pacificatione Osnaburgio-Monasteriensis,' 4to, Lipsiæ. Another task, which Adami had undertaken, 'Histoire de la Congregation de Bursfeld,' was left incomplete by the pressure of affairs, secular and ecclesiastical, and by the prematurity of his death.

ADAMNAN, or ADOMNAN, SAINT, an Irish abbot of Iona, was descended from Nial, King of Ireland, and was born at Rathboth, now Raphoe, in Donegal County, about 624. He was probably educated in the monastery founded by his kinsman, St. Columba, at Iona (Hii), as he assumed the religious habit there, and on the death of Faílbbh in 679, was elected abbot. His time was spent in study, instruction, and the governance of the monastery. About 697 he went over to Ireland, where he collected materials for his life of St. Columba. About the end of the century he was sent by his countrymen to Ailfrid, King of Northumberland, on a mission apparently of importance, though its purpose is not clear, as he stayed some time in the country. During his sojourn in Northumberland he became a convert to the Roman rule for the celebration of Easter—then a question of primary importance among the ecclesiastics of Britain. He preached the new rule in Ireland, and on his return to Iona in 702 or 703, endeavoured to persuade his monks to adopt it, but failing therein, died of chagrin, before the next celebration of Easter (704), says Bede, on the 23rd of September, 703, according to the Irish annalists. Adamnan's 'Life of St. Columba' is a tedious and inaccurate work, full of the most improbable marvels, but curious, and of considerable biographical and historical value. It was first printed by Canisius in 'Antiquæ Lectiones,' vol. v., and has been several times reprinted: all previous editions, however, are rendered superfluous by that of Dr. Reeves from the exquisite Schaffhausen MS., published by the Irish Archaeological and Celtic Society, 1857. Adamnan also wrote a very curious account of the Holy Land, which he says he derived from Arculf, a French bishop, who, on his return from Palestine, was shipwrecked on the west coast of Britain, and after much wandering found hospitable shelter in the monastery of Iona, where he related to Adamnan his travels, and described the wonders of the Holy country. Adamnan presented his book to King Ailfrid, who, being greatly delighted with it, caused several copies to be made for the instruction of his subjects. Bede, a contemporary of Adamnan, wrote an abstract of it, and makes it the subject of two chapters of his 'Ecclesiastical History' (Book V. chapters xvi. and xvii.). It appears to have become very popular, and no doubt did much to stimulate the interest felt in this country respecting the Holy places. Adamnan's 'De Situ Terræ Sanctis' was first published by the Jesuit Jacob Gretser at Ingolstadt in 1619, and afterwards included in vol. iv. of Gretser's collected works, 17 vols., fol., Ratisbon,

1734—41. It was also printed in tome 1, par. 2 of *Mabillon's 'Acta Sanctorum.'*

*ADAMS, CHARLES FRANCIS, an American politician and diplomatist, is grandson of John Adams, second President of the United States [E. C. vol. i. col. 33], and son of John Quincy Adams [E. C. vol. i. col. 36]. Charles Francis Adams was born at Boston, Massachusetts, August 18, 1807; received much of his education while residing with his father at St. Petersburg and London, and graduated at Harvard University in 1825. In 1828 he was elected a member of the legislature of Massachusetts. He was an unsuccessful candidate for the Vice-Presidency of the Republic in 1848, on what were known as "Free Soil" principles. He became member of Congress, and Chairman of the Committee of Manufactures in 1860. In 1861 Mr. Adams came to England as Ambassador from the United States—therein following in the footsteps of his grandfather and father. His occupancy of this post from 1861 till 1868 was an arduous one, owing to circumstances connected with the civil war in his own country. In 1861 the 'Trent' affair nearly plunged England and America into war. Soon after this, Messrs. Laird, of Birkenhead, built a fast and strong steamer, which evaded the watchfulness of the authorities, escaped to sea, took in a crew and an armament, and, as the 'Alabama,' cruised about under the flag of the Confederate States, inflicting a vast amount of injury on the Federal shipping. This was regarded by the United States Government as a violation of neutrality; and Mr. Adams was engaged almost continuously from that time until 1868 in diplomatic correspondence concerning this affair. Mr. Adams resigned his post in February, and left England in September, 1868, on the arrival of his successor, Mr. Reverdy Johnson. In the 'Alabama' question Mr. Adams of course maintained the views of his Government: but the tact, courtesy, and discretion with which he conducted the discussion, as well as the fairness and judgment displayed by him on all occasions, did much to preserve good feeling between the two countries in trying times, and secured for himself very general esteem.

ADAMSON, PATRICK, a distinguished Scottish prelate, an estimate of whose true character and position it is difficult to disentangle from the conflicting accounts of partizans, was born in March, 1536, at Perth, where his family had been established for about 150 years. He was the eldest of the three sons of Patrick Constan, Constantine, or Adamson, who appears to have been a baker, and who was a magistrate of Perth in the year 1541. His classical education was commenced at the Grammar School of his native city, whence he proceeded to St. Mary's College, St. Andrews. After taking his Master's degree, which he did in 1558, as *Patricius Constynne*, he appears to have acted as a tutor in the university. In 1560 he passed the examinations of the General Assembly, and soon after was appointed minister of the parish of Ceres in Fife. His first publication was a poetical attack on the doctrines and practices of the Roman Catholic Church, which he addressed to the Papists of Aberdeen, "*Ad Papistas Abŕdonenses*," with the title, "*De Papistarum Superstitionis Ineptiis, Patricii Adamsoni, alias Constantini, Carmen*," Edinburgh, 1564.

Having been refused, in June of the same year, the Assembly's permission to travel on the Continent, he presently threw up his charge, and set out for France in the capacity of tutor to the eldest son of Sir James Macgill, of Rankeilour, in Fife, his friend and patron, and one of the senators of the College of Justice. Adamson remained about two years in Paris, at the end of which time he contrived to excite the jealousy of the French Government by the impulsive loyalty with which he rushed to celebrate the birth of the son of Mary Queen of Scots (afterwards James VI.), in a Latin poem of about 300 hexameters, and by the extraordinary terms of the title, in which he styled the infant, Prince of Scotland, England, France, and Ireland. The title further sets forth that the work was sent to press on the 25th June ("*typis commissum, 25 Junii, sexto a partu die, 1566*") six days after the birth of the Prince. This jubilant but unfortunate poem bore as a title, "*Serenissimi ac Nobilissimi Scotiæ, Angliæ, Franciæ, et Hybernæ, Principis, Henrici Stuardi Illustrissimi Herois, ac Mariæ Reginæ amplissimæ filii Genethliacum*." It required all the interest of the Scottish queen with the French Court to procure the limitation of Adamson's punishment for his too loyal escapade to a six months' imprisonment. After his enlargement he proceeded successively to Poitou and Padua, where he and his pupil together commenced the study of the civil and canon laws, a pursuit which, after brief sojourns at Geneva and Paris, they continued during a seven months' stay at Bourges, probably in

1567 or 1568. Whilst Adamson continued in this city—he "sepulchre," as he himself called it, from the concealment he was obliged to practise, and the daily fear in which he as a Protestant was kept for the safety of his life—he wrote his translation of the Book of Job in Latin hexameters—"*Jobus, sive de Constantia*"—as well as a Latin tragedy on the death of Herod. The date of Adamson's return to his native country has been much debated; for if he were in Paris, as his partizans allege, during or about the time of the massacre of St. Bartholomew, August, 1572, it is all but proved that he could not have preached at St. Andrews on the 8th of February in the same year, a sermon, imputed to him by Calderwood and others of his opponents, the purport of which was to attack and to ridicule the order of bishops. The date of the dedication (February 18, 1572) of his Catechism to King James, however, goes to establish the fact that Adamson was at St. Andrews very close upon the time when the sermon was preached; and, on the whole, it seems fair to conclude that he had returned to Scotland as early as the year 1570. The Catechism referred to was written in Latin hexameters, and was prepared for the use of the young king, to whom, as we have said, it was dedicated. It bore as a title, "*Catechismus Latino Carmine redditus, et in Libros quatuor digestus*." Of this work a second edition appeared in 1581. In 1572, Adamson's Latin translation of the Scottish Confession of Faith was published at St. Andrews, under the title of "*Confessio Fidei, et Doctrinæ, per Ecclesiam Reformatam Regni Scotiæ receptæ*."

On his first return to Scotland, Adamson had married Elizabeth, the daughter of William Arthor of Kernis, and had begun to practise at the bar. He yielded, however, to the request of the Assembly that he should resume his original profession, and was thereupon appointed to be minister of Paisley. In 1575 he was one of a deputation selected by the General Assembly to confer "upon the jurisdiction and policy of the Kirk," with commissioners nominated by the regent Morton, by whom in the following year he was advanced to the primacy, then vacant by the death of Archbishop Douglas. He refused to "submit himself to the trial and examination of the Assembly (October, 1576), and receive the office of a bishop according to the injunctions and conditions registered in their books;" and from that time forward his life was an unintermitted struggle with the extreme Presbyterian party, now becoming every day more powerful in the Church, even whilst the system still continued to be mainly episcopalian in its forms. Between the years 1577 and 1580 it would appear that the primate had made two or three several submissions to the Assembly, to whom he had, either by his assumption or his imprudence, given occasion of complaint and censure. New cause of offence arose in 1582, from the fact of the Archbishop voting in Parliament, and collating to benefices. The Assembly, which met in October of that year, relegated him to be dealt with on these charges by the Presbytery of Glasgow; from whose animosity he was saved for a time by an attack of illness, to which he gave the name of a "fœdity," and which confined him to "his castle, like a tod [fox] in a hole," as Calderwood expresses it. He owed his cure to medicines prescribed for him by a poor woman, named Alison Pearson, who, four years after, in 1588, expiated her skill in leechcraft by being burned as a witch. The Archbishop, of course, thereafter lay under the imputation of having sought healing from the agents of the devil. From whatever cause, his recovery was coincident with the arrival of the king at St. Andrews, in June, 1583, before whom he preached with an unction and eloquence he had never previously manifested. One effect of his zeal was that in December of the same year he was commissioned by James as his ambassador to the Court of Elizabeth, for the purpose of facilitating in Scotland the establishment of such a form of episcopacy as should further the union of the two countries when James should become king of both. Adamson had but one audience of the Queen; and both at this and at other times scandal was busy with his name and character in England as well as in Scotland, where, indeed, he laboured under a sentence of suspension by the General Assembly. His preaching, on the other hand, is said to have been very attractive to the English people; so much so, in fact, as to rouse the jealousy of the queen, lest the eloquence of the ambassador should stir up too great an enthusiasm on behalf of his master. Adamson returned to Scotland early in May, 1584, and sat in the Parliament which met at Edinburgh in that month, by which Presbytery "was altogether thrown down, almost within the space of twenty-four hours." The Archbishop now stood high in the graces of King James, and was the constant preacher before the Court. But

the royal favour served only to increase his unpopularity, of which many particulars, betraying so much rancour as to forbid their being received as entirely credible, are still extant.

Whilst his enemies were busy with the circulation of libels, the eloquent pen of the Archbishop was occupied in drawing up a paper which was published in the beginning of the following year, and which in 1587 was printed in Thynne's continuation of Holinshed's 'Chronicle,' under the title of a 'Declaration of the King's Majesty's Intention in the late Acts of Parliament.' The return of Andrew Melville, the great champion of the Kirk, in company with the noblemen who had fled to England after the raid of Ruthven, however, brought about the downfall of the Earl of Arran's administration and the re-establishment of the Presbyterian party. The result was Adamson's ruin. Spurred on by the fierce invective of James Melville, the nephew of Andrew, the Synod of Fife, which met at St. Andrews in April, 1588, passed a formal sentence of excommunication upon the Archbishop, who two days after made a forceless attempt at retaliation by a counter-excommunication of the Melvilles and some of their associates. Through the influence of the Court, however, and at the price of a very humble submission, his peace was made with the Church at the next General Assembly. But he soon became involved in further troubles, and charges of various kinds were brought against him before the Assemblies of 1587 and August, 1588. As he did not appear on citation, his case was remitted to the Presbytery of Edinburgh, who in the following June found him guilty of falsehood, double dealing, erroneous doctrine, opposition to the discipline of the Church, &c., and thereupon deposed him from all his functions in the ministry till he should make satisfaction for his delinquencies. At this crisis the unhappy Archbishop experienced the folly of putting confidence in princes. In 1590 he published, with a dedication to King James, a version in Latin elegiacs of the Lamentations of Jeremiah, 'Threnorum, sive Lamentationum Ieremiæ Prophetæ, F. Elciæ Libellus, Latino carmine redditus'; and another, in hexameters, on the Book of Revelation, 'Apocalypsis S. Joannis Theologi, Latino carmine reddita.' James, however, was not to be moved either by admiration or compassion; and was, indeed, so scandalized at the charges against the Archbishop as to alienate from him the revenues of his see, in favour of the Duke of Lennox. Adamson, thus left in poverty and sickness, sought peace and relief at the hands of his old opponent, Melville, who taking compassion on him, prevailed on the Presbytery of St. Andrews to absolve him from the excommunication on condition of his making a full acknowledgment of his errors of life and doctrine. A full and complete 'recantation' was accordingly made in three several instalments, bearing the dates of the 8th of April, 12th of May, and 10th of June, 1591. The documents thus obtained from the miserable prelate were probably published immediately, although the oldest printed edition extant bears the date of 1598, and has for its title, 'The Recantation of Maister Patrik Adamson, sometime Archbishop of Saint-Andrewes in Scotlande,' the address of 'the Printer to the Reader' being headed with the portentous word, 'Pseudoeiscopomastix.' Archbishop Adamson died at St. Andrews on the 19th of February, 1592, and for fifteen years afterwards his see remained without an incumbent.

A collected edition of the Archbishop's works was published by Thomas Wilson (Latinæ, Volusenus), his son-in-law, an advocate, who dedicated it to James I. This work bore as its title, 'Reverendissimi in Christo Patris, Patricii Adamsoni, Sancti-Andree, in Scotia Archiepiscopi Dignissimi ac doctissimi, Poemata Sacra, cum aliis Opusculis, Studio ac industria Tho. Voluseni I. C. Expolita et Recognita. Londini, apud Joannem Billium, anno M.DC.XIX.' Wilson also published two or three separate tracts of the Archbishop's, and some of the more elaborate works of the latter, to which he alludes in his 'Recantation,' have never seen the light.

ADELARD of Bath [ATHELARD in E. C. S.].

ADLER, GEORG CHRISTIAN, German teacher and theologian, a descendant of the celebrated divine, Kaspar Adler, best known by his Latinised name of Aquila [AQUILA in E. C. S.], was born Nov. 1, 1674, at Wohlacht, in Silesia, and studied theology in the universities of Leipzig and Halle. After acting for a time as teacher in a noble family, he, about 1700, established a high class private school at Königsburg, which met with such success as to attract the notice of the king, who granted it the title of royal school. It afterwards became the Gymnasium of Königsburg, and is now the Collegium Fridericianum. In 1706 Adler was appointed teacher of the Pædagogium, Halle;

and in 1706 rector of the school of Alstadt-Brandenburg. Here he continued till his death, August 30, 1741, having however been elected diaconus of St. Gotthard's Church in 1708, and archidiaconus in 1714. Adler was not only a highly successful schoolmaster, but an esteemed author. His best known publications are 'De Liberalium Artium in Ecclesia Utilitate, si rite tractentur,' Stargard, 8vo, 1702; 'De Morte eruditorum Philosophica,' Berlin, 8vo, 1707.

ADLER, GEORG CHRISTIAN, son of the preceding, was born at Alstadt-Brandenburg, May 6, 1734; studied at Halle; was appointed preacher at Arnis in 1755, pastor at Sarau in 1758, and rose eventually to be royal Danish provost of Pinneburg and Altona, and chief pastor to the Lutheran Church at Altona. He died Nov. 2, 1804. Adler was a conscientious pastor and a learned theologian, but is now best known as an erudite archæologist. Besides a learned description of Ancient Rome (Altona, 1781), which has been superseded by later publications, he wrote 'Nachricht von den Pontinischen Sümpfen,' Hamburg, 8vo, 1784, and edited Frontinus 'De Aquæductibus Urbis Romæ,' Leipzig, 8vo, 1792.

ADLER, JACOB GEORG CHRISTIAN, a distinguished Oriental scholar, son of the second Georg Christian Adler, was born at Arnis in December, 1755. He went early to Rome, where he diligently studied the Eastern languages. On his return to his own country he was nominated professor of Syriac at the university of Copenhagen, and in 1788, professor of theology. He died in 1805. His chief works are 'Codices sacri recte scribendi leges, ad recte æstimandos codices manuscriptorum antiquos,' 4to, 1779; 'Descriptio codicum quorundam cæcorum . . . in bibliotheca regia Hafniensi servatorum,' 1780; 'Musæum cæficum Borgianum,' 2 vols. 4to, 1782-92; 'Bibliotheca biblica Wurttembergici ducis, olim Lorchiana,' 4to, 1787; 'Novi Testamenti versiones Syriacæ . . . illustratæ,' Copenhagen, 1789; 'Reise-bemerkungen auf eine Reise nach Rom,' 8vo, 1784.

ADLER, KASPAR [AQUILA, C., E. C. S.].

ADLER, PHILIP, German engraver, called by a mistake of Florent le Comte, *Paticina*, was born at Nürnberg in 1484; the year of his death is not known. Adler was among the first to adopt the art of etching, and he carried it at once to great perfection. His plates are highly valued, especially those he executed after Albert Dürer. His best print, or that most sought for by collectors, is a representation of the Virgin crowned, under an arch, on which is inscribed, 'Hoc opus fecit Philippus Adler Patricius. MDXVIII.' It was this inscription which by some strange confusion Le Comte read *paticina* instead of *patrician*, which led to the supposition that there was an engraver named *Paticina*.

ADRIAN, ABBOT, a learned divine of the latter part of the seventh century, was, according to Bede (who calls him Hadrian, 'Hist. Ecc.' l. iv. cap. 1), an African by birth, and, at the time he first mentions him, abbot of a monastery near Naples. On the death of Deusdedit, sixth Archbishop of Canterbury, July 14, 665, Egbert, King of Kent, desired to have the priest Wæghard, of the English race, to succeed him, and accordingly sent him to Rome with a request that the pope would confirm the appointment, and ordain him bishop. The pope, Vitalian, however, preferred an archbishop of his own selection, and fixed on Abbot Adrian as a man well skilled in all divine and secular knowledge. But Adrian shrunk from the charge, and eventually, on his recommendation, Theodore, a learned Greek, was appointed, with the condition, however, that Adrian, as being acquainted with the way and the people, should accompany him and prevent him from intruding any of the customs of the Greek Church, or other innovations. The two set out from Rome on the 27th of May, 668, but being detained some time in France, owing to suspicions entertained of their purpose, Theodore did not reach England till towards the end of 669, and Adrian some months later. Theodore appointed Adrian Abbot of St. Peter's, afterwards St. Augustine's, Canterbury, and the archbishop and abbot soon after visited together all parts of the island, Theodore being, according to Bede, the first archbishop whom the whole of the English obeyed. Their first object was to enforce conformity to Rome in rituals and the keeping of Easter, but beyond that they sought to raise the standard of learning among the clergy; founded numerous schools, and made the monastery of St. Peter's a great seat of learning; so that, as Bede writes, both the archbishop and abbot being instructed alike in sacred and secular literature, they collected together a crowd of scholars, and daily there flowed from them rivers of knowledge to water the hearts of their hearers. By the early writers Adrian is indeed considered as the first to introduce among the English the arts and

sciences, including sacred music, astronomy, arithmetic, and the Greek and Latin tongues, as well as sacred literature. Bede relates as a proof of Adrian's learning that his scholar and successor Albinus (from whom Bede derived much assistance in the compilation of his 'Ecclesiastical History') was thoroughly instructed in the study of the Scriptures, knew the Greek tongue well, and the Latin as perfectly as his native English. Abbot Adrian presided over his monastery for 39 years, dying in the year 709. A life of Adrian was compiled by Goscelin, chiefly from Bede's 'Ecclesiastical History,' with the addition of numerous miracles, and also an account of the translation of his relics.

(Bede; Capgrave, *Nova Legenda*; William of Malmesbury, *De gestis Pontif. Angl.*; *Acta Sanctorum*, vol. i. p. 595.)

ADRIAN DE CASTELLO, Italian cardinal, and predecessor of Cardinal Wolsey as Bishop of Bath and Wells, was born at Corneto in Tuscany about 1450. Distinguished as an accomplished scholar, and well skilled in civil affairs, Adrian was sent to England by Pope Innocent VIII. in 1488 to endeavour to bring about a reconciliation between James III. of Scotland and his subjects. When, however, Adrian arrived in London he received intelligence of the death of James; and he stayed in England, being warmly recommended by Cardinal Morton to the king, Henry VII., who, in the words of the old English version of Bacon's Life of Henry, "much phantasied and more favoured this Legate Adrian, inasmuch as he was his orator and solicited his cause, both to Innocent and also to Alexander VI., bishops of Rome. And after this for his diligent service, he so loved and favoured him that he made him Bishop of Hereford (1502), and shortly after (1503), that resigned and given over, he promoted him to the bishopric of Bath and Wells." Adrian in his visits to Rome had received many marks of the pontifical favour; he was made papal collector in England; prothonotary, secretary, and treasurer to Pope Alexander VI.; and now, to crown his English honours, he was made cardinal. Yet it is of Cardinal di Corneto, as he is henceforth usually called, that the story is told of his being invited to a banquet at the Vatican, when the vessel, by means of which the pope intended to poison the cardinal, was, by the negligence of a servant or the contrivance of Adrian, who suspected the design, taken by the pope himself, and caused his death, Aug. 18, 1503. The story is probably untrue, but it is illustrative of the character of the times, the place, and the men, that it could be generally repeated and believed. Under Pius III. and Julius II. Adrian lived in good repute, was known as an accomplished orator, and, himself an elegant writer, as the patron of learned men. By Pope Leo X. he was regarded with disfavour and suspicion. On the discovery of the alleged conspiracy of Cardinal Petrucci, June, 1517, Adrian was one of three cardinals whom the pope charged with complicity. Petrucci fled, but being induced to return to Rome under a safe conduct, solemnly confirmed by the verbal assurance of the pope, was seized, consigned to prison, and there strangled. Adrian and his associates were persuaded to confess their guilt, and were pardoned, on condition of paying a fine of 25,000 ducats. They paid that sum; but were then told that the fine was to be paid not jointly, but by each. Adrian resolved to escape from Rome. He succeeded, it was said, in doing so; but what became of him afterwards was never known. A report appears to have been circulated that he was murdered by his servant for the sake of the gold he had taken with him to assist his flight. The pope, through Cardinal Giulio de' Medici, a few months later, formally announced to Cardinal Wolsey the vacancy of the bishopric; and Henry VIII. at once conferred it upon Wolsey. Adrian, himself an excellent Latinist, was one of the first and most successful advocates of the adoption of a purer and more classical Latin style. He wrote 'De Vera Philosophia ex quatuor doctoribus Ecclesie,' Bologna, 1507; 'De Sermone latino et modo latine loquendi,' Basel, 1513, and several times reprinted; 'De Venatione, et Julii III. iter,' and some Latin verses printed in the 'Carm. Illustr. Poet. Ital.,' tome v.

ADUARTE, DIEGO, a Spanish friar, missionary, and historian, was born at Saragossa in 1569. Having joined an order of preaching friars, he went to the Philippines in 1594; and from that year till 1603 he went through a series of adventures which called forth indomitable firmness and perseverance. He learned the Chinese language so well as to be able to preach and catechise in it. He then accompanied Alonzo Ximenes, father provincial of his order, to Cambodia, with a large staff of assistant teachers; but a revolution in the country placed the Spaniards in great peril, and with difficulty they escaped to Cochin China. From thence they were speedily expelled; and Aduarte, while escaping, was wounded in a contest with a pirate. After recovering

from his wound at Malacca, he went to Manilla; but the ship took fire on the way. During a second expedition to Cambodia, he was wrecked on Babuan Island; and during a mission to Canton he was imprisoned and tortured. In later years he was made procurator of his order, prior of Manilla, and bishop of New Segovia. Aduarte published in 1632 an 'Account of the Martyrdom of Converts in Japan,' and in 1633 a history of the missionary labours of his order. After his death was published his 'Historia de la Provincia del Sancto Rosario de la Orden de Predicadores,' folio, Manilla, 1640, the first volume of which contains an account of his travels and labours in Cambodia, Cochin China, and Canton. Aduarte died in 1637.

AELST, EVERT VAN, Dutch painter, was born at Delft in 1602. He painted with great success what is technically termed still-life, especially dead birds, hares, and game generally, and sporting and warlike implements. A good colourist and finishing with great care, his works have always been attractive and still command high prices. He died in 1658.

AELST, NICOLAS VAN, engraver and printseller, was born at Brussels in 1526. In 1550 he was established as a publisher of prints at Rome, and he continued so employed till 1600: he is supposed to have died shortly after. N. Van Aelst engraved the 'Virgin and Child' of Giulio Romano in the Dresden Gallery, a 'Venus and Adonis' after Ghigi, and some other works, but the larger part of the prints which bear his name, and all those which have *formis* added, were either merely published by him or engraved by pupils and journeymen under his direction, as is the custom now-a-days with wood engravers. This kind of art-manufacture was extensively practised in the latter part of the 16th century, and N. Van Aelst was one of its most successful practitioners.

AELST, WILLEM VAN, Dutch painter, born at Delft in 1620, was the nephew and pupil of Evert Van Aelst, whom he followed in the class of his subjects, but excelled as a painter of fruit and flowers. He visited Italy, where he was known as Guglielmo d' Odlanda, and painted several pictures for the Grand Duke of Tuscany, which are still preserved in the Pitti Palace, Florence. On his return he stayed some time in Paris, but ultimately settled in Amsterdam, where his works were in great request. He died in that city in 1679. The pictures of Willem Van Aelst are more frequently met with in public galleries than those of his uncle: they are superior in arrangement, richer in subject, and more attractive.

AERTSZ, RYKAERT, Dutch historical painter, was the son of a fisherman at Wyck in North Holland, where he was born in 1482. While yet a boy his leg was burned so severely that it was found necessary to amputate it, and hence he was afterwards known as Wooden-legged Dick (Ryk met de Stelt). To while away the time during his tedious convalescence, Ryk used to draw with charcoal the various objects about him, until he became so expert that his father was persuaded to place him with a painter. He was accordingly sent on his recovery to Jan Mostaert in Haarlem, under whom he worked for a considerable time, chiefly painting friezes and other decorations in private houses. From Haarlem he went to Antwerp, where he settled; acquired reputation; was elected a member of the Academy in 1520; and died at the ripe age of 95 in 1577. His principal work was a diptych, or rather the wings of an altar-piece, for the principal church at Haarlem, representing incidents in the life of Joseph.

AERTSZEN, PIETER, called from his stature Long Peter, by the Italians Pietro Lungo, a celebrated Dutch historical painter, was the son of a stocking weaver at Amsterdam, where he was born in 1520. He was a pupil of Allard Claessen, and at the age of 18 had made himself known as a painter of homely interiors. But he abandoned this line and was employed by the civic authorities to paint a large altar-piece of the Death of the Virgin in the church of Our Lady at Amsterdam; another in four compartments representing the Annunciation, the Nativity, the Adoration of the Kings, and the Circumcision, for the new church in that city; an Adoration of the Magi for the new church at Delft, and one or two more, all of which were destroyed during the religious disturbances a few years later. He afterwards settled at Antwerp, where he was admitted a full member of the Academy of St. Luke, his name being entered in the books of the Academy as *Langhe Peter, schilder*. He was admitted burgher of Antwerp in 1552; married an aunt of his pupil, J. Buckelaer, and died at Amsterdam, June 2, 1573. One of the best of his small easel pictures, a Crucifixion, clearly painted and full of incident, is in the Antwerp Museum (No. 159). Three of his sons, PIETER (born 1540, died 1602); ALLARD

(born about 1545, died 1604); and DIRK (born about 1550, killed at Fontainebleau in 1620), followed their father's profession and acquired some celebrity.

AFFO, IRENEO, a distinguished critic, philologist, and historian, was born at Busseto, a small city which had once been the capital of the ancient Stato Pallavicino, on the 10th of December, 1741. His baptismal name was Davide, which he changed for Ireneo when, after prosecuting his studies at Bologna, and fulfilling a twelvemonth's novitiate at Busseto, he entered the Franciscan order, having just completed his twentieth year. In the beginning of May, 1767, he was appointed to the chair of philosophy of his order—the *Minori Osservanti*—at Ferrara; and about the middle of the same year was transferred in the same capacity to their convent at Parma. In 1768 the Duke of Parma promoted him to the chair of philosophy in the public school of Guastalla; the ecclesiastical and civil history of which he illustrated severally in his works, '*Antichità e pregi della Chiesa Guastallese*,' 1744, and '*Memorie Istoriche di Guastalla dell' Origine sua fino al 1539*,' in six books, 1775. The fame of these works, enhanced by that of his Poetical Dictionary, '*Dizionario precettivo, critico, e istorico, della Poesia volgare*,' 8vo, Parma, 1777, procured for Affo, April 7, 1778, the appointment of sub-librarian of the Ducal library at Parma, which had been created in great measure by his friend Paciaudi, the principal librarian; to whose office, upon his death in February, 1785, Affo succeeded. The same year he commenced the publication of his enlarged history of Guastalla, in four volumes, entitled '*Istoria della città e ducato di Guastalla*,' 4to, Guastalla, 1785-87; and in 1789 put forth the first volume of his biographical work of the writers and learned men of Parma, '*Memorie degli Scrittori et Letterati Parmigiani, Raccolte dal Padre Ireneo Affo, Minor Osservante, Bibliotecario di S.A.R., Profess. onor. di Storia nella R. Università e Socio della R. Accad. delle Belle Arti in Parma*,' 4to, Parma, 1789; of which four more volumes appeared before his death. The work has been since continued by Angelo Pezzana, one of Affo's successors in the office of librarian of the Parma library, who has devoted the whole of the sixth volume (Parma, 1825) to an elaborate biography of Affo, and a catalogue raisonné of his works, printed and not printed, to the number of more than a hundred. In 1791, Affo published '*Saggio di Memorie sulla Tipografia Parmense del Secolo XV.*'; in 1792, the first volume of his history of Parma, '*Storia della Città di Parma*,' of which three more volumes were subsequently published; and in 1794, a Biography of Cardinal Pallavicino, the historian of the Council of Trent, '*Memorie della Vita e degli Studj del Card. Sforza Pallavicino*.' Affo's death occurred May 14, 1797, of typhus fever, which attacked him whilst at his native town of Busseto, whither he had repaired for the sake of visiting a convent of his order; and the event was the occasion of a deep and a lively regret not in Parma alone, but in the whole of Italy, and indeed throughout the world of letters generally. He left behind him many memoirs, dissertations, and minor productions, some of which have been published since his death. The most remarkable of his works of posthumous issue, and one the publication of which was for a long time interdicted by the government of Parma, is his *Life of Pier Luigi*, which, completed in 1778, first saw the light under the care of Count P. Litta, in 1821, '*Vita di Pier Luigi Farnese, primo Duca di Parma*,' Milan. Affo was a true lover of literature, warm-hearted, honest, and indefatigable; and he has done more than any other writer to illustrate the history of his native duchy of Parma in all its branches. It should perhaps be mentioned, to complete his distinctions, that in his youth he had cultivated Italian poetry, and especially that he was the author of some satirical sonnets, which he published under an assumed name, '*Sonetti pedanteschi di Don Polipodio Calabro Pedagogo*.'

AFFZELIUS, ADAM, an eminent Swedish botanist, was born at Lång, in West Gothland, October 18, 1750. He studied under Linnæus at Upsal for several years; took his degree of magister philosophiæ in 1776; was appointed reader in Oriental literature in 1777, and demonstrator in botany in 1785—all at Upsal. In the last-named year he published, conjointly with Waldstrom, a treatise '*De Vegetabilibus Suecæ Observationes et Experimenta*.' In 1789 he visited England and Scotland. After declining an invitation to join Lord Macartney's embassy to China, he went, in 1798, to Guinea and Sierra Leone, as botanist to the Sierra Leone Company. He made botanical collections in Africa, and wrote two reports to the Company on the natural productions of Sierra Leone. After his return he was made Secretary to the Swedish Embassy in 1797; received the diploma of M.D. from

Upsal University in the same year, and was elected foreign member of the Royal Society in 1798. Returning to Sweden in 1799, he remained there till his death, January 30, 1836. For a part of the time he was professor of materia medica and dietetics in the University of Upsal. Afzelius contributed many botanical papers to the Linnæan Society of London and the Royal Academy of Stockholm. Besides his strictly scientific papers, he wrote a notice of the Life of Linnæus, with extracts from his Diary; '*Egenhändig Anteckning af Carl Linnæus om sig sjelf med Anmärkingar och Tillägg*,' Upsal, 4to, 1823; of which a German translation by K. Lappe was published at Berlin in 1826. Two of his brothers distinguished themselves—JOHAN, born 1753, died May 20, 1837, as professor of chemistry in Upsal University; and PEHR, born 1760, died Dec. 2, 1839, professor of medicine at Upsal, and physician to the King at Stockholm, by whom he was ennobled.

AGARDE, ARTHUR, styled by Camden *Antiquarius insignis*, was born about 1540 at Foston in Derbyshire. He was brought up to the law, but accepted a clerkship in the Exchequer Office, and in 1570 was made Deputy-Chamberlain of the Exchequer, a post he retained for 45 years. Having the charge of a large number of the national records, he now devoted himself to their study, and came to be regarded as one of the most accomplished antiquaries of the age, ranking in the estimation of his fellow-labourers along with his friend Sir Robert Cotton and Camden. Agarde was one of the original members of the Society of Antiquaries founded in 1572. Of the '*Collection of Curious Discourses*, written by eminent Antiquaries,' published by Hearne, six are by Agarde—1. '*Opinion touching the Antiquity, Power, Order, State, Manner, Persons, and Proceedings of the High Court of Parliament in England*;' 2. '*On the Question, Of what Antiquity Shires were in England?*' 3. '*On the Dimensions of the Lands of England*;' 4. '*The Authority, Office, and Privileges of Heraults in England*;' 5. '*Of the Antiquity and Privileges of the Houses or Inns of Court, and of Chancery*;' 6. '*On the Diversity of Names of this Island*.' He also wrote a treatise on the meaning of the terms in Domesday Book (Cottonian Lib., Vit. C. ix.), but it is not of much value; and a catalogue of the records under his charge, which was printed by the Record Commissioners, '*The Ancient Kalendars and Inventories of the Treasury of His Majesty's Exchequer*, 1836. Agarde died August 22, 1615, and was interred in the cloisters of Westminster Abbey, by the door of the Chapter House. He is said to have left 20 volumes of his MS. collections to his friend Sir Robert Cotton, but they are not mentioned in the catalogue of the Cotton MSS.

AGARDH, KARL ADOLF, a celebrated Swedish botanist, was born at Båstad, on the Gulf of Laholm, January 22, 1785, and completed his education in the University of Lund. From an early period he pursued the study of botany with great zeal, devoting his particular attention to the cryptogamia, in which he came to be regarded as the leading authority. In 1812 he was nominated professor of botany and rural economy in Lund University, but he also lectured on general economics. His thoughts having received a theological bent, he was ordained priest in 1816, and appointed to pastoral duty. At the same time he took an active part in politics, was elected deputy of his diocese in 1817 and 1823; and from his appointment in 1834 to the bishopric of Karlstad was a foremost Liberal in the Diet. But it is as a botanist, and chiefly by his writings on the Algæ, that he acquired European celebrity. On this branch of the science he contributed a large number of papers to the Natural History societies, but he also published several distinct works. Of these the most important were his '*Species Algarum*,' Lund, 3 vols., 8vo, 1820-28; '*Icones Algarum*,' Lund, 1828-35; and '*Systema Algarum*,' Lund, 1820; in which he not only embodied all that had been previously published on the subject, but added an immense body of original matter and developed a systematic arrangement, which, with some modifications, has since been very generally adopted. Another important work was his '*Lärobok i Botanik*' (Handbook of Botany), 2 vols., Malmö, 1829-32; of which the first volume was translated into German by Mayer, and the second by Creplin. He also published a '*Memoir of Linnæus*,' and some treatises on economics and theology. He died January 28, 1859. His son

* JAKOB GEORG AGARDH, born at Lund in 1813, has successfully pursued his father's special study; succeeded him as professor of botany at Lund University in 1854, and has greatly increased his vast collection. His chief works are—'*Synopsis Generis Lupini*,' Lund, 1835; '*Recensio Generis Pteridis*,' Lund, 1839; '*Algæ Maris Mediterranei et Adriatici*,' Paris, 1842; 'In

Systemata Algarum hodierna adversaria, Lund, 1845; '*Theoria systematis plantarum*,' Lund, 1858; and '*Om Bank-väsendet och pennig-theorien*,' edited by J. G. Agardh, 8vo, Stockholm, 1865.

AGAS, RADULPH, or AGGAS, RALPH, the designer of the earliest published map of London, flourished in the last half of the 16th century. Agas is included by Walpole in his *Catalogue of Engravers*, but there is no evidence that he practised engraving, and the probability is that he did not. The actual engraver of the maps he published appears to have been Augustine Ryther. Agas was a land-surveyor, and resided at Stoke, near Nayland, Suffolk, but made occasional or periodical visits to London, and probably to Oxford and Cambridge, to receive commissions. By way of advertising his qualifications, he issued hand-bills, of one of which a copy is in the British Museum; and apparently with the same object he published a quarto pamphlet entitled '*A Preparative to platting of Landes and Tenements for Surueigh*,' London, 1596. He had at this time "practised in survey more than forty years." A letter dated 1597, preserved among the Burghley Papers (Lansdowne MSS. vol. lxxxiv. No. 32), shows that he was then engaged in operations for improving the Fens. In 1593 he had addressed a memorial to Lord Burghley (preserved among the Lansd. MSS., vol. lxxiii. No. 29), which gives a curious and minute account of the improved method of land-surveying practised by him, and to the superiority of which he desires to call his lordship's attention.

Agas's Map of London is rather a bird's-eye view of the city than a map or plan of it. It measures 6 feet 3 inches long, by 2 feet 4 inches wide, and was engraved upon eight blocks of wood. The first edition of the map is sometimes positively stated to have been issued in 1560, and a copy with that date is said to be in the possession of Mr. J. Crace of London. But the inscription in the later edition, *Civitas Londinum circuitu Ano. Dni. M.D.LX.*, does not necessarily imply that it was originally issued in that year. Certain it is that in the verses printed on his map or plan of Oxford, '*Celeberrimæ Oxoniensis Academiæ Aularum et Collegiorum*, . . . 1578,' but not published till 1588, Agas distinctly states that for "near ten years past" he has been in doubt whether he should not lay aside his Oxford map "until he first had London platted out."

"Which still he craves, although he be denied
He thinks the Cities now in hiest pride,
And would make shewe how it was best besene,
The thirtieth years of our most noble Queene."

The 30th year of Elizabeth's reign began Nov. 17th, 1587, and it is quite clear that Agas had not published, and was not ready to publish, his map of London then. The copy in the Library of the City of London, Guildhall, appears to have been one of a new issue made in or about the first year of James I., 1603-4, the arms of James drawn with a pen being pasted over those of Elizabeth. Subsequent issues, with slight alterations and additions to the buildings, appear to have been made pretty frequently; and in the reign of William a copy, the size of the original, was engraved, apparently by one of the Dutch engravers then in England, on eight plates of pewter. This was published by Vertue in 1737, with his name attached, '*Vertue, Soc. Antiq. Lond. excudit*,' from which Walpole concludes that he re-engraved it. Besides the maps of London and Oxford, Agas designed one of Cambridge; and Vertue mentions that he had seen a plan made by Agas in March, 1589, on a large sheet of vellum, of the town of Dunwich, in Suffolk, with the adjacent villages. The year of Agas's death is unknown, but, as we have seen above, he was living in 1597.

AGELET, JOSEPH LE PAUTE D', French astronomer, was born at Thone-le-Long, near Montmédy, November 25, 1751, and studied astronomy under Lalande. In 1773 he joined Kerguelin's expedition to the Antarctic Seas, and on his return the following year, presented to the Academy of Sciences at Paris a journal of 1600 observations on planets and stars. In 1777 he was made professor of mathematics at the *École Militaire*, and in 1785 was elected Member of the Academy of Sciences. In 1783 he presented *Memoirs on the aphelion distance of Venus, and the length of the year*. In 1785 he sailed with La Perouse on his ill-fated expedition. The last letter received from him was dated from Botany Bay, March 1, 1788. His observations were lost with him, La Perouse having forbidden the communication of any during the voyage.

AGOSTINI, LIONARDO, a distinguished Italian antiquary,
BIOG. DIV.—SUP.

was born at Siena near the end of the 16th century. At the beginning of the pontificate of Urban VII., 1623, Agostini was at Rome, in the service of Cardinal Francesco Barberini, the pope's nephew, engaged in collecting works of art for the Barberini palace. By Pope Alexander VII. he was appointed pontifical antiquary and commissary or examiner of antiquities in Rome and Latium. Whilst thus employed he gave to the world the works by which he is now remembered: '*La Sicilia di Filippo Paruta, con la Giunta di Lionardo Agostini*,' fol. Rome, 1649. Paruta's work appeared originally in 1612; Agostini figured 400 additional medals, but gave no descriptions; these were afterwards added by Meier in his edition of 1697, but are of no value. The best edition of the work is that of Sigebert Haverkamp, 3 vols. fol. Leyden, 1723. Agostini's other work was '*Le Gemme Antiche Figurate di L. A., con le annotazioni del. Sig. Gio. Pietro Bellori*,' 4to, Rome, 2 parts, 1657 and 1670; the first part is said to have been originally published in 1636, though a copy does not appear to have been traced in any of the great libraries. The two parts were reprinted together at Rome, 1686, with a preface by Marinella. From the preface we learn that Agostini had been some years dead: he appears not to have long survived the publication of the edition of 1670, when he speaks of himself as already very advanced in years. The '*Gemme Antiche*' is chiefly valuable for the engravings by Galestruzzi, and the edition of 1670 is much the most prized, the plates having been retouched for the edition of 1686, and again for the augmented edition, by De Rossi and Maffei, of 1707. A Latin version by Gronovius appeared at Amsterdam in 2 vols. 4to, 1685.

AGOSTINO DI MUSI, or, as he is usually but incorrectly termed, AGOSTINO VENEZIANO, a celebrated early Italian engraver, was born towards the close of the 15th century. His earliest signed plates are after Campagnolo and Albert Dürer, the latter bearing the date of 1514. In 1515 he was in Florence, where he engraved several of the designs of Baccio Bandinelli and A. del Sarto. Agostino now repaired to Rome, where he remained till the death of Raffaele in 1520, engaged with Marco di Ravenna, assisting Marcantonio Raimondi in engraving the well-known plates after the great painter. Under Marcantonio, Agostino greatly improved his manner, but he never acquired the largeness and brilliancy of his master. Perhaps his best work of this period is the '*Christ bearing his Cross*,' after Raffaele. After the sack of Rome, 1527, Agostino fled to Mantua, where he engraved some of Giulio Romano's designs, under that master's supervision. Returning to Rome about 1530, he continued busily employed with his burin, but during the latter years of his life (1534—36) he seems to have been exclusively occupied upon portraits, and among these are some of his best works, such as Pope Paul III., 1534; Barbarossa; Francis I. of France; Charles V.; and Ferdinand I. Agostino's plates are very numerous, but good impressions are scarce, and highly prized. Heineken and Bartsch have published full catalogues of them. Passavant ('*Peintre-Graveur*,' vol. vi. pp. 51—66,) gives a list of 188, arranged under Scriptural subjects; virgins and saints; historical subjects; mythological and allegorical subjects; fantasy and genre subjects; portraits; architecture, vases and ornaments. The British Museum possesses many fine impressions of his works. Agostino's engravings have the immense advantage of being from the greatest painters and designers that Italy has produced, and executed under their immediate direction; but they are inferior as engravings to those of Marcantonio and the other chief masters of the art. Agostino drew but indifferently, and his original designs are decidedly poor.

AGRICOLA, GEORG, an eminent mineralogist, was born at Glaucha, near Meissen in Saxony, March 24, 1490. Having studied medicine at Leipzig and in Italy, he commenced practice as a physician at Joachimsthal, in Bohemia, in 1529. Geology and mineralogy being his favourite studies, he removed in 1531 to the mining district of Chemnitz, in Saxony, where he was appointed professor of chemistry. The Duke of Saxony gave him a pension to enable him to devote most of his time to researches on the geology and mineral resources of that country. In the year 1546 he published three works—'*De Ortu et Causis Subterraneorum*,' '*De Natura eorum quæ effluunt e Terra*,' and '*De Natura Fossilium*.' These works, written in elegant Latin, treated of minerals, lavas, bitumens, springs, &c., and discussed various theories concerning their formation. Not only was Agricola the first mineralogist of his day, but he raised mineralogy to a science. His other more important works were—on fossils, '*De Animantibus Subterraneis*,' 8vo, Basel, 1549; and on metallurgy, '*De Re*

Metallica, published with a new edition of the former, folio, Basel, 1556, and copiously illustrated with woodcuts on mining and metallurgy. These works have been several times reprinted; an edition of his mineralogical works in German, by E. Lehmann, was published in 3 vols. 8vo, Freyberg, 1806-10. Agricola also wrote on classical subjects and on some passing matters of controversy, but only his mineralogical writings are now of any interest or value. Agricola died at Chemnitz, November 21, 1555. Owing to religious bigotry his remains could not be interred at Chemnitz; they were buried at Zeitz.

AGRICOLA, JOHANN, a Saxon divine, one of the most distinguished German writers of the 16th century, and the reputed founder of Antinomianism, was born on the 20th of April, 1492, at Eisleben, the native place of Martin Luther. His real name was Johann Schnitter, Schneider, or Sneider, which, according to the fashion of the age, he Latinized as Agricola; whilst, from his birthplace, he sometimes called himself "Magister Eisleben," or "Magister Islebius." At the university of Wittenberg, where he studied theology and philosophy, he was the pupil and friend of Luther, whose opinions he enthusiastically embraced, and whom, in 1519, he accompanied to Leipzig, to the great meeting of German divines which is known by the name of the "Leipziger Religionsgespräch." To this assembly Agricola acted as secretary, and received, along with Melancthon, who was also present, the degree of baccalaureus from the university of Leipzig. For several years he worked in perfect harmony with Luther, by whom he was deputed, in 1525, to settle the ecclesiastical affairs of Frankfurt-on-the-Main. After a month's stay at this place, he visited his native town of Eisleben, where he was appointed preacher of the Nicolai Kirche, and soon after was made court preacher to John, Elector of Saxony, in which capacity he was present, in 1526, at the Diet of Spire, and took a part in the presentation of the Augsburg Confession in 1530. In the year last named he became court preacher to Count Albert of Mansfeld. The name of Agricola occurs immediately after that of Melancthon amongst the signatories of the Schmalkalden Articles of Faith, A.D. 1537; in which year he again went to Wittenberg. It was now that he began to carry out the great Lutheran doctrine of justification by faith, to the extreme of asserting the indifference of the law, and its inapplicability to the Christian as an authoritative rule of life and conduct. He held that nothing was required for salvation but faith in Christ, and repudiated the obligation even of the Ten Commandments. Obedience was not due to the law, but only to the gospel. This cardinal doctrine, on which other subordinate ones depended, received the adhesion of many of the Protestant divines, who, on account of their tenets, were called Antinomians. The disputes which followed, and the bitter animosity of Luther against the too logical Agricola, had the effect of compelling the latter, in 1542, to flee for protection to Berlin, where Joachim II., Elector of Brandenburg, conferred upon him the offices of court preacher and superintendent-general (archdeacon), which he held till his death, September 22, 1566. The Elector of Brandenburg endeavoured to bring about a reconciliation between Agricola and his former friends; but was unable to effect anything more favourable to his protégé than that Agricola should alternatively return to await the decision of judges appointed by the Elector of Saxony, or deliver in writing a recantation of his errors and of the injurious aspersions he had cast upon Luther. It was with the second condition that Agricola elected to comply, and he accordingly published at Berlin a volume in which he asked pardon of those whom he had offended, and especially of Luther, whom he designated as "that man of God." But Luther was little moved by protestations to which he did not attach the credit of sincerity, and Agricola remained at Berlin for the rest of his life. The versatility, fickleness, and ambition of Agricola had the result of inducing harsh judgments upon his character. His heresy was exaggerated and misrepresented; the heartiness of his recantation was denied by his opponents; and the part which he took, conjointly with Julius Phlugs and Michael Heldingus in drawing up the famous 'Interim' of Augsburg (1548)—which was conceived in a spirit of accommodation that satisfied neither Catholics nor Protestants—laid him open to unwarranted suspicions, and even to accusations of a desire to return to the Church of Rome.

Besides his numerous writings in exegetical and controversial theology—some of which are in Latin, but the greater part in German—Agricola has left behind him several works which have tended, in a degree second only to those of Luther himself, to elevate and fix the German language, and to consolidate

German nationality. He was the first to make a collection of German proverbs, which, to the number of 750, he published, with a concise, lively, and ingenious commentary. These proverbs appeared in two different collections. The first was published in Low German, and a few months after, in High German also. The Low German edition, which is extremely scarce, has the title, 'Dre hundert gemeiner Sprekwörde, der wy Düdschen uns gebruken, unde doch nicht wetten wo har se kamen, dorch D. Johann Agricolam von Islewe,' Magdeburg, 1528, 8vo. The High German edition appeared at Eisleben, 1528, 8vo. The second collection, which contains 450 proverbs, appeared without the name of the place of publication in the year 1529, 8vo, under the following title: 'Das ander Teyl gemeiner deutscher Sprichwörter mit yhrer Auslegung, hat fünffthalbhundert newer Wörter.' These two collections were afterwards frequently printed together, as at Hagenau, in 1537 and 1584; at Eisleben, 1548; at Wittenberg, 1582. The most correct edition is that of Wittenberg, in 1592, under the title, 'Siebenhundert und Funffzig deutscher Sprichwörter, erneuert und gebessert durch Johann Agricola. Mit vielen schönen lustigen und nützlichen Historien und Exempeln erklaret und ausgelegt.'

AGRICOLA, MARTIN, a German musical writer and composer, was born at Sorau, in Silesia, about 1486. He settled at Magdeburg in 1510 as a teacher of music and languages. In 1524 he was appointed professor of music and cantor at the college. During a long residence in Magdeburg he wrote largely on musical subjects. In musical composition he substituted notes for the tablature previously in use, to mark degrees in pitch and in duration. One of the most curious of his works was 'Musica Instrumentalis,' 1529, an account of all the instruments then in use, with woodcuts representing most of them. They comprised the flute, shawm, cornet, reed-pipe, bag-pipe, bomhart, trumpet, trombone, thürmer-horn (sounded by watchmen from church-towers), fixed and portable organs, regal, clavicord, clavicembalo, virginal, lyre, lute, quintern, four sizes of violin, viola, violoncello, dulcimer, harp, psalter, drum, keyed violin, and keyed zittern or cithern. The book, a thin duodecimo (of which there is a copy in the British Museum), is curious and instructive, showing in what particulars and in what degree the best known musical instruments have undergone changes of form and appearance during three centuries and a half. Other works by Agricola, all written in Latin, were—'Musica Choralis,' 1532; 'Musica Figuralis,' 1532; 'Melodiæ Scholasticæ,' 1512; 'De Proportionibus Musicis'; 'Rudimenta Musicæ,' 1539; 'Scholia in Muscam,' 1540; 'Quæstiones Vulgariore in Muscam,' 1543; 'Cantiones cum Melodiis,' 1553—the work which entitles him to rank among the earliest German composers of church music. He died June 10, 1556. Five years after his death appeared his 'Duo Libri Musices, continentes Compendium Artis et illustria Exempla,' 1561, edited by his friend, Georg Rhaw, the learned printer of all his works, and himself an excellent musician and critic.

AGRICOLA, MICHAEL, one of the early Swedish reformers, and celebrated as the translator of the New Testament into Finnish, was born at the village of Torsby, in the parish of Pernå, in Nyland, about the beginning of the 16th century. He was one of the eight students whose education at some foreign university, and especially at Wittenberg, was imposed by Gustavus Vasa as a tax upon the revenues of the just constituted Protestant see of Abo. When, in 1539, Agricola returned from the University of Wittenberg, where he had studied theology and medicine, he was the bearer of a letter from Luther, in which he was recommended to the King of Sweden as a youth of excellent learning, manners, and capacity, who was likely to be of service. His first appointment, conferred upon him in the same year, was the rectorship of the school at Abo; and conflicting assertion makes it probable, but less than certain, that shortly afterwards he was sent by Gustavus as missionary to Lapland. In 1548 he was appointed assistant to Martin Skytte, the first bishop of Abo, on whose death, in 1554, he was advanced to the superintendence of the diocese, less the diocese of Wiborg, which, previously a part of that of Abo, was now conferred upon Justen, the successor of Agricola in the rectorship of the school at Abo. Two years after, Agricola accompanied the Archbishop of Upsal, Laurentius Petri, to negotiate with Ivan Vassilevich, Grand Duke of Muscovy, who was at war with Sweden, and to hold conferences with the Russian clergy. A peace was concluded, but on his way home Agricola sickened and died, in the village of Kyroniem, in the parish of Vikyrkio, on the 7th of April, 1557.

The greatest monument of the zeal and learning of Michael

Agricola is his Finnish translation of the New Testament, the publication of which assisted considerably in the dissemination of the principles of the Reformation. The work was printed at Stockholm, in quarto, in the year 1548. A Finnish translation of the Book of Psalms, and other portions of the Old Testament, and the production of a Finnish Prayer Book, are also referred to him. He translated, into Swedish, the 'Sea-Laws,' or maritime code, of Wisby; a work which was not published till 1689, when it appeared at Stockholm under the editorial care of John Hadorph.

AIKIN, LUCY, daughter of John Aikin, M.D., the author of 'Evenings at Home,' and sister of Arthur Aikin [E. C. vol. i. col. 70], was born at Warrington, November 6, 1781. When she was three years old her father removed to Yarmouth, where he practised as a physician till 1792, when he settled in London. In 1797, on account of his failing health, he gave up his profession and retired to Stoke Newington, where he continued, till his death in 1822, busily occupied in the various literary works noticed in the article above referred to, and in which Miss Aikin rendered him valuable assistance. She had received a careful training, and, though in infancy called "the little dunce," soon exhibited unusual intelligence, obtained a wide acquaintance with historical literature, and was familiar with the best Italian and French authors. Her first publication was a translation of 'The Adventures of Rolando,' which was long a popular book with young people. In 1814 she published 'Lorimer; a Tale.' She also wrote 'Poetical Epistles to Women,' and various occasional verses, as well as numerous articles in the 'Annual Register' and other publications edited by her father. These, however, were only preparatory to the series of works on which her claim to remembrance rests:—'Memoirs of the Court of Queen Elizabeth,' 2 vols. 8vo, 1818; 'Memoirs of the Court of King James the First,' 2 vols. 8vo, 1822; and 'Memoirs of the Court of King Charles the First,' 2 vols. 8vo, 1833; all of which, but particularly the first two, are works of real value, though of course suffering from the deficiency in the curious private and personal matter since brought to light in the Calendars and other publications of the Rolls Office, and also perhaps from the author not having seen the importance of the illustrations to be obtained from the ephemeral literature of the several reigns, and which Macaulay has turned to such excellent account in his history. But the works are carefully and well written, tolerably free from prejudice, and very interesting. Her latest work, 'The Life of Joseph Addison,' 2 vols. 8vo, 1843, was less successful, and had the misfortune to be severely criticised by Macaulay. In 1824 she had published the literary remains and a pleasing biography of her father, 'Memoirs of John Aikin, M.D., with a Selection of his Miscellaneous Pieces, Biographical, Moral, and Critical,' 2 vols. 8vo.

Shortly after her father's death, Miss Aikin removed to Hampstead, and there, with a brief interval, she spent the last forty years of her useful and blameless life, the centre of a circle of attached friends, and there died on the 29th of January, 1864. Her grave, in the old churchyard of Hampstead, is next to that of Joanna Baillie, for many years her beloved friend and neighbour. In 1864 was published a volume of 'Memoirs, Miscellanies, and Letters of Lucy Aikin,'—the letters chiefly to Dr. Channing, and extending over a period of sixteen years,—with a brief memoir of Miss Aikin by Mr. P. H. Le Breton, from which most of the above facts have been taken.

AIKMAN, WILLIAM, a celebrated Scotch portrait-painter, was born in 1682 at Cairney in Aberdeenshire. He was intended for the law, but, preferring painting, became a pupil of Sir John Medina, then the leading painter in Scotland. In 1707 he sold an estate he had inherited at Arbroath, and went to Rome, where he stayed three years studying the works of the great masters. He then visited Turkey, and returned by way of Italy and London to Scotland, 1712, where he found a warm patron in the Duke of Argyll. Eventually, about 1723, he settled in London, and soon obtained a good share of patronage. But his health gave way and, after a lingering illness, he died in June, 1731, at his house in Leicester Fields (afterwards Leicester Square), leaving unfinished a large painting of the royal family. Aikman was a man of literary tastes and social habits, and numbered among his friends Sir Godfrey Kneller, Swift, Pope, Allan Ramsay, and James Thomson. In the Second Exhibition of National Portraits, 1867, were paintings by him of himself, William Carstairs, and Fletcher of Saltoun, all characteristic, and evidently faithful though somewhat coarse likenesses. His portrait of the poet Gay was esteemed one of his most successful works. This was in the same exhibition, but by an odd blunder was ascribed

to Ferdinand Bol, who died some years before Gay was born. A portrait of the poet Thomson in this exhibition was said to be "by William Aikman," but was really the portrait of the portly bard by Peyton, which Lord Chatham described as "beastly like." Aikman's portrait of Thomson is a very different one. His own portrait belongs to the National Gallery of Scotland; another is in the Gallery of Painters' Portraits at Florence.

AILRED, or ALURED, of RIEVAULX, English abbot, saint, and historian, was born about 1109, at Hexham, Northumberland, and was brought up at the court of David, king of Scotland, with whose son he is said to have been educated. Capgrave states that he became a favourite of the king, who offered him a Scotch bishopric, which he refused, and entered as a monk the recently-founded Cistercian Abbey of Rievaulx in the North Riding of Yorkshire, where, on account of his studious habits and piety, he was entrusted with the superintendence of the novices. Some of his early biographers state that he left Rievaulx to become abbot of Revesby in Lincolnshire; but this appears to be an error arising from the similarity of the names. At any rate he was elected Abbot of Rievaulx in 1146, and did not again leave it, except to attend a meeting of the chapter of his order at Cîteaux; to visit Westminster in order to assist at the translation of the relics of Edward the Confessor; to make a missionary journey, in 1164, to the wild Pictish population of Galloway in the south-west of Scotland; or on some like pious duty. During the last ten years of his life he was sorely afflicted with stone and gout. He died January the 12th, 1166, at Rievaulx, where he was interred. When Leland wrote, his tomb was richly adorned with gold and silver ornaments, but no trace is left of it now. Abbot Ailred enjoyed a high reputation for learning, piety, self-denial, and the austerity with which he governed his monastery. During his abbacy, Rievaulx increased greatly in numbers, wealth, and character: at his death it contained 150 monks and 50 lay brethren. Ailred was canonised in 1191.

As a writer of history, Ailred does not hold a foremost place. He is addicted to legend, fond of trivial matters, and has little critical discernment. Yet his works are not without a positive value, while incidentally they afford much insight into the life and modes of thought of the latter half of the 12th century. The chief of his historical compositions are—'De Sanctis Ecclesiæ Hagustaldensis et eorum Miraculis liber,' an interesting account of Hexham Church and of Sts. Acca and Alcmund, bishops of Hexham, printed in Mabillon, 'Acta Sanctorum,' vol. iii. i. p. 204, ed. Venet.; 'Vita Niniani, Pictorum Australium Apostoli,' an account of Ninian and his conversion of the Picts, full of alleged miracles, printed in Capgrave's 'Nova Legenda Angliæ,' 'Vita et Miracula Confessoris Christi Edwardi Regis Anglorum,' written on occasion of the translation of the Confessor's relics, printed in Gibbon's 'Opera Divi Aelridi Rhievallensis,' Douay, 1616-31, and reprinted in the 'Magna Bibl. Veterum Patrum,' Cologne, 1618; in the 'Acta Sanctorum,' Jan. 1, 292; and in Migne's 'Patrologia.' The metrical 'Vita S. Edwardi Confessoris, Regis Angliæ,' in six books, is also attributed to Ailred, but seemingly without sufficient authority: on both these Lives the reader should consult Mr. Luard's Preface to the 'Lives of Edward the Confessor,' published among the 'Chronicles and Memorials of Great Britain and Ireland.' 'Eulogium Davidis, Regis Scotiæ,' printed in Twysden's 'Decem Scriptores,' and in Pinkerton's 'Vitæ Sanctorum Scotiæ,' and by Fordun, but with some omissions by each: 'De Genealogia Regum Anglorum,' of little if any historical value, but a curious work; partly printed in Twysden's 'Decem Scriptores': 'Vita S. Margaritæ Reginæ Scotiæ': 'Chronicon ab Adam ad Henricum I.:' and several more of which only the titles are known. Ailred also wrote a 'Compendium Speculi Charitatis'; 'De Vinculo Perfectionis'; 'De Lectione Evangelica'; 'De Natura Animæ'; 'De Amicitia, sive Dialogus inter Hominem et Rationem,' a Book of Homilies; and several other theological treatises. A complete collection of his previously printed works is given in vol. cxcv. of the Abbé Migne's 'Patrologiæ Cursus completus.' For special information respecting any of Ailred's historical writings, the reader should consult Mr. T. Duffus Hardy's 'Descriptive Catalogue of Materials relating to the History of Great Britain and Ireland,' vol. i. p. 638; vol. ii. pp. 247 and 293, and the references there given.

*AINMULLER, MAXIMILIAN EMANUEL, a distinguished painter on glass, was born at Munich, February 14, 1807. He was intended for a learned career, but by the advice of Gärtner, the architect, who had detected his peculiar talent, he was induced to make decorative art, and particularly that of the mediæval German artists, his study; and later, at the instigation

of Hess, he directed his attention specifically to the investigation of early glass painting, both in its technical and artistic aspects. In this he was so successful that, in 1828, King Ludwig of Bavaria made him inspector of his newly established Royal Painted Glass Manufactory, Munich; and from that time he has laboured continuously to improve the materials and the processes of the art. The painted glass prepared under Ainsmüller in the Royal Munich works has long secured a European reputation, and is in its way unrivalled. Much of it has even been placed in British churches, but it is very different in kind to English painted glass, and its admission depends upon a different principle to that which has long ruled in this country. Here the main object has been to form the design by setting up, in a leaden frame work, comparatively small pieces of differently coloured glass, so that, by a sort of mosaic, the glass itself, with little aid from the pencil, makes the picture; and hence this, which is the method of the glass-workers of the Middle Ages, is sometimes termed the Mosaic method. The method adopted by Ainsmüller in the Royal Munich works is to employ larger sheets of glass, upon which the design is actually painted or enamelled, the painting as it advances being submitted to repeated "firings" in a furnace of an equable and carefully regulated temperature. In this, which is a modification of the method of the glass-workers of the Renaissance, and known as the Enamel method, the window is a transparent painting. Under Ainsmüller have been painted the windows added, since 1828, to the cathedrals of Regensburg, Augsburg, Basel, and Cologne; many churches in Bavaria; St. Nicholas, Hamburg; the Wilhelmina Schloss, Stuttgart; the church of St. Peter and St. Paul at Rome; and many other continental churches, whilst here we may note Kilndown Church, Kent; St. Peter's College, Cambridge; St. Paul's Cathedral, London; Glasgow Cathedral; and one or two churches in Ireland. Herr Ainsmüller is not merely an able and learned director of artistic work, but is himself a good designer and executant. Much of the architectural ornament and framing, a rather prominent feature in the Munich windows, has been designed by Ainsmüller. He also paints oil pictures of architectural subjects with much skill and taste. German critics especially praise his views of Westminster Abbey, and the Interior of St. George's Chapel, Windsor, painted from sketches made during a visit to England in 1849. Views of St. Mark's, Venice; the Cathedral of St. Stephen, Vienna; Ulm Cathedral; and the like, have appeared at the Munich exhibitions, and many of his works are to be seen in German galleries.

AINSWORTH, HENRY, an eminent Nonconformist divine and commentator, first mentioned in 1590, when he joined the followers of Robert Brown, then called Brownists but afterwards Independents [ROBERT BROWN, E. C. vol. i. col. 952]. With many of his fellow separatists Ainsworth fled from persecution at home to Holland, where he joined a Brownist congregation, of which Francis Johnson was the minister, and in which Ainsworth was a recognised teacher. Ainsworth was a scholar, a man of wide theological learning, a keen controversialist, and had a fluent pen; and with a view to moderate the opposition of the Dutch clergy, especially that of Arminius, then the leading minister at Amsterdam, Ainsworth drew up, in conjunction with Johnson, 'The Confession of Faith of certain English People living in the Low Countries exiled,' 1596. It was reprinted in 1598 with some alterations and a dedication "To the reverend and learned men, students of Holy Scripture in the Christian universities of Leyden in Holland, of St. Andrews in Scotland, of Heidelberg, Geneva, and other the like famous schools of learning in the Low Countries, Scotland, Germany, and France," and again republished in 1602 and 1604. But differences both as to doctrine and discipline broke out in the Brownist church and led to considerable secessions, and much unseemly recrimination, which Heylin, after his manner, has greatly exaggerated. With a view to allay the strife Ainsworth seems to have withdrawn for awhile to Ireland. After his return to Amsterdam old controversies were revived, and eventually Ainsworth and Johnson took opposite sides on the questions of baptism and church government. As neither could convince the other, and neither would remain silent, Ainsworth and his followers withdrew in 1610, and founded another church at Amsterdam, of which Ainsworth became pastor, the two congregations being known as Johnsonians and Ainsworthians, and each party is said to have excommunicated the other. Johnson, who seems to have been the more impetuous, shortly after withdrew with his adherents to Embden, where he died, and his church was broken up. Three or four strongly worded tracts were published by Ainsworth in connection with these disputes, but amidst

them all he was more usefully employed in the preparation of a work which has been found of service by divines of all denominations, and which has been highly praised by many who differed most widely from Ainsworth's peculiar views: 'Annotations on the Five Books of Moses, the Psalms, and the Song of Songs.' It comprises a literal translation of the books named as well as a commentary, and was published in separate parts in 1612 and following years, and reprinted in London in a single volume in 1627 and 1639, and several times since. The last edition, we believe, was in parts, Glasgow, 1842-43. A Dutch translation of the whole work was published at Leuwarden in 1690, and a German translation of the commentary on Solomon's Song at Frankfurt in 1692. The work is that of a good Hebrew scholar and a learned and able divine. Besides his occasional controversial publications, Ainsworth wrote one of more lasting value, and which may still be referred to with advantage, against the Church of Rome—'An Arrow against Idolatry taken out of the Quiver of the Lord of Hosts'; he also wrote some valuable non-controversial works, as a 'Treatise of the Communion of Saints,' 'The Book of Psalms, Englished both in Prose and Metre,' and 'The Orthodox Foundation of Religion,' a posthumous work published in 1641, with a preface by the editor, Mr. Samuel White. Ainsworth died at Amsterdam suddenly in 1623. Neal relates a strange story of his having been poisoned by a Jew, but as it is quite unconfirmed, and inherently improbable, it is not worth while to repeat it.

AITON, WILLIAM, gardener and botanist, was born in the neighbourhood of Hamilton, Scotland, in 1731. In 1754 he was engaged as assistant to Mr. Miller, author of the 'Gardener's Dictionary,' and curator of the Physic Garden at Chelsea. Here his assiduity and ability gained him friends, and he was appointed by George III. in 1759 to form the Botanic Garden at Kew. This he accomplished successfully, and during the 34 years the Gardens were under his direction he raised them to an unexpectedly high rank. Their excellence is well shown in his work 'Hortus Kewensis, or a Catalogue of the Plants cultivated in the Royal Botanic Garden at Kew,' 3 vols. 8vo. 1789, which also proves him to have been for the time a tolerable botanist, as well as a first-rate gardener. A second edition of the work, edited by his son and successor at Kew, William Townsend Aiton, but having the advantage of the revision of Robert Brown, was published in 5 vols. 1810-13. William Aiton died Feb. 1, 1793, and was buried in Kew churchyard, near the graves of his friends Zoffany and Gainsborough, the celebrated painters.

AKEN, JEROME VAN, called BOSCH, from his birthplace Hertogenbosch (Bois-le-Duc), a distinguished early Dutch artist, was born about 1450, though Immerzeel says 1470. Of his life nothing authentic is known. Van Aken painted in the neat sharp manner of the Van Eycks and their followers, but the treatment of his subjects was essentially different. He was the originator of that fantastic style of which Breughel is considered the chief exemplar. Temptations, scenes with demons and strange animals, towns on fire, and grotesque medleys seemed to have an irresistible attraction for him. In the Berlin Museum is a curious 'Last Judgment' from his pencil. Another characteristic work, 'The Temptation of St. Antony,' is in the Antwerp Museum (No. 41). Of this there is a well-known engraving on wood, which (on the authority of Immerzeel) is generally attributed to the painter; but it bears the date 1522, when he had been dead for four years, and it is improbable that he ever engraved on wood (Passavant, 'Peintre-Graveur,' tome ii. 285). He executed, however, several good engravings from his own designs (Passavant has identified 15), including 'The Sufferings of Job,' 'Christ between the Madonna and St. John,' 'Christ delivering the Patriarchs from Hades,' a battle, and two or three grotesques. The date of Van Aken's death is ascertained from an entry of it under 1518 in the register of the brotherhood of Bois-le-Duc (*Broederschap te s'Hertogenbosch*), of which he was a member, "*Hieronymus Agnen, alias Bosch, insignis Pictor.*" Kugler, Passavant, and some other recent writers have, since the discovery of this entry, written his name Van Agnen, but there is no doubt that Van Aken is the correct spelling. (See M. A. Pinchart in the *Bulletins de l'Académie royale de Belgique*, tome iv.)

ALABASTER, WILLIAM, was born in 1567, at Hadleigh in Suffolk, "and by marriage," says Fuller, "was nephew to Dr. John Still, Bishop of Bath and Wells. He was bred a fellow in Trinity College, in Cambridge," and took his degree of M.A. at that university, being afterwards, July 11, 1592, admitted *ad eundem* at Oxford. In June, 1596, he accompanied the expedition sent against Cadiz, as chaplain to the Earl of Essex, the

commander-in-chief of the land forces. While in Spain he went over to the Church of Rome. He published a vindication of the step thus taken; and his pamphlet, or pamphlets, gave rise to a controversy which had not terminated in the year 1604. Alabaster appears to have remained abroad till 1610, in which year he either first, or at least permanently, returned to his native country, and became reconciled to the Church of England. About four years after his adoption of the Romish faith, he addicted himself to what is termed Cabalistic divinity, or the Secret theology (*arcana theologia*) as he calls it, which consists in the combination of particular words, letters, and numbers, by which it is pretended that a clear insight into the sense of Scripture may be obtained. Of this kind of learning he gave evidence in a quarto volume, which he published at Antwerp in 1607, with the title of '*Apparatus in Revelationem Jesu Christi*.' This treatise was so ungratefully received by the ecclesiastical authorities at Rome, as to be put into the '*Index Librorum Prohibitorum*' in the beginning of the year 1610; a circumstance which, conjoined with the persecution and danger which he had to encounter in consequence, at Rome and elsewhere, operated very powerfully upon his mind in the direction of re-conversion to Protestantism. Upon his return to England, and his rehabilitation as a member of the Anglican communion, he took his degree of D.D., and improved the occasion by delivering himself of a discourse which was saturated with Cabalistic learning. This "*Clerum*" was founded on the text, "*Adam, Seth, Enos,*" the three opening words of the first Book of Chronicles, in which, according to Fuller, whose admiration of such a style of exposition is greater than his confidence, "he mined for a mystical meaning, Man is put or placed for pain or trouble." It was not long before Alabaster was made a "prebendary of St. Paul's, and rector of the rich parsonage of Therfield, in Hertfordshire." He died in the beginning of April, 1640.

Alabaster was the author of various theological treatises, of which may be mentioned his work entitled '*Ecce Sponsus Venit; Tuba Pulchritudinis*,' &c. 4to, London, 1633; in which he seeks to determine the date assigned to the existence of the world, and also that of the Church of Rome, his former love for which had now turned to bitterness. It is in reference to this work that Herrick, in his '*Hesperides*,' addresses a poem, which is not without suspicion of satire, "*To Doctor Alabaster*," a recognised variety of the name of Alabaster, as may be further seen by its use in Mr. Collier's '*History of Dramatic Poetry*,' where some '*Divine Meditations*, by Mr. Alabaster,' find a place. Another work of Alabaster's is a dictionary or vocabulary in five languages, entitled '*Lexicon Pentaglotton, Hebraicum, Chaldaicum, Syriacum, Talmudico-Rabbinicum, et Arabicum*,' folio, London, 1637. In addition to his prose works, Alabaster enjoyed in his own day a high reputation for his poetic genius, which was principally, though not exclusively, based upon his Latin tragedy of '*Roxana*,' for which, however, it has been discovered that he was indebted, without thinking it necessary to avow his obligation, to the Italian tragedy of '*La Dalida*,' written by Luigi Groto, commonly called the Blind Man of Hadria. Spenser speaks of Alabaster's poetry in terms of unmeasured admiration; and Fuller, referring expressly to '*Roxana*,' describes its author as "a most rare poet as any our age or nation hath produced." '*Roxana*' was acted in Trinity College Hall, Cambridge, probably in or before the year 1592; but was never fully or correctly published till its author rescued it from pirates and plagiarists by bringing out an exact edition in 1632.

ALAIN OF LILLE, in Flanders (Latinized ALANUS DE INSULIS), who is frequently confounded with another Alain of Lille, a slightly elder contemporary, whom it is difficult at all times to discriminate with precision, was born about the year 1114; a date the probability of which is fortified by his own assertion—supposing him, as is most reasonable, to have been the author of the Commentary on the Prophecies of Merlin—that he was 'a little boy' (*puerulus*) in the year 1128. He was so famous as a theologian and philosopher as to have received the title of 'the universal doctor' (*doctor universalis*); and it is natural, that, in default of authentic biography, of which we have scarcely a trace, a thousand fables should group themselves about a man who had any pretensions in his age to be distinguished by such a designation. An assertion of Henry of Ghent (*Henricus Gandavensis*), whose death occurred less than a century after that of Alain, makes it probable that Alain was rector of the ecclesiastical school at Paris; but the circumstance is not mentioned by other writers of, or near, his own time. Alain died about the year 1202, in the Abbey of Cîteaux, whither he had retired, according to the most natural explana-

tion, in order to exchange the literary bustle and rivalry of the schools for the religious seclusion of the convent; but, according to the traditions which are so free with his name, in a spirit of remorse for his presumption in having undertaken to explain the mystery of the Trinity. The most noteworthy of the numerous writings of Alain are (1.) the '*Anticlaudianus*,' or *Encyclopædia*, a moral allegory in Latin hexameters, in nine books. It has been published several times. The poem is an imitation of Claudian's poem against Rufinus, whence its title of *Anticlaudianus*. (2.) '*Doctrinale Minus* [sometimes called '*Doctrinale altum*,' a title which properly belongs to another work of the same writer] seu *Liber Parabolarum*,' a collection of proverbs and maxims in elegiac verse. The maxims relate sometimes to morals, sometimes to natural philosophy, and are often weighty and well expressed. A translation in French verse was published at Paris, A.D. 1492, in quarto. (3.) A treatise against Heretics and Unbelievers, in four books. The first two books were printed by Jean Masson, 8vo, Paris, 1612; and, again, with the beginning of the third, in the collection of Alain's works by De Visch. The authors of the '*Histoire Littéraire de la France*' vindicate Alain's claim to the authorship of the Commentary on Merlin's Prophecies, in opposition to several writers of good reputation, who ascribe it to Alain, bishop of Auxerre. The work, from internal evidence, was written by a member of one of the monastic orders, and between the years 1167 and 1183. It shows considerable acquaintance with English history. Alain's poetical works are his best. His controversial pieces are also considered good, but his other theological works have little in them that deserves notice.

ALASCO, or À LASCO, JOHN, whose real name was JOHN LASCZKI, was born in the year 1499, in Poland, and belonged to a family of so high a rank that he is stated by Fox the Martyrologist, his contemporary, to have been uncle to King Sigismund the First. By way of complement to the education he had received at home, he visited the most celebrated universities on the continent of Europe, especially those of Italy, France, and the Netherlands. At Zurich he became acquainted with Zwingli, and imbibed the doctrines of the Swiss reformers, which he afterwards advocated at large in his various writings. In 1525 he spent some time at Basel, where he contracted an intimate friendship with Ecolampadius and Pellicanus, but especially with Erasmus, of whose library, after the death of that eminent scholar, he became the possessor. On his return to Poland in 1526, he was appointed provost of Gnesen, and afterwards of Lencicz also. When, ten years later, two bishoprics were offered to him at once, the religious opinions which he had long been cherishing and developing forbade him to accept either of these high offices; and he received permission from King Sigismund to resume his travels in foreign countries. This permission had been sought by Alasco from a twofold desire of extending his knowledge and of practically carrying out his religious views with greater freedom than was tolerated in his own country. In 1537 he stayed for some time at Mainz, after which he spent two years at Louvain, where he married. In the course of these two years he also visited Wittenberg, and made the acquaintance of Melancthon. Soon after 1540 he went to Emden, in East Friesland, where he enjoyed the confidence of Count Enno, and after his death, of the Countess Anna; and where he found the ecclesiastical atmosphere so congenial that, after a short visit to his native country in 1542, he returned to Friesland. He acceded to a request that he should undertake the office of preacher to the Protestant community at Emden, and the superintendence of all the newly-established Protestant communities in the country. In the face of considerable difficulties and obstacles he achieved the completion and final settlement of the Reformation in this part of Holland. He wrote a Manual of the reformed doctrines, in which he followed the views of the Swiss reformers, his adhesion to which, especially those in reference to the Lord's Supper, stood in the way of his acceptance of a brilliant offer made to him by Albert, Duke of Prussia, who wished him to settle in his dominions. The publication of the Augsburg '*Interim*' (1548) embarrassed his operations in Friesland, so that he was glad to comply with an invitation given him by Archbishop Cranmer, at the request of King Edward VI., to come over to England. Here he added to the duties of chief preacher to the congregation of foreign Protestants, then sojourning in London in large numbers as refugees from the intolerance of their several countries, the superintendence of all their churches and schools. For this congregation, which in the year 1554 consisted of more than 3000 members, Alasco drew up an admirable constitution, '*Forma ac Ratio*

totius Ecclesiastici Ministerii Eduardi VI., in Peregrinorum, maxime Germanorum, Ecclesia,' London, 1550. In connection with this work it may be mentioned that he subsequently published at Emden, 'Simplex et fidelis Narratio de Ecclesia Peregrinorum in Anglia,' Emdæ, 1553; a work which was preceded by an admonitory letter to Christian, King of Denmark. The accession of Queen Mary, in 1553, necessitated the departure of Alasco, and the breaking up of the congregation, more than 300 of whom accompanied him to Denmark, where he trusted to find a place of refuge for them. But in the winter of the same year, Alasco was obliged to quit Denmark, in consequence of his declared disapproval of the ritual adopted in that country, and especially of the manner in which the Lord's Supper was administered. The Danish king, however, tempered the severity of dismissal from his territories by various acts of kindness to Alasco and his friends. Alasco repaired first to Emden, and afterwards to Frankfurt-on-the-Main, where he attempted to organize the body of foreign Protestants who had taken up their abode there, and many of whom had been members of the ecclesiastical corporation which had been established in London. In 1556 he finally retired to his native country, where he became one of the first and most active reformers in Poland. He was one of the eighteen divines who co-operated in the Polish translation of the Bible, which was published in 1563. Alasco, however, was denied the gratification of witnessing the completion of the work, as his death took place on the 13th of January, 1560.

It may be surmised that his literary, as well as his practical, controversies, were principally concerning the Lord's Supper. The most remarkable of his works, which are all in Latin, are, besides those already named, his 'Defensio veræ Doctrinæ de Christi Domini Incarnatione adversus Mennonem Simonis,' 1545; 'Brevis et dilucida de Sacramentis Tractatio,' 8vo, London, 1552; 'Epistola continens Summam Controversiæ de Cœna,' and 'Confessio de nostra cum Christo Domino Communionem, et Corporis item sui in Cœna Exhibitionem,' London, 1552; 'Catechismus Major,' London, 1551; 'De recta Ecclesiarum instituendarum Ratione Epistolæ III.' 1556; and 'Purgatio Ministrorum in Ecclesia Peregrinorum Francofurti adversus eorum Calumnias,' Basel, 1556, 8vo. His other writings, which consist chiefly of letters of a controversial nature, are scattered in various works.

ALBER, ERASMUS (Latinized Alberus), a German theologian, born about 1500, though the precise year is uncertain, and whose native place is variously stated to have been the Wetterau, and Spredlingen, near Frankfurt, was a contemporary and zealous friend and partisan of Luther. He was educated at Nidda and Mainz; and in 1520 was a student of theology under Luther, at Wittenberg. After the completion of his studies, he introduced the doctrines of the Reformation into various parts of Germany, having been successively teacher or preacher at St. Ursel, Götzenham, Spredlingen, Neubrandenburg in the Mittelmarch, Staden, Babenhausen, and Magdeburg. He was a constant martyr to the unsparing faithfulness of his ministry; and his inclination to satire and his resolute opposition to what he conceived to be abuses in church or state, involved him in continual change of scene and pastoral duty. His dismissals inveterately followed almost immediately upon his appointments. During 1552, and the commencement of the following year, he lived as a private person at Hanburg; from which seclusion he was appointed to be superintendent-general at Neubrandenburg in Mecklenburg. He had scarcely assumed the duties of his office when he died, May 5th, 1553.

Alber's character exhibits qualities which are almost antithetical. He was one of the most learned and witty men of his age, zealous and indefatigable as the champion of the Reformation, the interest of which he advanced by controversial and broadly satirical writings. As a fabulist he achieved considerable success; and as a hymnographer, is considered to be inferior to Luther alone of all the sacred singers of his time, whilst by some he is even reckoned as equal to Luther. Most of Alber's works are in High German, but a few are written in Low German. One of the most remarkable is his abridgment of the 'Conformationes S. Francisci' of Bartholomæus Albicicus of Pisa, in which the resemblance of S. Franciscus to Christ is set forth and supported by various miraculous occurrences of his life. Alber added to these stories numerous satirical and sarcastic notes, which made the work so popular that it was translated into Latin, French, and Dutch. It was first published, without date or place, in a duodecimo volume, entitled 'Der Barfüsser Münche Eulenspiegel und Alkoran, mit einer schönen Vorrede Martin Luther's.' It was reprinted at Wittenberg,

1542, 4to, and without place in 1573, 8vo. Another edition appeared at Halle, 1615, 4to. The fact of the preface having been written by Luther, led Conrad Badius, who translated it into French, into the mistake of attributing the entire work to the reformer. Alber's other productions are his News from Rome, 'Neue Zeitung von Rom,' &c., 4to, 1541, a bitter satire upon the Pope; a satirical dialogue on the Augsburg 'Interim,' 4to, 1548; two satirical attacks upon George Wizelius, whom, on account of his return to the Church of Rome, after having embraced Lutheranism, Alber compares to Judas Iscariot; a kind of Epic Poem in honour of Luther; a book on Marriage; several Hymns; and a collection of forty-nine Fables in verse, which bore the title of the Book of Wisdom and Virtue, 'Das Buch von der Tugend und Weisheit, nemlich xlix Fabeln, der mehrere Theil aus Esopo gezogen und mit guten Rheimen verkleidet,' 4to, Frankfurt, 1550; reprinted at Frankfurt, 1579.

ALBERT, PRINCE CONSORT. The memoir of the Prince Consort, in the BIOGRAPHICAL DIVISION of the E. C., vol. i., col. 86, was brought down to the year 1856. Beyond that period there is little of a public nature to record. The Prince's sympathy with all benevolent objects; his interest in the progress of the fine and industrial arts, and generally in whatever might tend to promote the well-being of the people at large, have been there sufficiently noticed. But about this time it seemed as though the events of the past years had led him to take a more decided part in the great social movements of the day. The impression appeared to have been deepening in the mind of the Prince that what most urgently demanded public consideration, or that which it lay most within his own line of duty and capacity to direct attention to, was the necessity for extending and improving primary instruction. He longed to see what he termed "the right of knowledge" recognised as the patrimony of all: and by endeavouring to render its possession attainable he believed that he should best assist in bringing about what he regarded as, in the actual state of society, the object which every one should desire, a more genuine feeling of mutual sympathy and good-will between the different classes in the country. Hence we find him present alike at the opening of the day-schools in the wretched district of Golden-lane, Barbican, in March, 1857; at the inauguration of the Art Treasures Exhibition, Manchester, in the following May; and in June presiding at the Educational Conference, London. In his address at the opening of the Manchester Art Treasures Exhibition, whilst expressing his warm admiration of "the building and the wonderful treasures of art which it displays," as well as of "the wealth and spirit of enterprise of this country" of which it is a sign, it is with its educational purpose he feels most sympathy, and especially "that generous feeling of mutual confidence and good-will between the different classes of society within it, of which it affords so gratifying a proof." At the opening of the Golden-lane schools, while recognizing the difficulties and hindrances in the way of the very poor sending their children to school, he exhorted those who had influence with them to urge the immense benefits of education to their children upon "the minds and hearts of parents, and to place before them the irreparable mischief which they inflict" by withholding it. With even greater earnestness were his sentiments expressed at the meeting of the Society for Improving the Condition of the Labouring Classes: "Depend upon it, the interests of classes too often contrasted are identical, and it is only ignorance which prevents their uniting for each other's advantage. To dispel that ignorance, to show how man can help man notwithstanding the complicated state of civilized society, ought to be the aim of every philanthropic person; but it is more particularly the duty of those who, under the blessing of Divine Providence, enjoy station, wealth, and education." It was in this spirit, and deeply impressed with the sense of this duty, that the few remaining years of the Prince's life were spent. How much he might have accomplished, as his disinterested earnestness of purpose came to be more and more clearly understood and appreciated, in furtherance of the mental and physical improvement of the ignorant and suffering, and in promoting a better feeling among all, it is now, of course, impossible to say, and would be idle to speculate. But it is necessary to recognise this as the governing principle of the Prince's later years in order to appreciate properly his public acts.

It was in June, 1857, that the title of Prince Consort was formally conferred on Prince Albert. In January, 1858, his eldest child, the Princess Royal, was married to the Crown Prince of Prussia—a union which had long been an object of warm interest to him. He did not live to witness the marriage

of another of his children, but the formal announcement was made to Parliament in May, 1861, of that between the Princess Alice and Prince Louis of Hesse. In August, 1858, the Queen and Prince Consort visited the Emperor Napoleon at Cherbourg, on occasion of the opening of the Napoleon Docks.

We have in the former notice spoken of the share which the Prince had in promoting the Great Exhibition of 1851, and the interest which he felt in exhibitions of objects of industrial art, and especially those of an international character. During the autumn of 1861 his time and thought were much occupied by the International Exhibition, which had been fixed to be held at South Kensington in May, 1862, and which, profiting by the experience gained in 1851 and by the French Exhibition of 1857, he was anxious should surpass all previous efforts. This exhibition was the last matter of public interest on which he was engaged. Immediately after attending a meeting in November for making the general arrangements, he was seized with the illness which terminated in death on the 14th of December, 1861. His body was placed temporarily in the vaults of St. George's Chapel, Windsor, but it has since been removed to a magnificent mausoleum, erected by the Queen for its reception, at Frogmore. At the same time, what was known as the Wolsey Chapel, Windsor, has been restored and fitted in a very costly manner by the royal children, as a memorial of their father.

The unexpected death of the Prince at the early age of 43, in the full enjoyment of an unusual measure of domestic happiness, in the midst of his projects for promoting the well-being of the people with whom his lot had been cast, and just at the time when his character had come to be clearly understood and his single-heartedness appreciated by all ranks and parties, caused profound and universal sorrow for the public loss, and the deepest sympathy with the bereaved Queen. Public testimony to the general feeling was given by providing a fund, partly by a parliamentary vote, partly by a public subscription, for the erection of a memorial, on the site of the first Great Exhibition of 1851, of a richer and more costly description than any public monument previously erected in England. And near it, as an additional memorial, and in order partly to carry into effect the Prince's frequently expressed wishes and views, a vast amphitheatre is being erected, to be called the Royal Albert Hall of Arts and Sciences. Memorials taking the form of statues, crosses, painted windows, schools of design, day-schools, local museums, mechanics' institutes, new wings to hospitals, or some other object of ornament or utility have been erected, not only in almost every great town in the kingdom, but in very many of the smaller towns, in testimony of the general respect with which the Prince's memory is cherished.

The public estimate, indeed, was not excessive. The Prince had devoted himself to the service of the country as no one in his position had previously done. We mentioned in the previous notice that one of the earliest acts after his marriage was to go through (1840-41) a regular course of reading on the constitution of England with Mr. Selwyn, an able nisi-prius barrister and a sound and learned constitutional lawyer, with a special view to fitting himself to fill rightly his place by the throne. And during the years he occupied that place his interest in all public affairs was unceasing, and his influence decided; but, always careful to observe strictly his true position as the partner of a constitutional sovereign, his influence was never obtruded, and by many hardly suspected. Statesmen of all parties, and, indeed, men of every calling and rank who were brought into association with the Prince for what we may call business purposes, have borne willing and ample testimony to the Prince's clearness of apprehension, soundness of judgment, and readiness of resource, and equally so to the earnestness with which he gave time and labour to the furtherance of the matter in hand, and the attention and courtesy with which he listened to every suggestion. Of his private character and domestic habits it is unnecessary and would hardly be becoming to speak, but something has been shown us of both by the Queen herself in 'Leaves from the Journal of Our Life in the Highlands from 1848 to 1861.' To Her Majesty, also, we are indebted for full and authentic materials for ascertaining the Prince's matured views on many social and some political matters, and for an ample and carefully-written biography. The former we find in the 'Speeches and Addresses delivered on different Public Occasions by the Prince Consort,' 8vo, 1863; the biography in 'The Early Years of H.R.H. the Prince Consort, compiled under the direction of Her Majesty the Queen, by Lieut.-General the Hon. C. Grey,' 8vo, 1867. This latter volume, written originally "for the use and study of his children," and at first printed only for

Private circulation among the royal family and a few personal friends, consists, as stated in the Introductory Remarks (p. xxiv.), of "a compilation of letters and memoranda, the greater part" by "the Prince himself and the Queen," and traces "the whole career of the illustrious Prince—his progress from boyhood to manhood," down to the end of the first year of his married life. The continuation, which will carry on the narrative "from manhood to the grave," has been entrusted to Mr. Theodore Martin, who, for its "prosecution will have the same advantages as to information from authentic sources that have been enjoyed in the preparation of the present volume" (*Preface*, p. xiii.).

ALBERTINI, GIORGIO FRANCESCO, by his monastic name, Giorgio Maria, an Italian theologian, was born on the 29th of February, 1732, at Parenzo, in Venetian Istria. In his thirteenth year he entered the order of St. Dominic; and after the completion of his studies at Venice, speedily acquired great reputation as a preacher throughout the whole of Italy. In 1787 he was summoned to Rome by the Cardinal Antonelli, and commissioned by Pope Pius VI. to investigate a difficult question in ecclesiastical order; an answer to which he delivered in a long and erudite dissertation in two volumes, which drew on him many enemies, and for the publication of which he was chagrined to find he could not procure the necessary sanction. He was, however, appointed by the Pope to the chair of dogmatic theology in the college of the Propaganda at Rome; and about three years afterwards, to the principal chair of theology in the university of Padua, then vacant by the death of Father Antonio Valsecchi, who had recommended Albertini as his successor. He discharged the duties of this chair, till its suppression by the new government of Italy in 1807; when he retired to his native town of Parenzo, and continued teaching theology in the seminary there till his death on the 29th of April, 1810, at the age of 78.

The works of Albertini are numerous, and amongst them may be distinguished his 'Osservazioni,' &c., Ferrara, 1781; some observations, published anonymously, in opposition to an irreligious French publication, 'Le Philosophe Militaire,' and to an answer to it, by Count Francesco Riccati, entitled 'L'Antifilosofo,' which was, in Albertini's opinion, hardly more orthodox than the work it professed to refute. His 'Dissertazione dell' Indissolubilità del Matrimonio' was published at Venice in 1792; to which, in reply to the attacks of Pellegrini, one of the disappointed competitors for the chair of Padua, he afterwards added an Epistle and Dissertation on the Marriage Question, 'Epistola e Dissertazione,' &c., Padua, 1804. The most important work of Albertini, however, and the one which was the immediate cause of the vehement assault of Pellegrini, was his 'Acroasi ossia la Somma di Lezioni teologiche,' Padua, 1798, Venice, 1800-2; a summary of his theological lectures, in five volumes, to which he afterwards added a sixth, entitled, 'Scholia,' Venice, 1808. The sermons, upon which the reputation of Albertini was originally founded, were, in spite of the remonstrances of his friends, committed to the flames by their author, some time before his death; but he left behind him several unpublished works.

ALBIN, ELEAZAR, an excellent draftsman of natural history, was born towards the end of the 17th century, but the years of his birth and death are alike uncertain. He was established in London as a teacher of drawing, when, having been employed to make some drawings of insects, he was led to a close study of objects of natural history, and in 1720 published an expensive quarto volume entitled 'A Natural History of English Insects, Illustrated with a hundred copperplates, curiously engraved from the life, and exactly coloured by the author.' Some of the plates are dated as early as 1713. A second edition was published in 1724, and a third in 1749. It also appeared with a Latin title and text, 'Insectorum Angliæ Naturalis Historia,' 4to, 1731. Other works by him are, 'A Natural History of Spiders and other curious Insects,' 4to, London, 1736, containing 53 coloured plates, and a portrait of Albin on horseback, by J. Scotin: of this an extended edition, "revised, enlarged, and designed anew by T. Martyn," appeared in 1794; 'A Natural History of Birds,' 3 vols. 4to, 1731-38, illustrated with 306 copperplates "engraved from the life and exactly coloured by the Author; to which are added Notes and Observations by W. Derham;" 'A Natural History of English Song Birds, and such of the Foreign as are usually brought over and esteemed for their singing: to which are added figures of the Cock, Hen, and Egg of each species, exactly copied from Nature by E. A.,' 12mo, London, 1737: of this work the author published a second edition in 1747, and a third in 1759, which is the last known of

him, and he probably died not long after. A new edition of the 'Song Birds' was issued in 1779, and in 1794 appeared a folio volume entitled 'The History of Esculent Fish, with 15 coloured plates drawn and engraved by Eleazar Albin: with an Essay on the Breeding of Fish and the Construction of Fish Ponds by Roger North.' Albin's drawings are admirable; his written descriptions are loose and valueless.

ALBINUS, BERNARD, a celebrated German anatomist and physician, was born at Dessau, January 7th, 1653. After studying at Bremen and Leyden, and obtaining a medical degree at Leyden University, he travelled in France and in Flanders, and was then appointed Professor of Medicine at Frankfurt-on-the-Oder. He acquired a high reputation as a practitioner, and was invited to Potsdam as physician to the great elector, Frederick William. Returning to Leyden in 1702, he held the Professorship of Medicine in that University for nineteen years, the medical school attaining great distinction under his direction. He died Sept. 7, 1721. His *éloge* was pronounced by the celebrated Boerhaave. Albinus published above fifty memoirs and dissertations, among the chief of which were 'De Corporeculis in Sanguine Contentis'; 'De Tarantula Mira'; 'De Sacro Freydenwaldensium Fonte'; 'De Melancholia'; 'De Epilepsia.' His lectures were published in 1792-95, under the title 'Causæ et Signa Morborum.'

ALBINUS, BERNARD SIEGFRIED, son of the preceding, was an anatomist of much greater fame. Born at Frankfurt-on-the-Oder, February 24, 1697, he studied medicine at Leyden under his father, but paid especial attention to anatomy, in which the university professors were of unrivalled eminence, and which continued to be his favourite study during the remainder of his life. Among his instructors were Boerhaave, Rau, Ruysch, and Senac. At the early age of twenty-two, in 1719, he succeeded Rau in the chair of anatomy at Leyden. He became almost equally eminent as a teacher and as an original investigator, during his professional career of more than fifty years. Some of his engraved plates of bones and muscles were regarded as of high value; and as publishers feared the expense, he bore much of the cost of publication himself. Besides editing the works of Harvey, and the anatomical works of Vesalius, Fabricius, and Eustachius, he published 'De Ossibus Corporis Humani' (1726); 'Historia Musculorum Hominis' (1734); 'Annotationes Academicæ,' in eight books, 1754-68; Treatises on the Vascular System of the Intestines, and on the Bones of the Fœtus; and numerous other works. He died at Leyden, September 9, 1770.

ALBRECHTSBERGER, JOHANN GEORG, musical composer and writer, was born February 3, 1736, at Klosterneuburg, near Vienna. He entered young as a choir boy in the church of St. Martin in that town, where the organ on which he learned is still preserved as a valued relic. After studying accompaniment and counterpoint under Mann, chief organist at Mölk, he was employed as organist at Raab, Maria-Tafel, and Mölk. In 1768 he married Rosalie Weiss, daughter of Bernard Weiss, a sculptor. Four years afterwards he obtained the post of organist to the Court of Vienna, and in 1792 that of kapellmeister at St. Stephen's Cathedral in the same city. During more than twenty years' residence in Vienna he was the centre of a large and influential musical circle; his compositions were greatly admired; he was regarded as the chief of contrapuntists; Haydn formed a high estimate of his powers; and he was one of the very first of teachers, numbering among his pupils Beethoven, Hummel, Seyfried, Moscheles, Eybler, and Weigl. He was a voluminous writer of music. His published works include eleven fugues for the organ, three preludes for the same instrument, four fugues for the pianoforte, eighteen string quartettes, several sonatas and quintettes, &c.; but Fétis gives a much longer list of music still in MS., and belonging to Prince Esterhazy, comprising masses, gradualls, vespers, litanies, psalms, Te Deums, motetts, allelujahs, oratorios, canticles, and other sacred pieces. Albrechtsberger is better known at present, however, for his treatises on 'Harmony, Thorough Bass, and Composition,' and the 'Theory of Music,' which superseded earlier works by Fuchs and Marpurg, and have become standard authorities. His treatise on Harmony was first published in 1790; but his pupil Seyfried, kapellmeister and opera director at Vienna, afterwards edited a collection of this and his other works. There is an English translation, but from a French edition. Albrechtsberger, who had a numerous family of nine sons and six daughters, died at Vienna, March 7, 1809.

ALCOCK, JOHN (Alcok, Alkok), son of William Alcock, sometime burgess of Kingston-on-Hull, was born at Beverley, in Yorkshire, where he received his elementary education. Thence

he repaired to the University of Cambridge, where he achieved great distinction, particularly for his knowledge of the civil and canon law. He commenced LL.D. in or before 1461, in which year he was called to the rectory of St. Margaret's, New Fish Street, London; and was advanced, on the 29th of April, 1462, to the deanery of the Chapel Royal, St. Stephen's, Westminster. In 1468 he obtained a prebend in the cathedral church of Salisbury, and another in that of St. Paul, London; and there is reason to believe that about the same period he was suffragan to the Bishop of Norwich. His civil advancement, according to the fashion of the time, fully kept pace with his ecclesiastical preferment. In 1470 he was named a Privy Councillor, and in March of that year, a few months before the short return of Henry VI. to regal power, was employed by Edward IV. on an embassy to John II., King of Castile. On the 29th of April, 1471, immediately after the battle of Barnet, which replaced Edward IV. upon the throne, Alcock was appointed to the Mastership of the Rolls; and on the 26th of August, in the same year, was at the head of the English commissioners empowered to treat with the Scottish ambassadors for a perpetual peace between the two kingdoms. When Thomas Rotherham was translated to the see of Lincoln, Alcock was preferred to succeed him in the diocese of Rochester, March 17th, 1472, having on the previous day resigned the Mastership of the Rolls to John Morton; and when Stillington, Bishop of Bath and Wells, and Lord Chancellor, gave up the duties of the latter office on account of a temporary illness, the Great Seal was placed, September 20th, 1472, in the hands of Bishop Alcock, who, as keeper thereof, opened the parliament which assembled on the 6th of October following. This parliament was prorogued by Lord Chancellor Stillington, who had by this time recovered his health, on the 5th of April, 1473. In July of the last-named year Alcock resigned the vicarage of Caster St. Trinity, in Norfolk, and was instituted, May 28th, 1474, to the rectory of Wrensham, in Suffolk. In this year the Bishop of Rochester was created by patent tutor to the Prince of Wales, afterwards Edward V., and president of his council, an office of which he actively performed the duties when he was sent by the king to reside with the prince and Earl Rivers (gubernator principis) in the Marches of Wales. Similar duties were for several years of occasional recurrence to Alcock, who is known as the first holder of the dignity of Lord President of the Council of the Marches of Wales, or, more popularly, Lord President of Wales. "A curious instance of the royal favour occurred in the year 1475, when both Alcock and Rotherham held the title of Lord Chancellor for several months together, affording a solitary instance in the history of this kingdom of two chancellors acting at the same time. The fact is incontestably proved by the evidence of numerous Privy Seal bills addressed to both by the same title, from April 27th to September 28th, 1475. This extraordinary circumstance may be thus explained:—When the king planned his invasion of France he intended to be accompanied by his Lord Chancellor, Bishop Rotherham, and, feeling it necessary to provide for the business of the chancery in England, he nominated Bishop Alcock to take the duty during the chancellor's absence. Instead, however, of pursuing the customary practice of making him merely Keeper of the Seal, he, as a mark of special favour, invested him with the title of Chancellor, intending that the regular Chancellor should be with him during the whole period of his absence in France. It happened, however, that from some cause or other the armament was delayed from April to July, so that during these months Privy Seal bills were addressed to both officers in England, frequently on the same day, and from the same place. The last writ of Privy Seal addressed to Bishop Alcock is dated on September 28th, after which Bishop Rotherham, having returned from France, resumed his functions as sole Chancellor." The foregoing quotation is made from Mr. Foss's 'Judges of England,' because that gentleman is the first at once to state and to explain an unparalleled circumstance. In 'Athenæ Cantabrigienses,' the fact of the joint occupancy is barely mentioned as one "of which no similar example is known;" whilst Lord Campbell ('Lives of the Chancellors') is at a loss to understand what he conceives to be the arbitrary deposition and the arbitrary reinstatement of Rotherham, whose performance of the business of the chancery had been more than commendable. The fact, as now laid open, is that neither deposition nor reinstatement took place at all.

In 1476 Bishop Alcock was translated to the see of Worcester, the temporalities of which were restored to him on the 25th of September. Over this diocese he presided for the rest of the reign, during which he enlarged the church of Westbury, and

founded a school at Kingston-on-Hull, where he built a chapel over the remains of his parents at the south of the church, endowing a chantry there also. In 1478 he is found actively engaged in the performance of his duties as Lord President of Wales; and he was a trier of petitions in the last parliament of Edward IV. On the death of that monarch in 1483, he was removed from the preceptorship of his infant successor by the protector, Richard, Duke of Gloucester, by whom, however, he was exempted from imprisonment, and treated altogether with more kindness and consideration than mostly fell to the lot of the young king's faithful servants. On the return of Henry VII. as conqueror and king from Bosworth field, August 22, 1485, Bishop Alcock, for the second time, was appointed Lord Chancellor. The date of the delivery of the Great Seal to him is not recorded; but he was present, as "Cancellarius Magnus Angliæ" at the coronation, October 30th, and on the 7th of November assisted at the opening of the first Parliament of Henry VII.; in which he skillfully and efficiently superintended the difficult questions it had to decide. The most important of these turned upon the effect of the attainder, by a parliament of Richard, of a great number of the temporal peers now summoned, and even of the sovereign himself, as Earl of Richmond. The chancellor and the judges decided with unanimous loyalty, "that the descent of the crown of itself takes away all defects and stops in blood by reason of attainder," which has ever since been received as a maxim of constitutional law; and "no doubt," says Lord Campbell, "was relied upon by the Jacobites, who attempted to restore the princes of the House of Stuart, attainted under King William, Queen Anne, and George I." The services of Lord Chancellor Alcock were rewarded by his being translated by a bulla provisionia, dated October 6th, 1486, to the Bishopric of Ely. He obtained the royal assent and the temporalities on the 7th of December following, and was enthroned on the 17th of the same month. There seems, however, to have been little serious intention to employ Bishop Alcock after the government of Henry VII. was fairly started; and the king reserved his more intimate confidence for John Morton, who had been in exile with him, who had been attainted for adhering to him, who had mainly contributed to his elevation, and whose advancement to the primacy it was which had left the see of Ely vacant for Alcock. Morton succeeded Alcock as Lord Chancellor, but the exact date of the transfer of the Great Seal to the former is not known, as it is not recorded in the Close Roll. It is supposed, however, to have taken place in August, 1487; and was certainly before November in that year, when there were bills addressed to him as chancellor, which are still extant. Whilst holding the incumbency of the diocese of Ely, Alcock performed the baptismal ceremony on the Princess Margaret, afterwards Queen of Scotland; as it had fallen to him, whilst Bishop of Worcester, to baptize Prince Arthur, of whose Council of the Marches of Wales he is found acting as president, January 31st, 1494.

His political career was now drawing to a close, for on the 27th of April, of the same year, Bishop William Smyth was Lord President of Wales. Alcock's name occurs, however, so late as the twelfth year of Henry VII. (1496-7), as one of the triers of petitions. The remaining years of his life were occupied with the affairs of his diocese; and he died at his castle at Wisbeach, October 1st, 1500, leaving behind him a great reputation for learning, tact, and ability, and greater still for virtue and sanctity. He was esteemed and respected by his contemporaries, and was named by Judge Lyttelton as the supervisor of his will. Coke, in relating this fact, calls him "a man of singular piety, devotion, chastity, temperance, and holiness of life." Bishop Alcock was buried under a tomb bearing his effigy in the beautiful chapel—lately restored at the cost of Jesus College—which he had erected for himself at the north-east end of Ely Cathedral. He had great skill in architecture, which, along with the revenues of his various preferments, he lavished upon the erection, repair, and adornment of ecclesiastical edifices in various parts of the country from Malvern to Hull and Beverley. He was a benefactor to Peterhouse; but his most memorable act of munificence was the foundation, in 1497, of Jesus College, Cambridge, on the site of the ancient but reduced nunnery of St. Rhadegund, which had been founded by Malcolm, King of Scots.

Besides 'Homilies,' 'Meditations,' and 'A Poetical Paraphrase of the Seven Penitential Psalms,' Bishop Alcock wrote several small works, as the 'Spousage of a Virgin to Christ,' 4to, 1486; 'Galli Cantus ad Confratres suos Curatos in Synodo apud Bernwell,' printed in 4to, London, 1498, by Pynson, and Wynkyn Worde; 'Mons Perfectionis ad Carthusianos,' 4to, London, 1501; and 'Abbatia Spiritus Sancti,' an 'Abbey of Saint Spirit'

BIOG. DIV.—SUP.

that is founded in a Place that ys clepyd Conscience.' This was published in Latin at London, 1531, in 4to, and again in English at Westmestre by Wynkyn Worde, in 4to. There are three MS. copies of it in the library of the University of Cambridge, and one in the Harleian collection, Codex, 2046, art. 41. In the Abbey of the Holy Spirit, which this work describes, Charity is the abbess, Wisdom the prioress, and Meekness sub-prioress.

ALCOCK, JOHN, organist and musical composer, was born in London, April 11, 1715. In 1722 he entered as a choir-boy at St. Paul's Cathedral, and in 1729 was placed under the tuition of Stanley, organist of the Temple Church and of St. Andrew's Holborn. Alcock was appointed organist at St. Andrew's Plymouth, in 1737; at Reading in 1742; and at Lichfield, in 1749. He passed the remainder of his long life as organist and choir-master of Lichfield Cathedral, receiving the degree of Mus. Bach. Oxon. in 1755, and Mus. Doc. in 1785. He composed and published a large number of hymns, psalms, motetts, services, Te Deums, Jubilates, &c. His chief collected works are:—'Harmonia Festi,' consisting of canons, airs, &c.; and 'Harmony of Sion,' an arrangement for four voices of about a hundred psalms. Alcock died in 1806, in his ninety-first year.

ALDHELM, Anglo-Saxon scholar, bishop and saint, was born in Wessex, about 650 or 656, the son of Kenter, a kinsman of King Ina. There is some difficulty as to whether the celebrated Adrian who came over to Kent with Theodore [ADRIAN, E. C. S.] was his first teacher in Greek and Latin, or Meildulf, an Irish monk who settled as a hermit in what was then the Forest of Wiltshire, and, finding teachers few, gathered about him a number of youths from the nearest villages, whom he instructed in Latin and rhetoric. Be that as it may, Aldhelm was one of Adrian's earliest scholars, and under him made so rapid a progress as to astonish alike his teachers and his schoolfellows.

On his return to Wessex, Aldhelm, finding that Meildulf's scholars, the master being dead, had continued the hermitage as a seminary, joined them, assumed the religious habit, and after a brief visit to his old master, Adrian, settled down to diligent study and teaching. His superior attainments, prudence, and piety, led the brethren to elect him as their head, and under his guidance the school acquired so high a reputation that scholars resorted to it not only from the neighbourhood, but even from Ireland and France. Aldhelm himself, according to his first biographer, Faricius, was so well skilled in the Greek language that he could both write and speak it like a native; was the ablest Latin scholar since the days of Virgil; read the Psalms of David, the Books of Solomon, and the Laws of Moses in the original Hebrew; played excellently on all the musical instruments then in use; and was a persuasive orator. The establishment was now formed into a regular monastery, and Aldhelm was ordained, and appointed abbot by Eleutherius, bishop of Winchester. His rule was strict, and the abbey so flourished that Meildulfesbyrig, as the houses which had gathered about the original seminary were called by the people, grew into a town, the name being gradually softened down into Malmesbury.

In 687 Aldhelm was invited to Rome by Pope Sergius I.; stayed there some time, and obtained from the pope the exemption of his monastery from episcopal jurisdiction. On his return he built a church at Malmesbury; founded dependent religious houses at Frome-Selwood: made many converts by preaching in the open air, and several times journeyed to Canterbury at the request of the archbishop. At the Synod called by King Ina, about 698, with a view to induce the Britons to adopt the Roman reckoning for the celebration of Easter, Aldhelm was appointed to write a letter to the King of Cornwall on the subject, and the reading of this letter, Bede, writing but a few years later, assures us, persuaded many of the Britons who were subject to the West Saxons to adopt the Roman rule. ('Hist. Eccl.' B. V. cap. 18.) In 705 Aldhelm was appointed first bishop of Sherborne. He died whilst on an episcopal visitation at Douling, in Somersetshire, May 25, 709, and his body was carried to Malmesbury for interment. The date of his canonisation is not clear. His relics were translated by Abbot Warin in 1080.

Aldhelm has been called the father of Anglo-Latin poetry, and King Alfred placed him in the first rank of Anglo-Saxon poets. His Latin, however highly esteemed in his own day, was regarded as corrupt when William of Malmesbury wrote, though some of his pieces were still popular. His most celebrated Latin poems are a celebration of the saints and martyrs who had devoted themselves to a life of chastity ('De Laude S.S. Patrum et Virginum,' or 'De Virginum') on which subject he also wrote a prose treatise; and a collection of riddles entitled 'Ænigmata,' both of which are in hexameter verse: these and other verses

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attributed to him have been often printed, and are given both in the 'Maxima' and the 'Magna Bibliotheca Vit. Patrum.' None of his vernacular poems have come down to us, unless, as is not improbable, the version of the Psalms, printed by Mr. Thorpe, is by him; or, it may be, modified from the translation he is said to have made. His principal prose work is the treatise 'De Virginitate' already referred to, but several 'Epistles' have been printed in the collections just mentioned, as well as elsewhere. All his writings which have been preserved are given in 'S. Aldhelmi Opera,' 8vo, 1842, forming the first volume of 'Patres Ecclesiæ Anglicanæ,' edited by Dr. Giles.

The earliest life of Aldhelm was written by Faricius, a native of Arezzo in Tuscany, by profession a physician, who came over to England, was admitted a monk of Malmesbury, and there wrote the life of Aldhelm. He subsequently was made Abbot of Abingdon, gained the favour of Henry I. who wished to make him Archbishop of Canterbury, and died in 1117. The life is full of wild stories of miracles wrought by Aldhelm during his life, and by his remains subsequently, but it is the chief source of our information respecting him. A second life, by William of Malmesbury, compiled in 1125, partly as he states from the former life by Faricius, but with additions from his own local knowledge and the information of certain old monks of Malmesbury. The narrative is less overlaid with marvels than that of Faricius, and brings the history of the abbey of Malmesbury down to the time of the writer. Both lives have been several times reprinted; as has likewise an abridgment of William of Malmesbury's 'Vita S. Aldhelmi.' There is also a metrical 'Life of Aldhelm the Confessor' in old English verse attributed to Robert of Gloucester, of which there are three copies among the MSS. of the British Museum, and as many in the Bodleian Library.

(Lives by Faricius and William of Malmesbury; *S. Aldhelmi Opera*; Bede, *Hist. Eccl.*, B. v. cap. 18; *Biog. Dic. of Soc. for the Dif. of Useful Knowledge*; Wright, *Biog. Brit. Lit.*, vol. i.; Hardy, *Desc. Cat. of MSS.*, vol. i. p. 389, &c.)

ALDRED, or EALDRED, known also as Aldredus, Alredus, and Ealredus, who was Archbishop of York in the 11th century, was originally a monk of Winchester, and afterwards abbot of Tavistock. He stood high in the favour of Edward the Confessor, by whom he was preferred, in 1046, to the diocese of Worcester. He was the first English bishop who made, 1050, a pilgrimage to Jerusalem, which he accomplished by way of Hungary. Upon his return he was charged by King Edward with a mission to the Emperor Henry II., requesting him to obtain the return from Hungary of Edward Atheling, the son of Edmund Ironsides, and spent nearly a year in Germany. He administered the see of Wilton for three years during the absence of Bishop Herman, and the see of Hereford for four years from 1056. On the 25th of December, 1060, Aldred was raised to the Archbishopric of York, and permitted by the King to retain the see of Worcester *in commendam*, as, it is affirmed, some of his predecessors had done. Upon his going to Rome for his pallium, 1061, Pope Nicholas II. not only refused it, but deprived him of his former dignities on the alleged ground of simony. Thus disappointed, he took leave of Rome, but in crossing the Alps he and his party were plundered, so that they were obliged to return to Rome for succour. With much importunity he succeeded in obtaining his confirmation in the archiepiscopal see at the hands of the Pope, who, however, yielded to him only on condition that he should relinquish the bishopric of Worcester. With this condition he formally complied, although by the King's consent he retained twelve manors or towns belonging to the see. Aldred's acts of ecclesiastical munificence and discipline include the restoration of St. Peter's, Gloucester, in 1058; the building of refectories for the canons at York and at Southwell; the finishing of the one at Beverley, and the introduction of a uniform habit for the clergy of his province. Aldred strongly favoured the claims of Harold to the English throne, and officiated at his coronation. On hearing of the death of that prince on the field of Senlac, Aldred, with archbishop Stigand, assembled the citizens of London, and in a hurried folk-mote proclaimed Edgar the Atheling king. But he soon saw the hopelessness of resistance, and with Edgar and the leading citizens of London repaired to Berkhamsted and submitted and gave hostages to William the Conqueror, whom, in default of the willingness or eligibility of Stigand, archbishop of Canterbury, to perform that office, he afterwards crowned. He appears to have kept William in a more than wholesome dread of the powers of the Church, and of his own in particular. On one occasion it is said that the King, overwhelmed by the vehement expostulation of the indignant archbishop, knelt at

his feet till he was appeased. After a year, however, Aldred fled into Scotland with Edgar, and thus broke his allegiance to William. His death took place on the 10th of September, 1069, and he was buried in York Cathedral; being succeeded in his province by Thomas, a canon of Bayeux. The death of Aldred is variously stated to have been caused by his disgust at the exactions of the Conqueror, and by vexation and grief at the insurrection of the inhabitants of his province, who, supported by an invading party of Danes, under Sueno, had declared for Edgar Atheling, whose cause there is every reason to believe the archbishop himself favoured in his heart. Aldred is said to have written a treatise entitled 'Pro' Edgardo Rege contra Tyrannidem Normanorum,' in which the whole matter of the English succession is examined.

ALDRICH, ROBERT, whose name varies as Aldridge and Aldryge, in Latin Aldrisius, or Aldrigus, was born at Burnham in Buckinghamshire, towards the close of the 15th century. He was educated at Eton, and became scholar and fellow of King's College, Cambridge. About the time of his proceeding to his M.A. degree he attracted the regard of Erasmus, who speaks of him as "blandæ eloquentiæ juvenis," and whom he accompanied as friend and interpreter, on the occasion of the pilgrimage made by the great scholar to our Lady of Walsingham. In 1523 Aldrich was one of the preachers sent forth from the University, to preach in different parts of the kingdom, as there was at that time a great scarcity of persons qualified for such an office. From the frequency of similar commissions to men of eloquence, arose the appointment, in many colleges, of College Preachers, who were allowed to hold livings with their fellowships, as an encouragement for them to do their duty in the circuits which they used to make throughout the nation. The elegance and purity of Aldrich's Latin style were so remarkable that we find him, according to an entry in the Proctor's Book, for 1527, employed by the University to write three letters to the King, "Magistro Aldryg pro tribus literis missis ad Dominum Regem, 10s." On the 18th of July, 1528, he was appointed to a stall, "centum solidorum," in the cathedral church of Lincoln; which in the following January he quitted for the more substantial prebend of "decem librarum." Aldrich proceeded to his D.D. degree in April, 1530; and on the 30th December, 1531, was preferred by the king to the archdeaconry of Colchester. He was appointed a canon of Windsor, by patent dated May 3, 1534, and was installed four days after; and in the same year was made registrar of the Order of the Garter. In 1537 he became chaplain and almoner to Queen Jane Seymour; provost of Eton, of which he had been successively a pupil, a master, and a fellow; and finally, on the 24th August in the same year, received the temporalities of the see of Carlisle, to which he had been nominated by the king in the preceding month of July. It says much for the versatility and the powers of accommodation of Bishop Aldrich, that he was able, in spite of the changes in church and state incident to twenty years of unsettlement, to retain the incumbency of his diocese until his death, on the 5th of March, 1556. This event took place in a manor-house belonging to the bishops of Carlisle, at Horncastle in Lincolnshire; and here Aldrich was buried. He was the author of several small productions in literature and theology. His first writings were chiefly against Robert Whittington, a grammarian of the time. As registrar of the Order of the Garter, he devoted himself to the illustration of its antiquities; and translated into Latin and abridged the 'Registrum Chartaceum,' which his predecessors had written in French. As Bishop of Carlisle, his replies to 'Queries put concerning some Abuses of the Mass,' are printed in Burnet's 'History of the Reformation,' part ii., book 1, Collection of Records, No. 25. And Wood, in his 'Athenæ Oxonienses,' refers to Aldrich certain Resolutions concerning the Sacraments, and concerning bishops, priests, and other matters relating to the Reformation.

ALEANDRO, GIROLAMO (ALEANDER, JEROME) was the son of a physician at Motta, in Friuli, where he was born, on the 13th of February, 1480. At the age of 13 he applied himself to the study of belles lettres at Venice, where, in the year 1500, he gave public lectures on the 'Tusculan Questions' of Cicero. His reputation won for him the admiration and esteem of Aldus Manutius, who, in 1504, dedicated to him, as to a perfect master, not only of the Latin, Greek, and Hebrew, but also of the Chaldean and Arabic languages, a mathematician, a musician, and a poet, his celebrated Greek edition of Homer. So high was Aleandro's character, that Pope Alexander VI. invited him to Rome, and intended to make him secretary to his son, Cæsar Borgia—a questionable promotion, which Aleandro

escaped by a timely illness, during a mission as the pope's envoy to Hungary. During his stay in Venice he had been admitted to the intimacy of Erasmus, with whom he resided at the house of Andrea Asolano, the father-in-law of Aldus. In 1508 he visited France, at the invitation of Louis XII., who conferred upon him the professorship of belles lettres and the Greek language, and afterwards the rectorship of the University of Paris. He remained in France till the year 1514, when he was made chancellor to Everard de la Marck, Bishop of Liège, by whom he was subsequently sent to Rome, to negotiate with the Pope for his promotion to the dignity of cardinal. This mission was successfully performed by Aleandro, who so well conciliated the good opinion of the pontiff, Leo X., that he was detained at the Papal court, and at length appointed librarian of the Vatican, in succession to Zenobio Acciajuoli, in 1519.

At the commencement of the following year he was sent by the Pope to oppose the spread of the doctrines of Luther in Germany, and was appointed to officiate as papal nuncio at the Diet of Worms. The excitement in favour of Luther in that portion of Germany through which Aleandro had to pass was so great as to expose him to neglect, insult, and discomfort, so that he approached Worms with feelings of exasperation and animosity against the Reformers. To the influence of Aleandro at the Diet of Worms the shameful treatment of Luther, the proscription of his person, and the burning of his books, are generally ascribed. The edict against the reformer, which was finally adopted by the emperor and the diet, was drawn up by Aleandro, who designated the Lutherans as "a motley rabble of insolent grammarians, licentious priests, disorderly monks, ignorant advocates, degraded nobles, misled and perverted plebeians." Such language was not likely to be lost on a man like Luther, who retaliated with invectives the most bitter against Aleandro, whom he declared to be a Jew, who did not believe in the Resurrection, and whom he accused of covetousness, lust, arrogance, pride, and vanity. It is certain that the zeal of Aleandro was fiery and impetuous, and that he was given to luxury and ostentation; yet it should not be forgotten that, if Protestant historians speak of his "Epicurean morals," Romish authors, on the other hand, applaud his "blameless life."

The violent conduct of Aleandro disgusted the more moderate of his own party, and especially Erasmus, from whom he was now completely estranged; but he did not forfeit the pontifical favour and confidence, for in 1523 Clement VII. made him Archbishop of Brindisi and of Oria, and despatched him as nuncio to the French court. In this capacity he was present with Francis I. at the battle of Pavia, in 1525, and shared the captivity of that monarch. A considerable outlay of money procured the enlargement of Aleandro in 1526, when he returned to Rome, from which city, however, he was glad to retire in 1527, on account of the outrages and the enmity of the Colonna faction. He sought safety in his diocese of Brindisi, and remained there until 1531, when the Pope recalled him to Rome, and sent him again to Germany to the Diet of Spire, which subsequently met at Ratisbon in the spring of the following year. The violence of his former proceedings frustrated his strenuous exertions to prevent the emperor concluding a truce with the Protestant princes of Germany, and he went as nuncio to Venice, where he remained until 1535, when the then Pope, Paul III., desirous of rewarding his devotion to the church, recalled him to Rome for the purpose of creating him cardinal. But this dignity was, on political grounds, withheld till 1538, in which year Aleandro went into Germany, for the third time, as legate from the Pope. He returned in 1539 to Rome, where he continued to reside until his death, on the 31st of January, 1542.

His principal works in print are 'Lexicon Græco-Latinum,' folio, Paris, 1512, now very scarce; 'Tabulæ sane utiles Græcarum Musarum Adyta Compendis ingredi volentibus,' 4to, 1515, an abridgment of the Greek grammar of Chrysoloras; and a piece in Latin verse, entitled 'Ad Julium et Næseram,' and inserted in the collection of Math. Toscanus, 'Carmina Illustrium Poetarum Italorum.' Aleandro's verses manifest considerable poetical aptitude. At the time of his death, the earliness of which prevented him from filling the presidency of the Council of Trent, for which he was designed, Aleandro was engaged upon a treatise 'De Concilio Habendo,' of which he left only four books, but which, incomplete as it was, was often consulted for the regulation of the proceedings of the Council of Trent. But of all the works which Aleandro has left, that which Mazzuchelli, his biographer, in the 'Scrittori d'Italia,' considers as most important, is a MS. volume, which contains the letters and other documents relating to his legations against the heresies of Luther,

which are preserved in the library of the Vatican, and from which Pallavicino has largely drawn for the early part of his 'History of the Council of Trent.'

ALEANDRO, GIROLAMO, commonly called the younger, born at Motta, in Friuli, July 29, 1574, was distinguished, like his great-uncle, the cardinal, by remarkable precocity, as an instance of which, it is stated that at the age of 16 he composed paraphrases of the Seven Penitential Psalms in the form of odes, which were greatly admired, and in 1593 published, under the title of 'La Lagrime di Penitenza.' At the age of 26 he published his commentary on the Institutes of Caius, which obtained for him the offer of the chair of jurisprudence in several Italian universities. For 20 years he served as secretary to Cardinal Ottavio Bandini, and only resigned, in 1624, to take the same office under Pope Urban VIII. In 1625 he accompanied Cardinal Barberini as councillor to France, where the unaccustomed good living brought on an ill state of health; which caused him to return to Rome, instead of proceeding with the cardinal to Spain. Aleandro died at Rome, March 9, 1629, and was interred with great splendour at the cost of Cardinal Barberini. He was regarded as one of the most learned Italians of his time, and Rossi greatly praises the purity and elegance of his style. Besides the Commentaries and Penitential Psalms, he wrote some Latin and Italian poems, and several treatises on antiquities and other subjects. A list of his writings is given in Mazzuchelli's 'Scrittori d'Italia.'

ALEKSÆEV, or ALEXEJEV, FEODOR YACOVLEVICH, a distinguished Russian artist, was born in 1755; studied in the Academy of the Fine Arts, St. Petersburg, where he carried off several prizes, and then went to Italy. Here, devoting himself particularly to the representation of architecture, he fixed his residence for some time at Venice, and acquired, from the class of subjects and style of his paintings, the title of the Russian Canaletti. On his return to St. Petersburg, 1779, he was appointed scene painter at the Imperial Theatre. This office he retained till 1787, from which time he occupied himself with painting small architectural pieces in oil. In 1801 he was commanded by the Emperor Paul to visit the chief cities of the empire, and take views of the public buildings, &c. He returned laden with drawings and sketches, from which he executed a series of paintings, now in the gallery of the Hermitage, and which are of great interest, not only as works of art, but as affording a tolerably complete and faithful idea of the appearance of the cities of Russia half a century ago. The views of Moscow afford almost the only trustworthy representation of its architecture prior to the conflagration of 1812. Aleksæev was elected member of the Academy of Fine Arts in 1794, and professor of perspective in 1803. He died November 23, 1821. His works are neatly and carefully drawn, well composed, and cleverly executed. The pictures painted during the last five years of his life are, however, much feebler than his earlier works.

ALEMAND, LOUIS AUGUSTIN, French writer, was born at Grenoble in 1653, and brought up as a Protestant, but abjured that faith in 1676. He was educated for the bar, and practised with success at his native place, but changed his career, studied medicine, and in 1693 was admitted to the faculty at Aix. Not meeting with success as a physician, he after a time went to Paris and devoted himself to literature; but towards the end of his life returned to Grenoble and to the practice of his first profession. He died there in 1728. Alemand is a good and useful writer, though his works are now probably never read, and seldom referred to. They comprise—'Nouvelles Obligations, ou guerre civile des Français sur la langue,' 12mo, Paris, 1618: a series of critical remarks on the history of separate words. Alemand promised six more volumes, but its continuation is said to have been prevented by the interference of the French Academy. Goujot, in his 'Bibliothèque Française,' praised the work very highly. 'Nouvelles Remarques de M. de Vaugelas sur la langue Française, ouvrage posthume, avec des observations de M. . . . Avocat au Parlement,' 12mo, Paris, 1690; 'Histoire Monastique d'Irlande,' 12mo, Paris, 1690. This work was dedicated to the exiled James II., his wife and son, is carefully and fairly written, and formed the foundation of the more pretentious work of Captain Stevens, 'Monasticon Hibernicum,' London, 1722. 'Journal Historique,' 8vo, Paris, 1694. This was to have been an annual volume, something like our Annual Register, but only one was published. Alemand announced his intention to publish abridgments of Dugdale's 'Monasticon Anglicanum,' and 'Baronage,' but they never appeared.

ALEOTTI, GIAMBATTISTA, Italian architect and engineer, was born at Argenta, in Ferrara, in 1546. Of humble origin, he

worked first as a mason, but by diligence and study, particularly of mathematics, he gradually raised himself, and in 1571 was taken into the service of Duke Alfonso II. of Ferrara as his engineer. After the death of Alfonso, in 1597, Ferrara being annexed to the Papal States, Aleotti was directed by Pope Clement VIII. to erect the citadel. He was subsequently employed by several of the princes and nobles of this part of Italy, Mantua, Modena, Parma, and elsewhere. His chief work was the great theatre at Parma, erected for Ranuccio I., and opened in 1619, which excited great admiration as one of the first designed in what was called the modern style: a full account of it was published by Donati, 'Gran Teatro Farnesino di Parma,' 1817. Aleotti was the founder of the Academy degli Intrepidi, at Ferrara, in 1600. He wrote 'Considerazioni d'Architettura di Geometria e d'Idrologia'; took part in the engineering discussions caused by the serious inundations in Ferrara, Romagna, and Bologna; and edited Hero of Alexandria's treatise on Pneumatics. He died in 1636. His daughter, VITTORIA ALEOTTI, attained some eminence as a musical composer. She studied at first under Pasquino, but afterwards in the musical school of the convent of St. Viti at Ferrara, where she passed the rest of her days. She published a 'Ghirlanda de' Madrigali,' Venice, 1593.

ALES, ALEXANDER (or ALESS, ALESSE, ALANE, ALESIUS), an eminent theologian of the 16th century, was born at Edinburgh, on the 23rd of April, 1500. He was educated at the University of St. Andrews, and obtained a canonry in the collegiate church there. At an early age he entered into controversy as an opponent of Luther, and also withstood the doctrines which had been imported from Marburg by Patrick Hamilton. His zeal for the Roman Catholic religion was staggered by the discourses of Hamilton, who was a young man of high rank, and of excellent parts and attainments, and the constancy and meekness with which he encountered martyrdom at the stake, February 28th, 1528. A too frank avowal of sympathy with the opinions of the Reformers, and a vigorous attack, in a sermon before the Synod of St. Andrews, on the corrupt lives of the clergy, brought Ales into peril for heresy; so that, after having been three times imprisoned, and as often liberated by his brother canons, he fled, in 1534, first to England, and afterwards to Germany. In 1535 he again visited England, where he became acquainted with Thomas Cromwell, and through him with Henry VIII., and many of the English Reformers, including Cranmer, Archbishop of Canterbury. The king regarded Ales with so much favour, as to speak of him as "his scholar." Upon the fall of Cromwell, he was obliged once more to seek refuge in Germany; and was appointed, in 1540, professor of theology at Frankfurt on the Oder, by the Elector of Brandenburg, who deputed him, with two others, to the Conference of Worms, 1541, in the discussions of which, however, he was forbidden by Cardinal Granville, who presided for the Emperor Charles V., to take a part. The next year, in a public disputation at Frankfurt, Ales maintained the power and the obligation of the civil magistrate to punish fornication; a proposition which was so distasteful to the laity generally, and so particularly obnoxious to the court of Brandenburg, that the too bold champion of purity was glad to retire, 1543, to Leipzig, where he was chosen professor of divinity, and held the office till his death on the 17th of March, 1565. On the 29th of November, 1560, in a public disputation held in the University of Leipzig, Ales maintained the necessity and merit of good works, thus espousing and affirming the doctrine of G. Major, who had raised the question. The works of Alexander Ales are numerous and miscellaneous, although for the most part they arrange themselves very naturally into three groups or divisions—(1) Commentaries on various Books of the Old and New Testament; (2) Works in favour of reading the Scriptures in the vernacular tongue, and against the bishops and others who are unwilling to concede the privilege; and (3) Works of Controversy on questions agitated between the Roman Catholics and the Protestants.

ALESSANDRI, ALESSANDRO (ALEXANDER AB ALEXANDRO), was born at Naples, about the year 1461. He was early destined for the legal profession, and, by way of preparation for his technical education, seems to have enjoyed a careful classical training. At Naples, he is said to have studied under Guinaiio Maio, a scholarly person, who is at present chiefly known for his devotion to the study of oneirocritics. Between the years 1475 and 1481, it would appear that Alessandri was prosecuting his studies at Rome; after the completion of which he began to practise both at Rome and Naples, and in the latter city he is said to have held the office of royal prothonotary in 1490. The iniquity

of the bench, to quote his own testimony, at length compelled the abandonment of his profession; and the latter years of his life, which were spent at Rome, were made tolerable through the kindness of the Pope, who conferred upon him some sinecure appointments, of which the emoluments just reached the limits of comfort. Alessandri died at Rome, on the 2nd of October, 1523, in the 62nd year of his age.

He published, in what year is unknown, four Dissertations on Dreams, Spectres, &c., the substance of which is embodied in four chapters of his 'Dies Geniales,' fol. Rome, 1522; a work in six books, each of which comprises from 26 to 32 chapters. Alessandri's stories of prophetic dreams, terrible spectres, mermaids, &c., would imply great credulity, if there were not good reason to question his veracity. His style is easy, the matter sometimes interesting, and sometimes frivolous. Great part of the book is occupied with desultory discussions on Roman antiquities; occasional legal difficulties are started, but even in discussing them, the philologist preponderates; they read like extracts from the note-book of one who had opportunities of hearing the conversation of good scholars.

*ALEXANDER II., NICOLAIEVICH, Emperor of Russia (styled Tzar, and Autocrat of all the Russias), was born the 29th (O.S. 17th) of April, 1818. The eldest son of the Emperor Nicholas, he was educated with a special view to his succession to the throne, the general supervision of his studies being assigned to General Mörder and B. Schukovski, but the Emperor is said to have himself directed his military training, and carefully watched against the intrusion of any anti-Russian ideas. The stern discipline to which he was subjected is supposed to have fostered, if it did not induce, the silent and almost morose disposition which distinguished him even when a young man. At the age of 16 he was declared of age, promoted to high office in the army, and made aide-de-camp to the Emperor. The state of his health causing disquietude, he was sent to visit the German courts; and in 1841 he married the Princess Wilhelmine Auguste Sophie Maria, daughter of the late Ludwig II., Grand-Duke of Hesse, who, before her marriage adopted the Greek faith, and received the name of Maria-Alexandrowna. The prince was now sent as Governor to Finland, where he carried out as far as practicable his father's directions for the "Russification" of the province. In 1850 he made a tour of inspection through Mid-Russia, the Crimea, Circassia, and other Russian provinces, and on his return was decorated with the order of St. George. Between the Archduke Alexander and his brother Constantine there had long been ill-feeling, which had on more than one occasion found vent in acts of open hostility; but before his death their father commanded them in his presence to promise friendship and mutual support when Alexander should be sovereign, and outwardly at least there has been no subsequent breach, though Alexander is accused of placing his brother in situations which may interfere with his popularity, or tend to lower him in the eyes of his countrymen.

The Emperor Nicholas died on the 2nd of March, 1855, and Alexander was without opposition proclaimed Emperor. In a manifesto addressed to the country, he declared his intention to continue in the line of policy inaugurated by his father, and to act in all things with a view to the furtherance of the strength and glory of the empire. Before long, however, he dismissed his father's most trusted ministers, and showed a strong desire to bring to a close the war with Turkey and the Western Powers, which had proved so disastrous for Russia, and to which he is said to have been always privately opposed.

The treaty of peace was signed at Paris in March, 1856, and the Emperor was now free to carry out the policy of internal improvement which he had declared to be his primary purpose. Among the improvements contemplated the most important were the reform of the system of administration; an amelioration of the criminal laws and improvement of the judicature; a better organisation of the army; an extensive development of the resources of the country; construction of railways and improvement in the means of communication generally; extension of education, and enlargement of the liberty of the press. These intentions, it is needless to say, have only been in part effected. Yet the improvement has been real. Administrative reform has proved a nullity, as all acquainted with the almost universal malversation of the government officials throughout the empire expected it would. The conscription has been rendered easier, and the condition of the soldier raised. Education extends but slowly, but something has been effected for its improvement and extension alike in the

universities and the schools of a lower grade. The primary schools now number nearly 1000, with a return of about 1,000,000 scholars on the books. Something has also been done for the culture of self-reliant habits by the grant of representative institutions for local government, imperfect in themselves and fenced about with formidable restrictions, but containing perhaps the germ of a wider freedom. They consist of departmental and general councils, which, by a Ukase of January 1, 1864, came into operation in 1865. The members are elected for three years; persons of all classes are eligible for the office, and they deal, within certain limits, with the economic and administrative questions relating to the district. By another Ukase promulgated in April, 1865, the press was relieved to a certain extent from the previous rigid censorship exercised over it. It is still surrounded with strict police regulations, but it exercises considerable freedom of political and almost unlimited licence in social discussions. The consideration of the broader, and, so to speak, abstract subjects of political and social science, in the periodicals is practically unrestrained. Scientific studies are of course not interfered with, and the Emperor has evinced a strong disposition to support those branches of science which bear on the physical condition of the country, and to assist scientific travel: in statistical inquiries, however, Russia is suffered to remain sadly in arrears. Efforts have been made at the Emperor's instigation to reorganise the financial department of the government, and also to improve the banking and monetary system of the country. The revenue has greatly increased, but the expenditure has more than kept pace with the increase; the deficiency has consequently had to be met by loans, which have added considerably to the national debt. Trade and commerce have largely augmented, and are evidently capable of an immensely greater development, as is shown by the continuous annual growth of both the exports and imports. The most striking advance, however, is in the railways and telegraphs, to which the Emperor lends all the aid in his power: at the present time there are above 3000 miles of railway completed, or approaching completion, and 25,000 miles of telegraph. These have been for the most part laid out primarily with a view to military and departmental service, but they cannot fail to assist enormously in the development of the national resources.

But the grand reform which will render the reign of Alexander II. an epoch in the history of Russia is the emancipation of the serfs. A Ukase of March the 3rd, 1861, declared the serfs of both classes—those who as peasants held a certain portion of land, for which they gave in return a fixed amount of labour; and those who, having no land, were virtually the property of the nobles and landowners—to be personally and civilly free. Both classes of serfs, in number about 23,000,000, were entirely subject to their lords, without whose permission they could not quit their homes or enter upon any new occupation, and by whom they could be punished, and even flogged, if disobedient. By the new decree they were removed from the jurisdiction of the proprietor, and admitted to the same rights, and made amenable to the same laws, as their fellow-subjects. Regulations were laid down for the grants of land to the emancipated serfs, and their payment by labour, or under certain conditions by means of a Government loan, and a period of transition was allowed to proprietors and serfs till 1870, when there will be entire freedom. The measure has, with some necessary qualifications, been persistently carried out. Opinions as to the consequences that have resulted from it to the present time differ considerably among even qualified and seemingly impartial observers. Of its ultimate benefits to all classes we cannot permit ourselves to doubt. Thus far the proprietors have unquestionably suffered greatly. But the benefit to the serfs themselves has been far from unalloyed. Morally the condition of the first or tenant class of serfs has improved, but materially they are said to be generally worse off. The second or *dvorori* class have changed little in their outward circumstances, but their social position has been greatly altered, and their chances of bettering their condition vastly improved.

The adoption and resolute accomplishment of so complete a scheme in the face of all opposition and difficulty afford perhaps the strongest proof of the Emperor's force of will and persistency of purpose. From the first it was opposed by the whole body of the nobles, by the old Russian party, and family and governmental traditions. But the Emperor refused to postpone, and was hardly brought to modify, his original decree. The nobles believed that it was put forth with the view to subvert their power, and for a time it seemed as though there would be a grave conflict. At an assembly of the nobles, held in January,

1862, it was formally moved to take into consideration a resolution calling upon the Emperor to abdicate in favour of his eldest son, and the motion was only lost by a majority of 18, the votes being 165 for, and 183 against it. This was a symptom of disaffection not to be overlooked. Stringent measures were adopted for the security of the Emperor's person and the safety of the seat of government, and military precautions were taken against any outbreak. But it was understood that the vote was intended rather as an intimation of dissatisfaction with the particular measure than of any purpose of revolt; and it was resolved to make some concessions. These somewhat hampered the working of the emancipation scheme, but did not materially alter it. Time was, however, gained, and the Emperor was able to use the emancipated peasantry as a check upon any hostile movement of the proprietors. The nobles have on the whole been compelled to acquiescence; any subsequent attempt at hostile action has met with a stern rebuke, and their power of deliberation and control by means of their territorial assemblies seriously abridged. Thus, the nobles of Moscow having met in full assembly, June, 1865, to claim guarantees which were refused, passed a resolution asserting the necessity for public representation, the provincial assembly of the nobles having been rendered nugatory by the institution of the provincial parliaments, whilst the political rights formerly possessed by the assemblies of nobles were only partially transferred to the popular parliaments. To this the Emperor replied by a letter addressed to the Minister of the Interior, in which, after referring to the reforms already accomplished by him, he declares that "the right of initiative in the various parts of the work of gradually perfecting those reforms belongs alone to me, and is indissolubly allied to the autocratic power confided to me by God. No class has legally a right to speak in the name of any other class, nor is any individual entitled to intercede with me in favour of the general interests, or with regard to what they consider necessities of state." Further, he wished them to understand for the future that any such deviations from the regulated order would only serve to retard the development of his plans.

Shortly after he ascended the throne the Emperor visited Warsaw. The nobles and merchants presented an address, and implored his favour. The reply contained the usual phrases of goodwill and benevolent intentions, but with them was the significant warning, "the order established here by my father must be maintained: no dreams!" Year after year the Poles found the iron hand pressing harder upon them. They were to be awakened from their fond dream of a national existence in any sense. The people were disarmed, the few constitutional safeguards were declared inapplicable to them. Any person of position who gave public expression to his dissatisfaction, and many who were only supposed to be dissatisfied, were arrested, and mostly exiled to Siberia. At length a harsh edict of conscription, which would have forced into the Russian army pretty nearly the whole manhood of Warsaw, brought matters to a crisis. Insurrection spread rapidly, and though for the most part with only improvised arms, the Poles maintained through 1863 a long and desperate struggle. They were of course beaten. The British, French, and Austrian Governments had proposed mediation, and even ventured to remonstrate against the Russian measures, but their interference was haughtily repulsed—"The insurgents must throw down their arms, and submit themselves to the clemency of the Emperor." When that hour of necessity came, the clemency was such as the character of the Emperor entitled them to expect. It is possible that the cruelties said to have been perpetrated may have been exaggerated; but the Emperor had fixed his mind on the Russification of Poland, on its absolute absorption into the empire, and he, autocrat and pope, had been defied, and his edicts disregarded. He had probably little thought of vengeance; but his decrees must be enforced, and his impassive temperament was utterly regardless of the suffering occasioned or endured. His task he believed to be to get rid of Poland and Poles as a distinct existence, and he has done his best to accomplish it. Tartar insurrections, Circassian revolts, he has treated in the same way. All such tribal or sectional efforts after a national existence must be suppressed; the cost in human life and suffering is a matter of pitiless indifference.

On the 16th of April, 1866, as the Emperor was about to enter his carriage at the gate of the Summer Garden, St. Petersburg, he was fired at by a man named Karakosoff, but the assassin's arm was seized by a bystander, who, diverting the pistol upwards, caused it to discharge harmlessly in the air. Karakosoff was a Russian of noble family; Kommisaroff, who saved the Emperor's life, was a journeyman hatter, but was ennobled on

the spot for his conduct. Great numbers of suspected persons, students, Poles, and the like, were arrested, but there was only questionable evidence of the crime being part of a conspiracy. A year later a similar attempt was made in Paris, where the Emperor was on a visit to the Emperor of the French. As the two Emperors were in a carriage in the Bois de Boulogne, a Pole named Berezowski took aim at the Tzar and fired, but Napoleon's equerry, M. Rainbeaux, observing his movement, rode forward, and his horse received the shot, the life of Alexander II. being thus a second time saved from the assassin. Berezowski was condemned to imprisonment with hard labour for life: Alexander had requested that his life might be spared.

Looking at the state of Russia during the 17 years of the reign of Alexander II., we see that it has been eminently a period of transition, and that to the personal character of the sovereign its special phase may be in an unusual degree assigned. His main purpose has been the unification, as it is called, of the empire, and in this he has been in a great measure successful. With ceaseless progression Poland, Courland, Livonia, and Esthonia have been "Russified"—the national laws, administration of justice, education, language having had to make way for those of Russia. He has also succeeded to a certain degree in improving the trade and developing the resources of the country. Like his predecessors, he has never lost sight of the extension of his territories. Convinced that the time was inopportune for actual aggression on Turkey, he has yet constantly sought to weaken her by encouraging disaffection in the Christian provinces, and making use of the ambitious tendencies of the Greeks. But, compelled to abstain from direct aggression in this quarter, he has found employment for his army by unceasing encroachment in Asia until he has brought the Russian power, if not actual Russian territory, into immediate contact with Bokhara, Afghanistan, China, and Japan, and as some fancy, into inconvenient proximity with British India. Whether the ultimate purpose or tendency of this vast extension shall prove hostile or pacific, whether it shall lead to the subjugation of ancient Asiatic kingdoms, and a struggle for ascendancy with European powers, or more happily to the opening of new and profitable channels of trade and friendly intercourse, only time can determine. But the fact cannot be without immense influence on the future of Russia, second, it may be, but only second to that resulting from what will undoubtedly remain the grand achievement of the reign of Alexander II., the emancipation of the serfs.

By his wife, the Empress Maria Alexandrowna, the Emperor has had six sons and a daughter. The eldest son, Nicolas, born September 20, 1843, died at Nice, April, 1865. The present heir to the throne, the Grand-Duke Alexander, was born March 10, 1845, and married the Princess Dagmar of Denmark, Nov. 9, 1866. The other children of Alexander II. are—Vladimir, born April 22, 1847; Alexis, born January 14, 1850; Maria, born October 7, 1853; Sergius, born May 11, 1857; and Paul, born October 3, 1860.

* ALEXANDER, WILLIAM LINDSAY, D.D., an eminent Congregational divine, was born at Leith, on the 24th of August, 1808. He was educated at first under Dr. Jamieson, at East Linton, and afterwards at the universities of Edinburgh and St. Andrews. He was distinguished for his essays on subjects in moral philosophy, and very soon began to attain a reputation as an author. After finishing his university course he was appointed classical tutor in the Independent College, Blackburn, and continued during four years to discharge the duties of his office. He then became the minister successively of Newington Chapel, Liverpool, and of Argyle Chapel, Edinburgh. This important pastorate, on which he entered in 1835, he still carries on, but in a larger and more beautiful building, erected in 1861, and named the Augustine Church. Since the death of Dr. Ralph Wardlaw, in 1853, Dr. Alexander has held, in addition to his pastorate, the professorship of theology and Church history in the Theological Hall of the Congregational churches of Scotland. He is a man of various and extensive learning, and is favourably known as a sacred poet and as a contributor of articles to the 'Encyclopædia Britannica,' as well as to 'Kitto's Cyclopædia of Biblical Literature,' 1847, of which work he lately edited a new and improved edition. He was also at one time editor of the 'Scottish Congregational Magazine.' Dr. Alexander enjoys a high reputation as a philologist and as an adept in Biblical literature, and is one of the most voluminous and scholarly of living writers. The following are among his principal works:—'The Connection and Harmony of the Old and New Testaments,' being his 'Congregational Lecture,'

1841 and 1853; 'Lectures to Young Men,' 1842; 'Anglo-Catholicism,' &c., in reply to 'Tracts for the Times,' 1843; 'Switzerland and the Swiss Churches,' 1846; 'The Ancient British Church,' 1852; 'Christ and Christianity,' 1854; 'Memoir of Life and Writings of Dr. Wardlaw,' 1856; and 'St. Paul at Athens,' 1865.

ALEYN, CHARLES, a poetical writer of considerable reputation in his day, though now almost forgotten, was born near the end of the 16th century. On the completion of his education at Sidney Sussex College, Cambridge, he came to London, and was engaged as assistant in the celebrated grammar-school kept by Thomas Farnaby, at Goldsmith's Rents, Cripplegate. He was afterwards tutor in the family of Edward Sherburne, Esq., Clerk to the Ordnance, and his pupil, afterwards Sir Edward Sherburne, attained considerable eminence as a scholar, and testified to the gratitude and friendship he felt for his teacher in some verses he addressed to him in 1638. Aleyn first appeared as a poet in 1631 in a volume of 138 pages, entitled 'The Battles of Crescey and Poitiers, under the Fortunes and Valour of Edward the Third of that Name, and his Son, Edward Prince of Wales, named the Black.' The two poems are in stanzas of six lines, consisting of a quatrain with alternating rhymes, closed by a couplet in the heroic measure, and though the metre becomes monotonous when protracted through a long poem, it is not unskillfully handled, and the story is tersely and vigorously told. A third poem of similar construction appeared in 1638, under the title of 'The Historie of that wise and fortunate Prince Henrie, of that name the Seventh, King of England; with that famed Battaille fought between the said King Henrie and Richard III., named Crook-back, upon Redmore, near Bosworth.' Several sets of commendatory verses prefixed to this poem show the admiration which the previous volume had excited. In 1639 Aleyn published 'Eurialus and Lucretia,' freely rendered, according to Oldys, from a story found among the epistles of Æneas Sylvius. He died in 1640, or, as some accounts say, in 1643, and was buried in St. Andrew's, Holborn.

ALFARABUS, the Latinized surname of a learned Arabian philosopher, who was born in Transoxiana in the 10th century. He went to Bagdad to study Arab philosophy, and also Greek philosophy through the medium of Arabian writers. After visiting Egypt (A.D. 941-2), he settled at Damascus, where he resided till his death in 950. He was a man of great learning in languages and the sciences, and wrote sixty different works on philosophy, dialectics, physics, metaphysics, optics, astronomy, &c. He was highly esteemed by Jews as well as Arabs, who translated many of his works into Hebrew and Latin. One of his writings on the elements of music gave an account of the Arab musical notes, and figures of the instruments. Some authorities credit him with the introduction of the method of sol-fa-ing, or syllable-singing. The two works which gained for him his great celebrity were the 'Ihsâ-l-olûm', or Review of the Sciences; and a parallel between the philosophical systems of Aristotle and Plato. Alfarabius was in high favour with the Sultan Seyfu-d-daulah.

ALFARO Y GAMEZ, JUAN DE, celebrated Spanish painter, was born at Cordova in 1640; received a good general education; studied painting in his native city under Antonio del Castillo, and then entered the school of Velasquez at Madrid, by whose advice he copied the works of Titian, Rubens, and Vandyck, in the Royal Gallery, and thus acquired the brilliant style of colouring to which he owed his subsequent success. His first commission on returning to Cordova was to paint a series of subjects from the life of St. Francis for the cloister of the convent named after that saint. In the designs he was said to have borrowed a good deal from engravings, but he placed *Alfaro pinxit* conspicuously under each picture. To abate his pride, his old master, Castillo, obtained permission to fill one of the unfinished compartments, and put under his picture *Alfaro non pinxit*. Alfaro painted many religious and historical pictures, both in Cordova and Madrid, but his works in this line are not of much worth. He had studied little, drew indifferently, and designed without originality or power. His strength lay in portraiture. He seized the distinctive character, produced a pleasing likeness, and coloured well. For his patrons, the Regidor Don Pedro de Arce, and the Admiral of Castile, he painted portraits of many of the most distinguished personages of the day: that of Calderon was suspended over the great dramatist's tomb in the church of San Salvador. Alfaro, who seems to have been a light-hearted and somewhat frivolous, but accomplished man, wrote verses, and made biographical notes on the painters with whom he had associated, which were arranged after his death by his brother, Henri

de Alfaro, a physician, and proved of much service to Palomino in the compilation of his 'El Parnaso Español Pintoresco laureado.' Alfaro died in 1680.

ALFEZ, RABBI ISAAC BERABBI JACOB, one of the most celebrated of the Jewish Talmudists, was born in 1013, at a village near Fez, in Africa, whence his designation, Alfez or the Fezite. He had spent a long life in his native place, teaching the principles of the Talmud, not only to his countrymen but to foreign Jews who flocked to him from all parts, when, at the age of 75, he was compelled to quit Africa through the intrigues of an opponent. Alfez took refuge in Cordova, then the flourishing capital of the Moorish kingdom, and the principal seat of Hebrew learning. He was received with great honour by the chief rabbi, and remained there for seven years lecturing on the sacred books and laws; but eventually withdrew to the quieter town of Alusina (probably the present Lucena), where he continued his studies and teaching until his death, in 1103, at the age of 90.

Alfez has always been regarded by Jewish writers and theologians with the utmost reverence, and his writings are only placed below the Talmud in point of authority. The most important, sometimes called 'The Lesser,' or 'The Little Talmud,' 'The Institutions of Rabbi Alfez' (*Hilcuth Rab Alfez*), and sometimes simply 'Alfezi,' is a sort of abstract of the Talmud, or of so much of that work as appeared to Alfez to be applicable to his time. It was first printed at Constantinople, in folio, 1509; the second edition appeared at Venice, 3 large volumes folio, 1521-22, and has been often reprinted. The best edition is that published at Sabionetta, in Italy, 1534. Many commentaries on the Little Talmud have also been published.

(Bartolocci, *Bib. Mag. Rabb.* vol. iii.; Wolfius, *Bibl. Heb.*; Buxtorf, *Bib. Rab.*, art. *Alphesi*; *Biog. Dict. of U. K. S.*, and the authorities there cited.)

* ALFORD, HENRY, D.D., Dean of Canterbury, was born in London, in the year 1810; was educated first at Ilminster Grammar School, Somerset, and afterwards at Trinity College, Cambridge. He was a wrangler, and Bell's university scholar; and took his degrees of B.A., M.A., and B.D., respectively in 1832, 1835, and 1849. His first literary production was entitled 'Poems and Poetical Fragments,' Cambridge, 1831; followed, in 1835, by 'The School of the Heart, and other Poems,' in two volumes, a work of which several editions have been published both in this country and in America. In 1834, Mr. Alford became a fellow of his college of Trinity; and was vicar of Wymeswold, Leicestershire, from 1835 to 1853. He published his 'Chapters on the Poets of Greece,' in 1841; and in 1841-42 delivered the Hulsean lectures in the University of Cambridge, which he published in 1842, under the title of 'The Divine Revelation of Redemption.' From 1841 to 1857 he acted as Examiner in Logic and Moral Philosophy in the University of London; and from 1853 to 1857 was known as the eloquent minister of Quebec Street Chapel, London. In 1854-5 he published two volumes of 'Quebec Chapel Sermons.' On the death of Dr. Lyall, in 1857, Dr. Alford was appointed by Lord Palmerston to the deanery of Canterbury. His greatest work is that entitled 'The Greek Testament, with Notes,' the first instalment of which appeared in 1849, and the whole of which was completed in 1861. The different volumes of which it consists have gone through several editions; and notwithstanding the drawback to the worth of the whole work, arising from some modifications on the part of the author during its progress, its value as a scholarly production is generally recognised. Dean Alford is also the author of several magazine articles on 'The Queen's English,' 'Journeys in Italy,' 'The Right Use of the Gospels,' &c., some of which have since been published separately; and he is the editor of 'The Contemporary Review.' He published, in addition, 'The Year of Prayer,' and 'The Year of Praise,' (1867), the latter of which is a hymnal, containing 326 hymns, of which 55 are his own. A fourth edition of his poetical works appeared in 1865, containing many pieces then for the first time collected. As a poet, he is pleasing, devout, and various; and some of his sonnets especially may be regarded as very felicitous. The last result of his poetical activity is found in the publication of 'The Lord's Prayer,' illustrated artistically by Mr. F. R. Pickersgil, R.A., and by Dean Alford, by means of a lyrical drama, with appropriate chorus, metrical dissertations, and descriptions.

ALISON, SIR ARCHIBALD, Bart. [E. C. vol. i. col. 152.] 'The History of Europe, from the Fall of Napoleon, in 1815, to the Accession of Louis Napoleon, in 1852,' was completed in eight volumes in 1859, but there was nothing in the later vo-

lumes to modify the unfavourable opinion expressed of the work in the memoir above cited. Of the original 'History of Europe . . . to the Restoration of the Bourbons in 1815,' a tenth edition, in 14 vols. 8vo. was published in 1860. The only subsequent publication of any consequence given to the world by Sir Archibald was, the 'Lives of Lord Castlereagh and Sir C. Stewart, the second and third Marquesses of Londonderry,' 8vo. Edinb. and Lond. 1861. Sir Archibald Alison died May 23rd, 1867, aged 74.

ALLAMAND, JEAN NICOLAS SEBASTIAN, was born at Lausanne in 1713. Here he studied theology, and on being admitted to the ministry, accepted an appointment at Leyden. He had now an opportunity of gratifying his taste for science; and so successful was he, that the celebrated Professor S'Gravesande made him tutor to his children, and afterwards his literary executor. On the death of S'Gravesande he was about to quit Leyden to fill a scientific post, when the university authorities persuaded him to remain, and obtained for him the chair of philosophy. His first lecture, 30th March, 1749, was an *éloge* on his patron and friend, S'Gravesande. Some years later he was also called to the chair of natural history, which, with that of philosophy, he occupied until his death, 2nd of March, 1787. He often received specimens from various parts of the world, with which, together with his private collection, he enriched the botanic garden and museum of the university. His name is associated with that of Muschenbröck as being the first in Holland to repeat the experiment of the electric shock, discovered by Cuneus. Priestley ('Hist. Electricity') refers to him as one who "makes approaches to the discovery of negative electricity." There is also a letter by Allamand in No. 477 of the Transactions of the Royal Society of London (1745) on the phenomena of the Bologna phial, containing an account of some experiments by an Italian philosopher, which he repeats and extends. Allamand's scientific papers display no powers of original research. Most of his time was occupied in translating or editing the works of others, not only in natural science, but also in theology, for which task he seems to have been well fitted by his modesty (he always omitted, or endeavoured to omit, his own name), integrity, and industry. His translation of Buffon's great work, which extended to 38 vols. 4to, was published at Amsterdam between 1766 and 1779.

ALLEGRI, GREGORIO, an Italian musical composer, was born at Rome about 1580. Having composed several motetts and sacred vocal pieces, he entered the service of Pope Urban VIII. in 1629, in the choir of the Sistine Chapel. Here he remained till his death, February 18, 1652. He was a voluminous composer of masses, motetts, hymns, psalms, and other kinds of ecclesiastical music; but his fame rests chiefly on a *Miserere* for a double choir, sung in the Sistine Chapel in the Holy Week. It was so highly esteemed by the papal court that the printing and even the copying were prohibited; but Mozart secretly wrote it out while listening to it, and Dr. Burney contrived to obtain a copy of it for printing in 1771. The *Miserere*, though not remarkable either for melody or harmony, has an intensity of mournfulness about it which has never been adequately rendered, except in the chapel for which it was composed, or rather perhaps we should say, is never so deeply felt elsewhere,—much of the impression being no doubt due to the perfect manner in which it is performed and to the solemnity of the surrounding circumstances.

ALLEGRI, FRANCESCO, a celebrated Italian painter, was born at Gubbio in 1587. A scholar of Cesari d'Arpeni, he painted at first in the vitiated manner of his master, his chief works at this time being the frescoes of the Sacrament in the cupola of the Duomo, and others in the church of the Madonna de' Bianchi at Gubbio. He afterwards painted numerous works in the cathedral and palaces at Savona, in the Durazzo Palace at Genoa, and finally settled at Rome. By this time his powers were matured and his style greatly improved. He executed a large number of frescoes in the churches of San Marco, San Pietro in Montorio, Delle Virginie, and SS. Cosimo and Damiano. Both Ratti and Baldinucci highly commend several of his works; but at best he is only a painter of the second order. Though properly a fresco painter, he executed some oil pictures, and he occasionally painted the figures in the landscapes of Claude Lorraine. He died at Rome in 1662. His son FLAMINIO, and his daughter ANGELICA ALLEGRI, were his pupils, and painted in his manner. Flaminio assisted his father, but some works painted in the Vatican on his own account are commended by Italian critics.

FRANCESCO ALLEGRI, a designer and engraver, born at Florence 1729, died at Rome about 1785, must not be confounded

with the painter. The later Allegrini, in conjunction with his brother, GIUSEPPE ALLEGRINI, also an engraver, brought out a new edition of the 'Regiæ Familiæ Mediceorum Etruriæ Principum Effigies,' with many additional portraits; a series of 'Portraits of Illustrious Persons of Tuscany,' and separate portraits of illustrious Italians, from Cimabue, Giotto, and Dante, to Michelangelo, Petrarch, and Boccaccio. Giuseppe engraved subject pieces and architecture as well as portraits.

ALLEINE, JOSEPH, an eminent nonconformist divine, was born at Devizes, Wiltshire, in 1633; was educated at Lincoln and Corpus Christi colleges, Oxford; and in 1655 became curate to Mr. Newton of Taunton, with whom he was ejected for non-conformity in 1662. Alleine continued, however, to preach with greater frequency and fervency than ever, until he was committed to Ilchester jail, May 26, 1663. He was tried the following August on the charge of causing by his preaching a riotous and seditious assembly, and though the evidence only proved that when he exhorted his family in his own house other persons were present, he was condemned and sentenced to a fine of 100 marks, and in default of payment was imprisoned for a year, all but three days. On his release he resumed his former practice, but was again committed to prison, July 10, 1665. "From the jail to which he was consigned by the victorious Cavaliers he addressed to his loving friends at Taunton many epistles breathing the spirit of a truly heroic piety. His frame soon sank under the effects of study, toil, and persecution: but his memory was long cherished with exceeding love and reverence by those whom he had exhorted and catechised" (Macaulay, 'History of England,' vol. ii. p. 165). He died in November, 1668, at the early age of 35.

To the precepts and example of Alleine, Macaulay attributes the maintenance at its height of the puritanical spirit for which the people of Taunton were long remarkable. But Alleine's writings and example had probably considerable influence in keeping up the same spirit throughout the country. His life, written by Richard Baxter, had a large circulation, while his famous work, 'An Alarm to the Unconverted, or the Sure Guide to Heaven' (not a tract, as Macaulay styles it, but a book of some bulk), was long one of the most popular of religious manuals, and still continues to be reprinted. Alleine's 'Familiar Explication of the Assembly's Shorter Catechism' was also much used in religious instruction. His other works are 'A Call to Archippus, being an Earnest Motive to the Ejected Ministers to continue in the Ministry,' 'Divers Cases satisfactorily resolved,' and a posthumous volume of 'Sacramental Addresses, Letters, &c.'

(Life by Baxter; Newton, *Sermon at the Funeral of Mr. Joseph Alleine*; Palmer, *Nonconformist Memorial*.)

ALLEN, ETHAN, who achieved a composite reputation as a soldier and a Deistical writer, was born at Litchfield, in Connecticut, North America. He emigrated when young, with four of his brothers, to the tract known as the New Hampshire Grants, which now forms the State of Vermont; and about 1770 headed the "Green Mountain Boys" in the opposition they made to the claim put in by the authorities of New York to the territory they had occupied. The dispute was still pending, when, a few days after the battle of Lexington, at the request of the legislature of Connecticut, Allen collected a body of 230 Green Mountain Boys, and marched to surprise the forts of Ticonderoga and Crown Point. After being joined by a body of troops under Colonel Arnold, they arrived in the night of the 9th of May, 1775, on the banks of Lake Champlain, opposite to Ticonderoga. With some difficulty boats were obtained sufficient for the transportation of the troops; and both Allen and Arnold embarked with the first body, consisting of 83 men, who effected their landing without being discovered. Day now dawned, and no more men could follow. It was thus necessary either to abandon the attack or to prosecute it with so small a number. All volunteered to follow Allen, and they immediately marched against the fort, which was completely surprised, and surrendered without firing a single gun. Crown Point was taken immediately after, by Colonel Seth Warren, without opposition. These successes of the Congress had a great effect both in America and England, and the name of Ethan Allen, as the captor of Ticonderoga, became well known. His vanity and presumption, however, led to disaster; for in the autumn of the same year, 1775, whilst employed on an expedition to Canada, and marching to attack Montreal, he fell in with the British troops, and was taken prisoner. He remained a prisoner upwards of two years and a half, a short time of which he spent in England, in confinement in Pendennis Castle, near Falmouth. He made great

complaints of the severity of his treatment as a prisoner, and published 'A Narrative of Colonel Ethan Allen's Captivity,' Philadelphia, 1779. On his release, by exchange, on the 6th of May, 1778, Allen was received with great respect by Washington, and his arrival among the Green Mountain Boys was celebrated with the firing of guns and every demonstration of joy. He found that during his absence Vermont had become a State, although its independence was still disallowed by the State of New York. As a mark of gratitude for his services, Allen was appointed general of the State militia, and chosen a representative to the assembly of the State. The Congress of the United States also gave him the commission of colonel. When peace was concluded he retired to his agricultural pursuits, and died suddenly of apoplexy at Burlington, in Vermont, on the 13th of February, 1789. He was the author of four works, of which one has been already mentioned. The others are:—'A Narrative of the Proceedings of the Governor of New York,' in the affair of the Green Mountain Boys, Hartford, 1774; 'A Vindication of the Opposition of the Inhabitants of Vermont to the Government of New York, and of their Right to form an Independent State,' 1779; and 'Reason the only Oracle of Man, or a Complete System of Natural Religion,' Bennington, 1784. This work is remarkable as being the first published in America in direct opposition to Christianity. It abounds with absurdities, but affords no countenance to the assertion, often made, that Allen was a believer in the Pythagorean doctrine of the Metempsychosis. His system is that of a pure Deism.

ALLEN, WILLIAM, whose name is also written Alan and Alleyn, and who is generally known by the name of Cardinal Allen, was born in 1532, at Rossall, in Lancashire, whither his grandfather, a member of an old and respectable family in Staffordshire, had migrated. In the fifteenth year of his age he was entered of Oriel College, Oxford, and profited so much by his own parts and industry, and the tuition of Morgan Philips, that in 1550 he was unanimously elected fellow of that society. In 1551 Allen seems to have suffered on account of his religion: but during the reign of Mary, when the Roman Catholic faith was in the ascendant, he became, about the year 1556, principal of St. Mary's Hall. In 1558 he was appointed a canon of the cathedral church of York. Upon the accession of Queen Elizabeth, Allen retired to Louvain, in the Spanish Netherlands, where he was entrusted with the education of some English youths of his own communion. His health giving way, however, he was recommended to try the restorative effects of his native air, and he accordingly came over to England, where he spent about three years, at the end of which time the notoriety of his efforts to make proselytes forced him again to leave the country. Returning in 1565 to the Spanish Netherlands, he selected a monastery at Mechlin for his place of retirement. Here, being yet only in deacon's orders, he prepared himself for the priesthood, and published his first work, which was an answer to one by Bishop Jewell, and was entitled 'A Defence of the Doctrine of Catholics concerning Purgatory and Prayers for the Dead,' 1565. Towards the end of the year 1567 Allen went to Rome, in company with Morgan Philips, his old tutor, and Dr. Vendeville, king's professor in the newly-established university of Douay, and afterwards Bishop of Tournay.

"An accidental discourse they had upon the road," says the Roman Catholic historian of the English Church, "was the first rise of the English College at Douay, and, by degrees, of all the other colleges and communities which have since furnished England with missionaries." When they returned together next year, Vendeville invited Allen to come with him to Douay, and there finish his academical degrees. He accepted the invitation, and in the very year, 1568, of their return from Rome, Allen, zealously supported by Vendeville, opened an English Roman Catholic college at Douay. The college in a short time, under Allen as president, prospered greatly, and, having begun with six members, soon numbered 150, "whereof," says Dodd, "eight or nine were eminent doctors of divinity." Allen took the degree of bachelor of divinity, January 31st, 1570, and that of D.D. July 16th, 1571, in the University of Douay. In 1570 he was appointed a royal professor of the university, and a canon of the church of Cambrai; and in 1575 made a very successful pilgrimage to Rome on behalf of his college. But papal favour could not frustrate the effects of popular jealousy, and the college at Douay was broken up by a proclamation of the magistrates dated March 21st, 1578. Thereupon the college migrated to Rheims, where, in numbers and efficiency, it flourished not less than it had flourished at Douay. In 1580 Allen was summoned to Rome, to give the benefit of his experience for the government

of a college similar to that at Rheims, which Gregory XIII. had endowed in 1579 for the education of English Roman Catholic priests.

Whilst at Rome, Allen had interest enough to procure the despatch of a small Jesuit mission to England; and this mission, and the labours of Allen's seminarists, together provoked Queen Elizabeth to the issue of a proclamation which forbade her subjects in any way to encourage or to countenance the English seminarists abroad, or to harbour or relieve any Jesuit or seminarist in this country. It was in answer to this proclamation that Allen, in 1581, after his return from Rome, wrote and published his 'Apology for the English Seminarists,' the language and tone of which are remarkable for their loyalty and respect towards the Queen. The subsequent publication of the defence of the executions of Roman Catholics, which bore the significant title of 'The Execution of Justice,' and was written by Lord Burleigh himself, called forth a reply from Allen, who published in 1584 'A True, Sincere, and Modest Defence of the English Catholics that suffer for their Faith, both at home and abroad, against a slanderous Libel entitled "The Execution of Justice in England."' This work of Allen's excited a great sensation, and was replied to by Mr. Stubbs, of Lincoln's Inn, under the immediate direction of Lord Burleigh. One Alfield was indicted on the 3rd of July, 1585, for high treason, for bringing the book into England, was found guilty, and executed.

On the 7th of August, 1587, Allen was raised to the Cardinalate, with the title of St. Martin in Montibus; a promotion accorded by Pope Sixtus V. to the request of Philip II. of Spain, who, on the eve of despatching the Invincible Armada to England, wished to have a prince of the church ready, on the success of the expedition, to proceed to England, superintend the affairs of religion, and invest the conqueror with the English crown. As the preparations for the Spanish invasion of this country drew nearer to completion, Allen, by command of the Pope, prepared an address to the Roman Catholics in England, calling on them for assistance. He wrote, or caused to be written, accepting all the responsibilities of authorship, the 'Admonition to the Nobility and People of England,' in which Elizabeth is charged with being a usurper and "an incestuous bastard," a heretic, a tyrant, and steeped in lust, and which calls on all persons to rise in favour of the King of Spain's liberating army, and free themselves from the disgrace of having "suffered such a creature, almost thirtie yeares together, to raigne both over their bodies and soules, to the extinguishinge not only of religion but of all chaste livinge and honesty." A large impression of this work was printed at Antwerp, and was afterwards put on board the Armada to be carried to England. An abridgment also was prepared, which bore the title, 'A Declaration of the Sentence of the Deposition of Elizabeth the Usurper and pretended Queen of England.' When the invincible Armada was defeated, all the copies both of the 'Admonition' and the 'Declaration' that had been designed for distribution in England were destroyed.

The Pope kept Allen at Rome with him after he was created Cardinal, and even refused to allow him to leave for his archiepiscopal see of Mechlin, to which in 1589 the King of Spain appointed Allen, with the hope that he would reside within its limits. Allen spent at Rome the remainder of his days, living in wealth and splendour, having unbounded influence over Sixtus V. and his next two successors; the chief agent of the King of Spain for the management of his interests, and distribution of his bounties, among the English Roman Catholic exiles in the Spanish Netherlands and at Rome, and the recognised head of that party among the English Roman Catholics which was known as the Spanish party, and which desired to place the English crown after Elizabeth on the head of the daughter of the King of Spain. Cardinal Allen died of strangury, on the 6th of October, 1594, and was buried with great pomp in the chapel of the English College at Rome. History would be at a loss to furnish an instance of a man more thoroughly denationalising himself than did Allen, for the sake of his faith; and it is very difficult to believe that, irreproachable in his private life, he followed in his public course the dictates of his conscience, and that, in leaguering himself with England's foreign foes, he did so, thinking the tie of religion above that of country, and the Roman Catholic faith indispensable to the happiness and prosperity of England.

Allen's literary productions are, 'Brief Reasons concerning the Catholic Faith'; 'A Defence of the Doctrine of Catholics concerning Purgatory and Prayers for the Dead,' Antwerp, 1565; 'Treatise made in Defence of the lawful Power and Authority of the Priesthood to remit Sins. The People's Duty for Confes-

BIOG. DIV.—SUP.

sion of their Sins to God's Ministers. The Church's Meaning concerning Indulgences, commonly called Pope's Pardons, Louvain, 1567; 'Of the Worship due to Saints and their Relicks'; 'De Sacramentis in genere, de Sacramento Eucharistie, et de Missæ Sacrificio,' Antwerp, 1576; 'Apology and True Declaration of the Institution and Endeavours of the two English Colleges, the one in Rome, the other now resident in Rheims, against certain sinister Informations given up against the same,' Mons in Hainault, 1581; 'A true, sincere, and modest Defence of the English Catholics that suffer for their Faith, both at home and abroad, against a slanderous Libel entitled "The Execution of Justice in England,"' 1584; 'Epistola de Daventriæ Redditione,' Cracow, 1588; 'An Admonition to the Nobility and People of England concerning the present Warres made for the execution of His Holiness's Sentence by the high and mighty King of Spain,' 1588.

Besides these works, Allen had a principal share in the execution of the Roman Catholic translation of the Bible, which goes by the name of the Douay Bible, of which the New Testament was published at Rheims in 1582, whilst he was there as president of the English Roman Catholic College, and the Old Testament at Douay some years after his death, in 1609.

ALLESTREE, or ALLESTRY, RICHARD, whose personal adventures were of a more striking character than commonly diversified the lives of scholars and divines, even of the turbulent 17th century, was born at Uppington, in Shropshire, in the year 1619 (according to Wood, 1621). His father, Robert Allestree, was a member of an ancient family formerly settled at Alveston, in the county of Derby. After receiving the first rudiments of education in a seminary in the neighbourhood of Uppington, Richard was sent to the Grammar School at Coventry, of which Philemon Holland, known as the "Translator-general of his age," was at that time master. In the Lent term of 1636, he became a commoner of Christ Church, where he had the advantage of being under the tuition of the famous Richard Busby, and of which society, about six months after his admission, Dr. Samuel Fell, the dean, made him a student; "which title," says Bishop Fell, son of the dean, who afterwards acted as Allestree's biographer and literary executor, "he really answered by great and happy application to study, wherein he made remarkable progress; as a testimony and encouragement of which, so soon as he had taken the degree of Bachelor of Arts [October 24th, 1640], he was chosen Moderator in Philosophy, and had the employment renewed year by year, till the disturbances of the kingdom interrupted the studies and repose of the university." In 1642 Allestree was amongst the foremost of the Oxford students who appeared in arms for the king, placing himself under the command of Sir John (afterwards Lord) Byron. He then joined Prince Rupert in the West; and, after the relief of Worcester, returned to Oxford, where, in accordance with its then twofold character of university and garrison, he alternated, and even combined, the prosecution of his studies with the duties of a soldier. Frequently, we are told, might he be seen "holding his musket in one hand and his book in the other, and making the watchings of a soldier the lucubrations of a student." It was Allestree's good fortune, whilst in charge of his college, in the absence of the dean and his family, to preserve by a clever ruse the contents of the Christ Church treasury from the rapacity of the Parliamentary troops under Lord Say; for which success he was happy enough to suffer the penalty of only a very short detention. In June, 1643, he proceeded Master of Arts; and in the same year his life was endangered, and his activities, whether academical or military, suspended by an attack of a pestilential disorder, which then raged within the garrison of Oxford, and which had been bred by the crowded state of the city. Immediately on his recovery, though now a fellow of his college, he joined the regiment of students which had lately been embodied for the king's service; and in this employment continued till the unhappy contest resulted in the triumph of the Parliament. Then "betaking himself to that warfare to which his education had designed him, he entered orders at a time when there was no prospect of temporal advantage, and when his being in the service of God threatened no less danger than being in the service of the prince."

In the parliamentary visitation for the reform of the University, Allestree shared the disabilities at that time incident to loyalty, being (July, 1648) deprived of his preferment and ejected from the University; "so that being put to his shifts," as Wood expresses it, he retired to his native county, where he was entertained as chaplain in the family of the Honourable Francis Newport, afterwards Lord Newport, of High Ercall. Here he

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remained, with the exception of a journey to France in the interests of his patron, till the defeat and retirement of Charles the Second; when his reputation for tact, discretion, and diplomacy recommended him as a fitting channel of communication between the exiled prince and his adherents in this country. Among other transactions, the negotiations respecting the means of preserving the episcopal succession in the Church of England were entrusted to his management. He had succeeded in safely performing several journeys, when, on returning from Brussels, in the winter of 1659, he was seized at Dover, conveyed in custody to London, and imprisoned in Lambeth Palace by a committee of the Council of Safety. The dawn of the Restoration was, however, already discernible, and a period of six or eight weeks was the measure of his imprisonment. Whilst carrying on these negotiations, Allestry had his head-quarters for several years at the house of Sir Anthony Cope, of Hanwell, near Banbury, a royalist of quality and fortune, who gladly conceded to him the liberty of going and coming as the royal occasions demanded.

Shortly after the restoration of Charles the Second, in 1660, Allestry was made canon of the eighth stall of Christ Church; on the 3rd of October in the same year, took the degree of D.D.; and was almost concurrently appointed one of the king's chaplains in ordinary. In September, 1663, he was elected Regius Professor of Divinity; and, two years after, achieved his ultimate preferment, the provostship of Eton, which was conferred upon him by the personal favour of the king, August 10, 1665. Throughout his exercise of the functions of this office, it is recorded to Allestry's honour, that Eton College—to which, in various ways, he was an important benefactor—presented but one united family. There, accordingly, he determined to end his days, although so strongly solicited to fill a higher dignity, as fully to justify that clause of his epitaph which declares, "Episcopales infulas eadem industriâ evitavit, quâ alii ambiunt"—he shunned the episcopal dignity as anxiously as other men seek it. Perceiving his sight and health begin to fail, Dr. Allestry resigned his chair at Oxford in the year 1679; and when further symptoms of decay culminated in dropsy, he repaired, for the sake of commanding the best medical assistance, to London, where he died, January 28, 1681. He was buried in the chapel of Eton College, on the north side of the communion-table, where his monument still remains. "He was," says Wood, "a good and most affectionate preacher; and for many years by his prudent presiding in the professor's chair, he did discover perhaps as much learning as any, and much more moderation, as to controverted points, than most of his predecessors. He was also a person richly furnished with all variety of choice solid learning, requisite to recommend him with the greatest advantage, to the more intelligent world for one of the most eminent divines of his age." The chief productions of Dr. Allestry are his *Discourses*, which are distinguished by their vigour and vivacity, scriptural insight and felicity of diction. These discourses, which had for the most part been preached, on various occasions, before the king, and many of which had been published singly in the life-time of the author, were after his death collected and edited by Dr. John Fell, Bishop of Oxford, with the title of 'Forty Sermons, whereof twenty-one are now first published, the greatest Part preached before the King, and on solemn occasions,' 2 vols. fol. Oxford, 1684. Wood attributes to Allestry the authorship of a pamphlet entitled 'The Privileges of the University of Oxford in Point of Visitation, in a Letter to an honourable Personage,' 4to, 1647. This little work, which was the occasion of a controversy, has been variously referred to Dr. John Fell, and to Philip Fell, his brother, and a fellow of Eton. Further, and finally, a Judgment by Allestry on a case of divorce, is printed in Bishop Barlow's 'Miscellaneous and weighty Cases of Conscience,' 8vo, London, 1692.

ALLESTRY, JACOB, English poet and scholar, born in 1653, was the son of James Allestry, a London bookseller, whose property was destroyed in the great fire of 1666. Jacob Allestry received his early education at Westminster School; in 1671 was entered at Christ Church, Oxford; took the degree of B.A. with credit; in due time proceeded M.A.; was made music reader in 1679; and terræ filius in 1682. In the University he won great credit alike for his knowledge of languages and skill in poetry, his poetic powers being largely employed in preparing the verses and pastorals spoken before the Duke and Duchess of York on occasion of their visit to Oxford, May 21, 1681. He died October 15, 1686, his end being hastened by excesses, if we may believe Anthony à Wood, who in his solemn, purblind, blundering way, says, "being exceedingly given to the

vices of poets, his body was emaciated and worn away by his juvenile extravagances." Allestry's poems were much admired and sought after; some were printed in the 'Examen Poeticum,' others in 'Miscellany Poems,' 1727; but they do not seem to have been collected for separate publication. They are evidently the productions of a scholar, and there is in them much grace and refinement; often considerable elevation of thought.

*ALLINGHAM, WILLIAM, the son of a manager of the Provincial Bank at Ballyshannon, was born in that town about the year 1828, and was educated at a school in Ireland. Early in life he began to contribute to periodical literature; and in 1850, published his first volume of 'Poems,' with a dedication to Leigh Hunt, who encouraged his literary attempts, and afterwards befriended him in matters of more importance. In 1854, Mr. Allingham published his 'Day and Night Songs,' which he inscribed "to my friends, known and unknown"; and of which an enlarged edition, illustrated by Millais and other artists, appeared in the following year. In 1854, he also published 'Peace and War: an Ode.' 'Laurence Bloomfield in Ireland; or the New Landlord,' a poem in twelve chapters, which first appeared in 'Fraser's Magazine,' was published in 1864. Of this work a cheaper issue, with a preface of some length, was put forth in 1860. In 1864, the year in which Mr. Allingham obtained a literary pension, he edited 'The Ballad Book; a Selection of the choicest British Ballads.' In 1865 he published 'Fifty Modern Poems,' six of which had already appeared in one of his earlier volumes. The dedication of this volume to his friend A. F. offers a modest self-estimate of the author's poetical position and pretensions. "My 'Works,'" he says, "for so far (trivial enough works!) are now in three volumes, counting one hundred and thirteen poems, long and short. These claim to be genuine in their way, and beyond this the writer thinks or cares very little about them." Mr. Allingham holds an appointment in the Customs, in England.

ALLIX, PIERRE, was born at Alençon, in 1641. At an early age he became minister of the Reformed Church at Rouen; quitting it, with a great reputation for eloquence, for the pastorate of the church of Charenton, near Paris, the members of which were amongst the most distinguished of the professors of the Reformed faith in France. The fame he had acquired as a preacher preceded him, when, on the Revocation of the Edict of Nantes, in 1685, he took refuge in England. Here he was most warmly received. The University of Cambridge conferred upon him the degree of Doctor of Divinity; and, in 1690, he was appointed treasurer of the cathedral church of Salisbury. Notwithstanding that his great application presently acquired for him a competent mastery over the English language, Allix does not appear to have exercised his gifts of preaching in this country, although with his pen he was, to almost the end of a protracted life, the untiring apologist and champion of the Protestant cause. He died in London, on the 21st of February, 1717, leaving several children, the eldest of whom was a clergyman of the Church of England.

The controversial writings of Allix, directed against the Church of Rome, on the one hand, and, on the other, against the Arian heresy, were held in great estimation by his contemporaries; but his claims to present consideration and esteem are founded rather on his more general works on the evidences of Christianity, and others relating to the history of the early Protestant churches on the Continent. Long lists of his works occur in Niceron, and in the *Biographia Britannica*; the most important are the following:—'Ratramne, ou Bertrand, Prêtre, du Corps et du Sang du Seigneur,' Rouen, 1672, 8vo; 'Dissertatio de Sanguine Christi,' Paris, 1680, 8vo, in the same volume with two other small treatises; 'Anastasi Sinaitæ anagogicarum contemplationum Lib. xii.' in Greek and Latin; 'Douze Sermons sur divers Textes,' second edition, Rotterdam, 1685, 12mo; 'Reflexions upon the Books of the Holy Scripture, to establish the truth of the Christian Religion,' 2 vols. London, 1688, a French edition of which had appeared at Rotterdam in 1687, making it probable that the work was originally composed in the author's native tongue; 'Determinatio F. Joannis Parisiensis de Modò existendi Corpus Christi in Sacramento Altaris,' London, 1686, 8vo; 'Some Remarks on the Ecclesiastical History of the ancient Churches of Piedmont,' London, 1690, 4to; 'Remarks upon the Ecclesiastical History of the ancient Churches of the Albigenes,' London, 1692, 4to; 'The Judgment of the Ancient Jewish Church against the Unitarians, in the Controversy upon the Holy Trinity,' London, 1689, 4to; and 'De Messias duplici Adventu Dissertationes duæ adversus Judæos,' London, 1701, 8vo, in which the author fixed the date of the Second Coming of our Lord as 1736, at the latest. In addition to the above, Allix published several works of practical piety, including

a 'Preparation for the Lord's Supper'; several occasional Sermons; and a number of temporary pamphlets. He is also understood to have composed an elaborate 'History of the Councils,' on the invitation of a body of English ministers; but it was never printed, for want of a sufficient number of subscribers.

ALMON, JOHN, a celebrated political writer and publisher, was born at Liverpool, about 1738; educated at Warrington; and apprenticed to a bookseller in his native place. Growing tired of the drudgery and confinement of the shop, he went to sea about 1756, and remained abroad till 1758, when he returned, and soon after established himself in London. Here he formed the acquaintance of Goldsmith and Wilkes, and commenced the career of a political writer with a pamphlet entitled 'The Conduct of a late noble Commander [Lord George Sackville at the Battle of Minden] Examined,' 8vo, 1759, which passed into a second edition. This was followed by the 'Military Dictionary,' a compendious history of famous battles and sieges from the time of Charlemagne to the year of publication, 1760. It was a folio, issued in sixpenny weekly numbers; and, with a certain liveliness, was laudably free from research or good writing. He was now engaged as a writer of letters (corresponding to our leaders) for the 'Gazetteer' daily newspaper, the circulation of which was threatened by the 'Public Ledger,' started in 1760, to which Goldsmith was a contributor. Almon's contributions to the Gazetteer were published separately, under the title of 'A Collection of Interesting Letters from the Public Papers,' in four vols. 12mo, and reprinted in two vols. 8vo. His fertile pen also produced 'A Review of the Reign of His late Majesty, George II. 8vo, 1761, which passed through two editions. On the resignation of Lord Chatham, October, 1761, he published a volume entitled 'A Review of Mr. Pitt's Administration,' which reached a fourth edition, and secured for Almon the substantial friendship of Lord Temple, to whom it was dedicated. His connection with Lord Temple led him, when that nobleman quarrelled with his brother, George Grenville, to write, under his old Gazetteer signature of "An Independent Whig," 'A Letter to the Right Hon. George Grenville,' which was answered by Mr. Grenville's private secretary, Charles Lloyd, both the pamphlets obtaining a large circulation.

Almon having accidentally called on Wilkes a few minutes after his arrest on a general warrant for publishing No. 45 of the North Briton, Wilkes in a low tone informed him of the circumstances, and begged him to apprise Lord Temple. Almon not being known, was permitted to leave the house, for which, as he states, the officers "were afterwards severely reprimanded." The issue of the affair is well known. Almon gave full particulars of it in his 'Memoirs of John Wilkes,' and wrote a pamphlet or two on the subject. He also wrote, about this time, 'A Review of Lord Bute's Administration,' and 'An Impartial History of the Late War, from 1749 to 1763.'

But he was now to extend his sphere of activity. Pamphlets were the chief instruments for bringing public opinion to bear upon the government, but so personal were they commonly, and often so virulent, that, in face of the law of libel as then administered, it was difficult to find publishers willing to incur the risk of issuing them. Almon had become personally known to most of the leaders of the opposition; he was a man of irrepressible activity, fond of notoriety, of tried courage and audacity; and he had the double advantage of being a ready writer, and of having been brought up as a bookseller. He was easily persuaded to enter into the business; he was assured of the support of the party, and of immunity from personal loss. He accordingly, in 1763, opened a shop in Piccadilly, opposite Burlington House, for the sale and publication of political pamphlets, which soon became and long continued the resort of the members of the opposition, and rendered Almon himself a political oracle in a small way. The political pamphlets published by him during the following years are far too many for enumeration; the fortune of his shop was made by the earliest of them, the well-known Candor pamphlets, which almost rivalled 'The Letters of Junius' in popularity, and have been by some supposed to be from the pen of Junius himself. Of the famous Junius Letters, Almon published an edition without the consent of the author. But Almon did not confine himself to publishing, or even writing pamphlets. In 1765 he published in an octavo volume a 'History of the Minority, during the years 1762—1765: exhibiting the Conduct, Principles, and Views of that Party.' This work was issued anonymously, but was soon known to be Almon's, and to be a sort of manifesto of the party he represented, and above 10,000 copies of it were sold within six months. He now started a monthly 'Political Register,' which was continued

for two years. 'The New Foundling Hospital for Wit,' begun in 1768, was another successful venture.

It is not to be supposed that Almon was looked upon by the government with much tenderness; but the occasion selected for punishing him was not a little remarkable. The Letters of Junius were at the height of their popularity, and the 'Letter to the King,' one of the most violent, and, consequently, most read of the series, was reprinted in a magazine called 'The London Museum.' For selling a copy of this in his shop, Almon (who was not the publisher, and had no connection with the magazine,) was tried in the Court of King's Bench; and, being convicted, was sentenced by Lord Mansfield to pay a fine of ten marks, and to give security for his good behaviour for two years, himself in 400*l.*, his sureties in 200*l.* each. Such a judgment did little hurt to Almon; but the charge of the Chief Justice called forth 'A Letter to Lord Mansfield,' which was one of the most bitter of the Junius series. Almon of course published 'The Trial of John Almon,' in which he reprinted all the offensive matter, but he was not further disturbed.

In 1774 Almon commenced the publication of 'The Parliamentary Register,' in which the debates in parliament were very fairly reported, and which met with a large measure of success; he also published a continuation of the debates from the conclusion of Chandler's reports, in 1742, to the commencement of the 'Parliamentary Register.' Other serials issued by him were 'The Remembrancer,' a monthly collection of letters relating to the American war, which extended to 20 volumes; and an 'Asylum for Fugitive Pieces,' a sort of continuation of his 'New Foundling Hospital for Wit,' several times reprinted in 4 volumes. His larger works include 'A Collection of all the Treaties of Peace, Alliance, and Commerce between Great Britain and other Powers, from the Revolution in 1688 to 1771,' 2 vols. 1772, reprinted with considerable additions in 1781, and again in 1785: this was a work on which he a good deal prided himself, and it has some value; 'Protests of the House of Lords,' 8vo, 1772; 'A Letter to the Earl of Bute,' 1773; 'Free Parliaments; or, a Vindication of the Parliamentary Constitution of England,' 8vo, 1783.

About this time Almon, having secured a competence, retired from business to a pleasant residence at Boxmoor, in Hertfordshire, where, however, he continued to employ his pen. But he yearned for the old activity, and having married the widow of Mr. Parker, printer of the 'General Advertiser,' he became the proprietor of that publication, and determined to undertake its management. In this, however, he was unsuccessful. He became insolvent, was imprisoned for a libel, and was outlawed. Eventually he was enabled to return to Boxmoor, and again resumed his pen with all his old diligence. Besides political and occasional pamphlets, he wrote 'Anecdotes of the Life of the Right Honourable William Pitt, Earl of Chatham, and of the Principal Events of his Time, with his Speeches in Parliament, from the year 1736 to 1778,' 2 vols. 4to, 1792. In the preparation of this work Almon was assisted by Lord Temple and other political friends. Like most of Almon's productions, though put together with little skill, it was suited to the requirement of the hour, and sold largely, a sixth edition (in 3 vols. 8vo) being necessary to meet the demand. 'Biographical, Literary, and Political Anecdotes of several of the most Eminent Persons in the present age,' 3 vols. 1797, is a one-sided and not very trustworthy book, but it is amusing, and contains a good deal of information respecting the prominent personages of the time. Almon's last work was 'The Correspondence of the late John Wilkes with his Friends, printed from the original Manuscripts, in which are introduced Memoirs of his Life,' 5 vols. 8vo, 1805—of all Almon's writings the crudest, and perhaps the least successful. It is, in fact, a mere heap of materials brought together without order, and left incomplete. Almon did not long survive its publication, dying at Boxmoor on the 12th of December, 1805. Few will now turn to Almon's books for amusement, and any who may will be disappointed; but the student of the history of the last half of the 18th century will find in them a vast amount of suggestive matter—to be used, of course, with discrimination.

ALOISI, BALDASSARE, called IL GALANINO, Italian painter and engraver, was born at Bologna in 1578, and educated there in the school of the Carracci, to whom he was related, and of whom he was one of the ablest scholars. He painted a Virgin and Child, with St. Francis and St. John, for the Osservanza, and a Visitation for the Carità, Bologna, which were greatly admired; and after he settled in Rome he executed several altarpieces for the churches of that city and the neighbourhood, but he was most successful in his portraits of illustrious men, of

which he painted a large number, and which obtained for him the cognomen of the Italian Vandyck. His portrait of himself, in the Painters' Gallery, Florence, is a good example of his skill in that way. He also etched 50 plates, 'Historia del vecchio Testamento,' from the loggie of Raffaele, and a few others after the Carracci, Guido, &c.; but good impressions of these are now rare. Aloisi died at Rome in 1638.

ALPHEN, DANIEL VAN, Dutch jurist, was born Nov. 7, 1713; was educated at Leyden University; in 1735 was made professor of jurisprudence in the university, and in 1749 griffier, or city clerk. From this office he retired in 1778, devoting the remainder of his days to literature. Besides a valuable work on the 'Rights of the Magistracy with reference to the Church,' 8vo, 1755, of which a second edition was required in the following year, he wrote the latter half of the history and description of the city of Leyden ('Beschryving der Stad Leyden,' folio, vol. ii. 1770, and vol. iii. 1784), of which the first volume had been completed by his friend Mieris in 1762. Van Alphen collected materials for a fourth volume, but died before putting them in order, and it remains unpublished. The work is the standard history of the city of Leyden, and is illustrated with admirable engravings. Daniel Van Alphen died on the 16th of July, 1797.

ALPHEN, HIERONYMUS, Dutch theologian, son of Hieronymus Simons van Alphen, professor of theology at Utrecht, noticed below, was born May 9, 1700, and was successively minister at Nieuw Loosdrecht, at Leeuwarden, and at Amsterdam, in which last city he died, April 20, 1758. His principal writings are (1) a dissertation on Zechariah, chap. 9, v. 1; 'De Terra Chadrach et Damasco ejus quiete,' 12mo, Utrecht, 1723, reprinted in vol. vii. of Ugolini's 'Thesaurus Antiquitatum sacrarum,' a work showing an extensive acquaintance with the Arabic and Syriac languages as well as the Hebrew; and (2) a commentary on the 24th and 25th chapters of St. Matthew, 'Verklaring over Matth. xxiv. en. xxv.,' 2 vols. 8vo, Leeuwarden, 1734.

ALPHEN, HIERONYMUS VAN, a celebrated Dutch poet, grandson of the famous Utrecht professor noticed below, was born August 8, 1746, at Gouda, of which town his father was syndic; studied at the universities of Utrecht and Leyden, at the latter of which, on taking the degree of master of laws, in 1768, he published a thesis on the Roman jurisconsult Javolenus Priscus. His acquirements, ability, and high moral character secured for him general confidence, and he held successively the important posts of procurator-general of the court of Utrecht, pensionary of the city of Leyden, and treasurer-general of the Union. These functions he resigned when the French invaded Holland, in 1795, and retired to the Hague, where he died, April 2, 1803.

The leisure he could snatch from his public employments Van Alphen gave to the cultivation of poetry and the literature of art, and he was among the first of his countrymen to study and appreciate the new development of German poetry and æsthetics. His first poetic publications were 'Proeve van Stigtelijke Mengelpoezij' (Specimens of Miscellaneous Moral Poetry), in two series, 8vo, Utrecht, 1771-72, written in conjunction with P. L. van de Kastele, and his countrymen find it difficult to assign to either his respective share. Subsequent poems, of which he alone was the author, were—'Gedigten en Overdenkingen' (Poems and Meditations), 1777; 'Nederlandsche Gezangen' (Dutch Songs), 1779, many of which are of exceeding beauty; 'Kleine Gedigten voor Kinderen' (Short Poems for Children), 1781, a work often reprinted, universally popular in Dutch households, and by general consent one of the most charming volumes of children's poetry extant; 'Digkundige Verhandeligen' (Poetical Dissertations), 1782; 'Mengelingen in Poezij' (Poetic Miscellanies), 1783; and 'Proeven van Liederen en Gezangen voor den Oppenbaren Godsdienst' (Specimens of Hymns and Songs for Divine Service), 1801-2, which contains some of his purest and noblest efforts; one piece in particular, 'De Starrenhemel' (The Starry Heavens), says a competent critic, Mr. Thomas Watts, "is a poem which will probably last as long as the language in which it is written." But while it was as a poet that he shone brightest and will be longest remembered, his pen was not confined to poetry. In 1778-80 he published a translation from the German of Riedel's 'Theory of the Fine Arts and Polite Literature,' which, with some observations in the Introduction he prefixed to it, led to a controversy with De Perponcher, published in 1783. Van Alphen also wrote several religious essays in prose, the most important perhaps being 'The Christian Spectator,' 'Some Doctrines of the Protestant Religion defended against Eberhard,' and a treatise on 'The Superiority of the Legislation of Moses to that of Solon and Lycurgus,' which was

awarded the gold medal of the Teylerian Society of Haarlem, and is printed in vol. ix. of their Transactions. Van Alphen's posthumous papers were published at Utrecht in 1813, under the title of 'Nagelatene Schriften, van Van Alphen, gevonden in Dezelfs Papieren.' A collected edition of his poetical works, with a memoir, appeared at Utrecht, in 3 vols. 8vo, 1838-39.

ALPHEN, HIERONYMUS SIMONS VAN, one of the most distinguished of the Dutch Protestant theologians, was born May 23, 1665, at Neuhanau, in Hesse Cassel, the son of a merchant in that town, driven from Holland by the religious persecutions. After studying Greek and Latin at the schools of Hanau, and Hebrew at home under a learned Jew, the young Van Alphen went in 1681 to Leyden, where he pursued his studies for five years under Gronovius, Schaaf, and F. Spanheim, thence proceeded to Franeker, where he was for two years under Vitringa, and was then about to remove to Groningen, intending to complete his course at Heidelberg; but his abilities had already attracted notice, and he was chosen pastor of a church at Warmond, near Leyden. Here he remained four years; was then two years pastor at Zutphen, and afterwards 20 years at Amsterdam. His reputation constantly increasing, he was now (1715) chosen professor of theology at the University of Utrecht. This office he held for 27 years, ranking as the first theological teacher in Holland, and attracting large numbers of students to the university. H. S. Van Alphen was the embodiment of the great old scholars of Holland. Every hour of his long life was devoted to his work, and all his actions were regulated with reference to it. He was thrice married; his first wife he took "to manage his household affairs, the second to look after the children, and the third to take care of himself." He survived the last, dying on the 7th of November, 1742. His son and grandson, both distinguished men, are noticed above.

H. S. Van Alphen's principal Latin works comprise, 'Specimina Analytica in Epistolas Pauli quinque ratione ordinis temporis quo scriptæ sunt priores,' an analysis of the first five Epistles of St. Paul in the order of time, namely, those to the Thessalonians, the Galatians, and the Corinthians, in 2 huge 4to volumes, Utrecht, 1742; a similar commentary on St. Paul's epistle to the Ephesians, 'Specimen Analyticum in Epistolam Pauli ad Ephesios,' 4to, Utrecht, 1742; 'Economia Catechesis Palatina,' an elaborate explanation of the Heidelberg Catechism; and a short grammatical treatise, 'De Usu Accentuum.' His writings in Dutch are numerous; the following are perhaps the most important—'On the ninth Chapter of Daniel,' 4to, Amsterdam, 1716; 'On the Epistle of Peter,' 2 vols. 4to, Amsterdam, 1734; 'On Psalm cxi.,' 4to, Amsterdam, 1735; 'On Psalms xxi., xli., xlvii., and cxii., and the Song of Moses,' 4to, Amsterdam; 'On the two Epistles of Paul to the Corinthians,' 2 vols., Utrecht; and 'On the First Epistle to the Thessalonians,' 4to, Utrecht, 1741. He also published a volume of religious poems, 'Gezangen,' of which a second edition appeared at Amsterdam in 1748. (Chalmot, *Biographisch Woordenboek der Nederlanden*; Geysbeek, *Biog. Woord. der Nederduitsche Dichters*; Kok, *Vaderlandsch Woordenboek*; T. Watts, in *Biographical Dictionary of Soc. for Diff. of Useful Knowledge*, and the authorities there cited for all the Van Alphens here noticed. Between 50 and 60 more, of greater or less celebrity, are given in the *Woordenboeken*.)

ALPHERY, REV. NICEPHORUS, a clergyman of the Church of England in the 17th century, was descended from a branch of the imperial family of Russia, but in consequence of the disturbances incident to the contests for the crown was in the beginning of the 17th century, probably in 1605, sent over to England in the care of Mr. Bidell, a Russia-merchant, and entered as a student at Oxford University. Having completed his terms he took orders in the English Church, and in 1618 was presented to the living of Wooley in Huntingdonshire. It is said that he was more than once invited back to Russia to take upon him the government of that country, but preferred his quiet cure. Here he remained till 1643, when he was forcibly ejected by a file of parliamentary soldiers, who dragged him from his pulpit one Sunday morning, and turned his wife and children, with his household goods, out of the parsonage. For a week they were forced to live in a sort of booth he constructed under the trees opposite the parsonage, but he afterwards obtained a small house in which he dwelt for several years in great poverty. Eventually he went to reside with his son at Hammersmith, but after the Restoration went back to his living, where, however, he remained only a short time, returning to his son's house, where he died at an advanced age, though in what year is not mentioned. One of his descendants was living in 1764, the wife of a Mr. Johnson, a cutler in Huntingdon, and

was treated with marked respect by her neighbours on account of her descent.

(Walker's *Sufferings of the Clergy in the Grand Rebellion*, pt. ii. p. 183; *Biographia Britannica*; *Biog. Dict. of U. K. Soc.*; Lysons' *Env. of London*, vol. iv. p. 264.)

ALPINUS, PROSPER (Prospero Alpini), the most eminent botanist of his age, was born November 23, 1553, at Marostica in Venice. On quitting school he enrolled himself in the army of Milan and served some time, but quitted it in obedience to the wishes of his father, a physician of some note, and entered the University of Padua as a student of medicine. Here his progress was rapid; he was chosen as syndic of the university and deputy rector. In 1578 he was admitted doctor of medicine, and commenced practice at Campo San Pietro, a small town in Padua. Whilst here he diligently carried on his botanical pursuits, but with the few books and imperfect knowledge then existing of the science, he felt that his only hope of obtaining the information he desired was by travel. For this an opportunity was afforded by an offer of accompanying G. Emo, the newly-appointed Venetian consul, as his physician to Cairo. Alpinus left Venice in September, 1580, and remained abroad about six years. During his stay in Egypt he carefully investigated the botany and natural history of the country, but he complains bitterly of the difficulty he found in obtaining assistance in his researches or even accurate information. He was resident almost three years in Cairo, made journeys up the Nile, visited Alexandria, and travelled in Candia and other islands of the Grecian archipelago. On his return to Venice in 1586 he accepted the appointment of physician to Andrea Doria, Prince of Melfi, and resided some time with him at Genoa. His celebrity as a physician and man of science was greatly extended by his work on Egyptian medicine, the first work in which he gave some of the results of his Egyptian studies—*De Medicina Egyptiorum*, libri iv. 4to, Venice, 1591—in which he described their manner of bleeding, cupping, scarifications, and various processes and medicines not then in use in Italy, with notes of the climate of the country, and the food, dress, and habits of the people as far as they influenced their health. The following year appeared another elaborate work, in the form of a dialogue, on the balsams, under which name he included the numerous gummy exudations from trees then much in vogue for medicinal purposes: *De Balsamo*, dialogos; in quo verissima balsami plantarum, opobalsami, carpobalsami, et xylobalsami cognitio plerisque antiquorum atque juniorum medicorum occulta, nunc elucescit, 4to, Venice, 1591; 2nd ed. 4to, Padua, 1639; and translated into French by A. Colin, 8vo, Lyon, 1619. A more important work, and that by which he mainly acquired his fame as a botanist, was *De Plantis Egypti Liber*, in quo non pauci, qui circa herbarum materiam irrepserunt, errores deprehenduntur, quorum causa hactenus multa medicamenta ad usum medicinarum admodum expetenda, plerisque medicorum, non sine artis jactura occulta atque obsoleta jacuerunt; 4to, Venice, 1592. In this treatise on the plants of Egypt with reference to their use in medicine, Alpinus described and figured (in very clear woodcuts) above 50 plants, of which 23 were previously undescribed: among these is the coffee-plant, with the method of preparing the now familiar infusion. This work was afterwards remodelled and combined with the author's other writings on the natural history of Egypt, but remained in MS. till 1735, when it was published at Leyden in 4to with a good commentary by Vesling, the successor of Alpinus at Padua, under the title of *Historiæ Naturalis Egypti libri quatuor, opus posthumum, nunc primum ex auctoris autographo diligentissime recognito*. It is illustrated with numerous engravings of the animals, plants, and other natural productions of Egypt, and includes the earliest published figures and descriptions of the Egyptian lotus and the laserpitium.

The publication of these works led the Venetian government to offer Alpinus in 1593 the chair of botany at Padua, with a salary of 200 florins, which was afterwards, as his celebrity extended, increased to 750. He held the chair for 20 years with a constantly increasing European renown, but during his latter years he suffered from feeble health, deafness, and gout. He died on the 5th of February, 1617, leaving four sons, who each attained some eminence—MARCANTONIO (died in 1631), as a jurist; ALPINO (died 1637), professor of botany at Padua, who edited his father's work on exotic plants referred to below; MAURICE (died 1634), a learned theologian; and PAOLO, who distinguished himself as a soldier.

Besides the works above named Alpinus published *De Præ-sagienda Vita et Morte ægrotantium*, libri vii.; in quibus ars

tota Hypocratica prædicendi in ægrotis varios morborum eventus, cum ex veterum medicorum dogmatibus, tum ex longa accurataque observatione nova methodo elucescit, 4to, Venice, 1601. This work was long considered as the best guide for the student of medicine, and as such was recommended to be used as the physician's text-book in the Leipzig *Acta Eruditorum*. It was reprinted at Pavia the same year in 4to, at Frankfurt in 8vo in 1621, under the title *Medicinalium Observationum Historico-criticarum*; at Leyden, with a preface by Boerhaave, 4to, 1700; at Hamburg, 1734; and at Venice, 1735. Another work, *De Medicina Methodica*, libri xiii. folio, Venice, 1611, was an attempt to determine the views of the ancient sect of the Methodists. A posthumous work, *De Plantis Exoticis*, libri duo, edited by his son, contains descriptions of rare exotic plants cultivated in the Botanic Garden of Padua, of which Alpinus was the founder. Linnæus dedicated to the memory of the great Venetian botanist, the genus *Alpinia* of the order of the Zingiberaceæ.

ALS, PEDER, a celebrated Danish painter, was born at Copenhagen in 1725. He studied in the Academy of Copenhagen, where in 1755 he carried off the first great prize given for painting, and then proceeded as pensioner to Rome, where he entered the school of Mengs. Here he made many copies from the pictures of Raffaele, and on his return to Copenhagen painted several historical pictures, in which the influence of Mengs was very perceptible. He was more successful as a portrait painter, especially of men, and examples of his portraits are numerous in the public and private galleries of his native country: but his best works are over-elaborate and tame. He died in 1775.

ALSTED, JACOB HEINRICH (or ALSTEDIUS), a German theologian and historian, was born in 1588, at Ballersbach, near Herborn, Nassau; received a learned education; in 1610 was made extraordinary and in 1615 ordinary professor of philosophy at the pedagogium of Herborn; and in 1629 accepted the chair of philosophy and theology in the newly-founded university of Weissenberg in Transylvania, which he retained till his death, November 8, 1638. Alsted is now only remembered as a most laborious compiler; his industry procured for him, whilst yet living, the anagram of *Sedulitas*, but his erudition and judgment were then alike honoured. His principal works are—*Theatrum Scholasticum*, 8vo, Herborn, 1610, 2nd ed. 1620; *Lexicon Theologicum*, 8vo, Hanover, 1612, and many times reprinted; *Artificium perorandi*, Frankfurt, 1612; *Theologia Naturalis*, 4to, Frankfurt, 1615, 2nd ed. 1622; *Thesaurus Chronologicus*, 8vo, Herborn, 1624; reprinted 1628, 1637, and 1650. But his great work was his *Encyclopædia Philosophica*, of which the first edition in 2 vols. folio appeared at Herborn in 1620, and a second in 1630; it being again reprinted at Lyon in 1649. With the somewhat doubtful exception of that of Acquaviva, of which nothing but the title is known, this was the first encyclopædia written, and was a work of prodigious labour, the whole of it, and the work extended to 2444 closely-printed folio pages, double columns, being written by Alsted himself. Though an encyclopædia, it is not arranged in alphabetical order, the author aiming at making it a methodical abridgment or compendium of all the sciences, to be read continuously, the only assistance to the reader being the divisions and subdivisions, which, however, in their extent and minuteness, have proved, according to Nicéron, rather bewildering than helpful. The work, though esteemed as a vast repository of knowledge, was probably never much read, and has of course been long obsolete, but it has secured to Alsted the honour of having produced the first known and complete encyclopædia. In 1626 Alsted published a *Compendium Lexici Philosophici*, but in his dictionary he is nearly as regardless of alphabetical order as in his encyclopædia.

ALTENSTEIN, BARON VON. [STEIN, BARON VON, E. C. Biog. Div. vol. v. col. 680.]

ALVENSLEBEN, PHILIPP KARL VON, a distinguished Prussian minister of state, was born December 16, 1745, at Hanover, where his father was Minister of War to the Elector, King George II. of England, and his grandfather had been minister. Thus marked out by birth for official life, he was educated, with the crown prince, afterwards King Frederick William II. of Prussia, and his brother, at Magdeburg, and afterwards studied jurisprudence at Halle. He was then, 1770, appointed referendarius in the chief court of justice at Berlin, and afterwards advanced to a judgeship. In 1773 he was sent with the grand chancellor to introduce the Prussian system of administration into the ceded province of Poland, now called West Prussia. In 1774 he was appointed chamberlain to Prince

Ferdinand, and the next year was nominated ambassador to the court of Saxony. Here he remained busily occupied in furthering the Prussian interest with the German courts till 1787, when he was sent to Paris to negotiate with France for the pacification of the United Provinces of the Netherlands. In 1788 he went as ambassador extraordinary to Holland, and in the same year was promoted to the like post in London, where he remained till 1790. On his return to Prussia, he was made Minister of War; in 1792, received the unusual distinction of the order of the black eagle; and in 1801 was created count. Alvensleben possessed the entire confidence of the king, and exerted an important influence on the policy of Prussia. He died at Berlin October 21, 1802. He published, but without his name, a chronological account of military events from the peace of Munster to that of Hubertsburg, 'Versuch eines tabellarischen Verzeichnisses der Kriegsbegebenheiten vom Münsterschen bis zum Hubertsburgischen Frieden,' 8vo, Berlin, 1792.

AMAT, FELIX, abbot of St. Ildefonso and archbishop of Palmyra, was born August 10, 1750, at Sabadell, in the diocese of Barcelona, of a family rather noble than wealthy. At the age of eleven he was sent to the episcopal seminary at Barcelona, where he distinguished himself for his proficiency in poetry, rhetoric, and mathematics. Resolving to enter the church, he received, in 1767, his first tonsure from Climent, Bishop of Barcelona, who had conceived a great admiration for his talents and industry. Amat's stature at this time was prodigious; at the age of seventeen he had attained the height of ten palms and three inches Spanish, or seven feet two inches English. In 1770 he took his doctor's degree at Granada, and returning to Barcelona, was named by his patron, Bishop Climent, professor of philosophy at the episcopal seminary, and by the king, at Climent's recommendation, librarian of the episcopal library. In the latter office he distinguished himself for his activity, intelligence, and powers of classification and arrangement, the fruits of which abide to this day. He occupied himself, also, at the suggestion of Climent, in writing 'Institutes of Philosophy;' and was engaged by Valladares, who succeeded to the bishopric of Barcelona on the resignation of Climent in 1775, to draw up a series of new regulations for the episcopal seminary, and to write a little book for the guidance of the institution, which was published under the title of 'El Seminarista.' Amat likewise accepted from the bishop the post of director of this establishment; but escaped from the too great mental and bodily fatigue incident to the office, when he became a successful candidate for the chief canonry of Tarragona. This preferment at once introduced him to the friendship of Don Francisco Armaña, Archbishop of Tarragona, with whom he co-operated in forming at Tarragona a society of "Amigos del Pais," or "Friends of the Country," a title which has rather a social and economical than a political significance. Of this society Amat drew up the regulations, and contributed numerous articles to its Transactions. In 1790, with the assistance of his brother, Don Antonio, who was perfectly acquainted with the English language, he prepared a compendium of Burke's 'Reflections on the French Revolution,' which was published without the name of the translator, or the date or place of printing. When the war with France broke out in 1794, the patriotism of Amat procured for him to be named one of the general junta for the rising in arms of Catalonia, but he found time in the midst of his warlike occupations to write a letter to Veyan, Bishop of Vich, on the method of teaching theology by the 'Sum of Theology' of St. Thomas Aquinas. In the next year, which restored peace to Spain, Amat was engaged in a controversy with Jovellanos on the 'Notice of the Royal Institute of Asturias;' and about the same time was freely contributing materials to his friend Don Josef Esteve for the Catalan dictionary, published in the year 1800. Amat was appointed, in 1801, royal visitor of the priory and college of Roncesvalles, and discharged his delicate duties with so much tact and success that he was named in 1803 by Charles IV. abbot of St. Ildefonso, the royal residence; in 1805, visitor of the royal monastery of the Escorial; and in 1806, confessor to the king. In 1803 he had been made, by the Pope, archbishop of Palmyra *in partibus*. On accepting the office of royal confessor, he stipulated that he should not be required to interfere in political affairs; but he entered with energy into the discussions on a plan for the general reform of the universities, and actively promoted the design of a new Spanish translation of the Bible, which was suggested by the king, and finally executed by Don Felix Torres Amat, the nephew of the confessor.

But the events of the years 1807 and 1808, were such as to force Amat from his position of political neutrality, which he

abandoned in such a way as to taint his hitherto unimpeached patriotism with the suspicion of sympathy with the French invaders of Spain. He was set down by his fellow countrymen as an "Afrancesado;" and was judged, not only by the Spaniards, but by the French themselves, as favourable to the cause of the latter. King Joseph Bonaparte appointed him to the bishopric of Osma, which Amat neither accepted nor declined, merely putting off taking possession till the arrival of the necessary bulls from Rome. At this time he wrote his work, 'Deberes del Cristiano hácia la Potestad Publica;' Duties of a Christian towards the Public Authority, or Principles of Guidance for Good Men in the Revolutions that agitate Empires. On the entry of Lord Wellington into Madrid, 12th August, 1812, and the restoration of the national government, Amat judged it prudent to retire from the capital; to which he returned, however, on its re-occupation by the French troops, when he endeavoured to play the part of a mediator with so much success as to leave it doubtful on which side were his sympathies. On the arrival of King Ferdinand VII., who, from having been a prisoner, showed every sign of developing into a despot, Amat was unsuccessful in his attempt to convince the sovereign of the rectitude of his political conduct during the French domination; and being, along with others, who had held certain offices under King Joseph, banished by royal decree from Madrid, retired July 13th, 1814, to Catalonia. In 1816 he obtained permission to resign the Abbey of St. Ildefonso; and in 1817 had the mortification of seeing his 'Ecclesiastical History' arbitrarily prohibited by the Inquisition, which had been re-established by King Ferdinand. Amat foresaw the agitations that impended over his native country, and in 1820, when commotions had broken out at Cadiz and elsewhere, published 'Observaciones pacíficas sobre la Potestad Ecclesiástica,' or Pacific Observations on Ecclesiastical Power, which satisfied neither party. The infirmities of advanced age, combining with the sorrow and apprehension with which Amat regarded the existing disasters and future prospects of Spain, put an end to his life on the 28th of September, 1824, at the age of seventy-four, at a convent of Franciscans near Sallent, where he had resided for several years.

Four principal works of Amat may be selected for mention out of the long list of his productions. His great work is his 'Tratado de la Iglesia de Jesu Cristo' (Treatise on the Church of Jesus Christ), generally known as his 'Ecclesiastical History,' which is the name given to it in the leaf before the title-page. It occupies twelve small Spanish quartos, which were published at intervals, the first four at Madrid in 1793, the fifth and sixth in the same city in 1798 and 1799; the seventh and eighth in 1799, at Barcelona; the ninth and tenth also at Barcelona in 1800 and 1802 respectively; and the two last in the same city in 1803. A second edition, in thirteen volumes, appeared at Madrid, in 1807. It is singular that this work, which in the warmest terms defends the Inquisition, should have been, at its first appearance, denounced to that tribunal, and several years after prohibited by it. Amat's next important works are his 'Observaciones sobre la Potestad Ecclesiástica' (Observations on Ecclesiastical Power), Barcelona, 1817-23, 3 vols. 4to; and his 'Seis Cartas à Irenico' (Six Letters to Irenicus), Barcelona, 1817. Both these works were published under the assumed name of Don Macario Padua Melato, Macario being the Greek equivalent of his Christian name of Felix, and Padua Melato an anagram of his appellation Amat de Palou. In the 'Letters to Irenicus' the author enunciates distinct ideas of the rights of man and of civil society, and that contract is refuted which is pretended to be the origin and necessary foundation of sovereignty, and makes it dependent on the consent of subjects. The mention of the principal works of Amat is completed with the 'Deberes del Cristiano en Tiempo de Revolucion,' Madrid, 1813, 8vo; but besides these, he left several small treatises in philosophy; occasional sermons; pastoral letters; and an unfinished reply to Volney's 'Ruins of Palmyra,' with which, as archbishop of Palmyra, Amat thought himself particularly concerned. (*Biog. Dict. of Soc. for Diff. of U. Knowledge.*)

AMELOTTE, DENYS, a French ecclesiastic of the 17th century, was born at Saintes, in Saintonge, in 1606. He was ordained priest in 1632, and some time after took the degree of doctor of divinity. He formed an intimacy with the priests of the Congregation of the Oratory, and subsequently—probably several years before, but certainly not later than, 1650—became a member of that body. In his 'Vie de Charles de Condren, second Supérieur Général de la Congregation de l'Oratoire de Jesus,' 4to, Paris, 1643, Amelotte, who had been a pupil of Condren, made some remarks on Du Verger de

Hauranne, abbot of St. Cyran, which gave great offence to the friends of that ecclesiastic, and to the Jansenists generally. Some years later Amelotte published the first part of a work on the Jansenist controversy—which should have been followed, but was not, by two other parts—with the title of 'Défense des Constitutions d'Innocent X., et d'Alexandre VII., et des Decrets de l'Assemblée du Clergé contre la Doctrine de Jansenius,' &c., 4to, Paris, 1660. This work drew upon its author the attack of the members of the Society of Port Royal, in a work written by Nicole and remarkable for its personalities, of which the title was 'Idée Générale de l'Esprit et du livre du Père Amelotte,' 4to, Paris, 1661. Amelotte retaliated in the dedication of his translation of the New Testament, addressed to Péréfixe, Archbishop of Paris, in which he described the Jansenists as "blind rebels," and charged them with "rage, imposture, and calumny." Further, Amelotte exerted his influence to procure the prohibition of the version of the New Testament, then in preparation by the members of Port Royal, of which they asserted Amelotte had surreptitiously obtained a copy, and availed himself of it in making or correcting his own version. The Port Royalists, being thus prevented, through the influence of Amelotte, from obtaining a licence to publish their version at Paris, brought it out at Mons, in Flanders. It is known as De Sacy's version.

Amelotte was Superior of the house of the Congregation of the Oratory, Rue St. Honoré, Paris, and assistant to the Superior General of the Congregation. He was the theological adviser of the Chancellor Seguier, whom he had prevailed on to withhold his licence from the Port Royal New Testament. But in the latter part of his life, he complained of the neglect of the great, whom he had obliged, and through whose influence he vainly expected a bishopric. Le Long, in a note to his 'Bibliothèque Historique de la France,' places the death of Amelotte in 1675; but the balance of probabilities is appreciably, if slightly, in favour of Nicéron, who states ('Mémoires,' &c.) that he died at Paris, 7th October, 1678, at the age of 72.

Amelotte's version of the New Testament is from the Clementine edition of the Vulgate, and bore as its title 'Le Nouveau Testament, traduit en François, avec des Notes sur les principales Difficultés,' &c., 3 vols. 8vo, Paris, 1666, 1667, and 1670. It was republished twice, if not three times, in the author's lifetime, but without the notes. It has been reprinted many times since. A second edition, with the notes, and with a new dedication to Harlay, successor of Péréfixe in the archbishopric of Paris, was published in two volumes, 4to, 1688. The other works of Amelotte are religious, and comprehend two Lives of Jesus Christ, one in Latin and one in French, harmonised from the four Gospels in the Latin version, and in his own French version. 'Le petit Office du Saint Enfant Jesus,' enumerated by Nicéron amongst the works of Amelotte, appears to have been written by Marguerite du Saint Sacrement, whose Life Amelotte wrote, and was merely edited by him.

AMICI, GIOVANNI BATTISTA, a distinguished Italian astronomer and optician, was born at Modena, in 1784. While studying mathematics at Bologna, he evinced a taste for the pursuits which afterwards brought him into note. He studied the principles of various optical instruments; introduced a new brilliant hard white alloy for the specula of telescopes; made large specula with his own hands; invented ellipsoid specula, to get rid of spherical aberration; greatly improved the achromatic microscope, with which he made valuable observations on infusoria, on the circulation of the sap in plants, and on vegetable functions; and contrived six kinds of camera lucida, for the use of designers and to facilitate microscopic observations. These labours were spread over the first forty years of the present century. After making telescope specula 11 inches in diameter, and one of larger size for Milan Observatory, he undertook to make a magnificent five-feet speculum, to be cast in the ducal gun-foundry at Pavia; but various circumstances led to the abandonment of the design. He contrived new forms of reflecting microscope, polariscope, and micrometer. Amici, who had been professor of mathematics in early life at the Lyceum of Pano, was in 1831 appointed Inspector General of Studies in the Duchy of Modena; and he afterwards succeeded Pons as director of the Florence Observatory. Besides papers on microscopic physiology, in the 'Memorie della Società Italiana,' he communicated to various scientific bodies articles on Double Stars, Jupiter's Satellites, the Angular Diameter of the Sun, &c. Amici died April 23rd, 1863.

AMIGONI, or AMICONI, GIACOMO, a celebrated Italian painter, was born at Venice in 1675. After studying in the schools of his native city, he went to Flanders, attracted by the

reputation of the Flemish painters, and from his study of their masterpieces, is said to have discovered the system of colour he had long sought in vain in Venice. He painted historical subjects and the then popular conversation pieces, adopting the small size of the Flemish cabinet painters as well as their mode of colour in preference to those of his countrymen. Having been appointed painter to the Elector of Bavaria, he stayed some time at Munich, painted the ceilings of the palace at Schleissheim; some altar-pieces for churches, and several cabinet pictures for private collections. From Munich he came in 1729 to England, where his manner was a novelty, and where, consequently, he was for some few years very popular. One of his first commissions was to paint a staircase at Lord Tankerville's in St. James's Square (already destroyed when Walpole wrote), and for which, on his declining to charge beyond the cost of the scaffolding, &c., Lord Tankerville gave him 200*l*. He was then employed to paint the staircase of Powis House, Great Ormond-street, with the story of Holofernes—the personages of which he clad in Roman dress. Other decorative works engaged his pencil, and among them was a 'Shakspeare and the Muses' over the proscenium of the new Theatre in Covent Garden; but the demand for this kind of decoration was slackening; his manner had lost its novelty; patrons would not buy his history or conversation pieces, and so he was driven to portraiture, on which he flourished for the next few years, contriving, besides living handsomely, to put by 5000*l*. Walpole records that for a whole length he was paid 60 guineas. Among the portraits he painted whilst here were Caroline, Queen of George II., and the three eldest princesses; Prince Frederick, eldest son of George II., the Poor Fed of the satirists, who is represented by the courtly painter as seated, with a volume of Homer in his hand, whilst a couple of Loves are hovering over him; the portrait is now in Windsor Castle. Amigoni left London in 1739 for Venice, where he painted several works, the most admired being a 'Visitation' for the monastery of S. Filippo. In 1747 he went to Spain, was made court painter to Ferdinand VI., and painted for him several pictures which met with much applause. He died at Madrid in 1773.

Amigoni was sufficiently praised in his own day and immediately after. Lanzi speaks of his fertile and animated genius, and grandeur and beauty of style; and Zanetti eulogises the clearness and charm of his colour; but in truth he was wholly wanting in genius, and in manner feeble and conventional. The only interest he now retains for us arises from his connection with English art during the early years of the reign of George II. He etched a few plates, but they are of little value. Heineken enumerates 127 engravings executed from his pictures, among them being many from his English portraits, some of which are prized by collectors.

AMLING, CARL GUSTAV, an eminent German engraver and designer, was born at Nürnberg in 1651. Having learnt to draw and engrave at home, he went to Munich, where he attracted the notice of the Elector, Maximilian II. of Bavaria, who sent him to Paris to complete his studies under F. de Poilly, one of the ablest engravers of the time. On his return to Munich he was made court engraver, and continued to reside in that city till his death in 1701. Amling enjoyed the reputation of being the best line-engraver in Germany. His style is, however, deficient in purity and vigour, and the drawing is frequently incorrect. The most important, and perhaps the best, of his historical prints, are 13 of the series of 22 from the tapestries designed by P. Candido, in the palace at Munich. But his historical plates are inferior to his portraits, some of which are highly prized: the best are those of the Electors; several are from drawings made from the life by himself. Heineken, who gives a full list of his engravings, says that he was a painter as well as an engraver.

AMORETTI, CARLO, a learned Italian, was born at Oneglia, in Genoa, March 13, 1741. The son of a merchant, he was intended for the priesthood, and at the age of 16 entered the order of St. Augustine. His progress in study was so satisfactory that while still young he was appointed professor of ecclesiastical law at the University of Parma; but a growing dislike to the clerical profession led him to petition the Pope for secularisation, which was granted in 1772, and having resigned his professorship, he was left free to apply himself to his favourite studies. At this time his bent was towards physical and natural science; he was united in close intimacy with Fortis, Soave, and Vanini, workers in the same field; and the post of tutor in the Cusani family at Milan enabled him to pursue his investigations under favourable circumstances. In 1775 Amoretti began, in conjunction with Padre Soave, a work that was intended to keep his countrymen acquainted with the progress of knowledge throughout the civi-

lized world by means of translations of memoirs and essays, either published or in MS., by distinguished writers, selected from the transactions of the chief learned societies. Of the 'Scelta di Opuscoli interessanti,' as it was called, 36 volumes were published in three years, when, fearing the accumulation of small volumes would be found inconvenient, the editors determined to change the form; and in its larger size, and under the title of 'Opusculi Scelti sulle Scienze e sulle Arti,' it was continued from 1778 to 1803, making 22 quarto vols. The work was of great value at the time of its publication, and may still be referred to with advantage.

Amoretti's first independent work was a translation, made at the suggestion of Fumagalli, of Winckelmann's History of Art, 'Storia delle Arti del Disegno presso gli Antichi,' 2 vols. 4to, 1779. It was received with great favour, and the credit he gained from it led Amoretti to write a life of Lionardo da Vinci, in the preparation of which he was able to make use of the MSS. of Lionardo preserved in the Ambrosian Library: "Memorie storiche sulla Vita gli Studi, e le Opere di Lionardo da Vinci," 8vo, Milan, 1784, and several times reprinted. In 1783 Amoretti was made secretary to the Società Patriotica di Milano, for the promotion of arts and agriculture, and he retained this office till the dissolution of the society in 1798. Before this happened, 1797, he was elected one of the "Dottori del Collegio Ambrosiano," or conservators of the Ambrosian Library, a position which greatly facilitated his researches. His attention had for some time been directed towards geography and the connected sciences, and in 1794 he published what has been generally considered the most valuable of his works, 'Viaggio di Milano ai tre Laghi.' The three lakes are of course Lago Maggiore, Lugano, and Como, and the book is an invaluable repository of information respecting the physical features of the district in which they are situated, as well as of the political and social condition of Milan. The work was several times reprinted, and Amoretti published in his 'Opusculi Scelti' some appendices to it, the results of subsequent journeys and investigations. In 1800 he published another important contribution to comparative geography, being an account of the first voyage round the world made by the fleet under the command of Magalhaens, from Pigafetta's MS. in the Ambrosian Library, 'Primo Viaggio intorno al Globo Terraqueo; ossia Ragguaglio della Navigazione alle Indie Orientale per la Via d'Occidente, fatta dal Cavaliere Antonio Pigafetta, Patricio Vicentino, sulla Squadra del Capitano Magaglianos negli Anni 1519-22; ora pubblicato per la prima Volta, tratto da un Codice MS. della Biblioteca Ambrosiana di Milano,' &c., 4to, Milan, 1800; with it was included an essay on navigation from a MS. bound up with Pigafetta's, and presumed by Amoretti to have been written by him. A French translation of the *Primo Viaggio*, by Amoretti, appeared the same year as the original. Amoretti also published both in Italian and French the voyage of Maldonado, the truth of which he stoutly maintained, but though convinced himself, he has convinced few besides. Two other works may be mentioned, 'Le Guide des Étrangers dans Milan, et aux Environs,' 2 vols. 12mo, Milan, 1805, a well arranged and useful guide, written by Amoretti in French; and a reprint of several papers on the use of the divining rod in searching for water and minerals, 'Della Raddomanzia ossia elettrometria animale ricerche fisiche e storiche,' 8vo, Milan, 1808. He also published later various papers on coal, lignite, animal electricity, &c., and took some part in a periodical commenced in 1808, under the title of the 'Giornale della Società d'Incoraggiamento delle Scienze e dell'Arti stabilita in Milano.' Amoretti was created a Knight of the Iron Crown in 1805; he was subsequently a member of the Council of Mines, and was elected member of the Institute of Italy. Beyond barren honours, his various and most useful labours met, however, with but little recompense, and he died, as he had lived, in comparative poverty, March 25, 1816.

AMPÈRE, JEAN-JACQUES-ANTOINE, a distinguished French writer, the son of the eminent mathematician and physicist, ANDRÉ-MARIE AMPÈRE [E. C. BROS. Div. vol. i. col. 195], was born at Lyon, August 12, 1800. He was educated at Paris under the supervision of his father; studied philosophy under Cousin; read diligently English and German literature, and evinced a decided inclination for a literary life, which his father fostered. The young Ampère ranged himself along with the brilliant band of literary men who united liberalism in politics with freedom in the forms of philosophy, poetry, and romance. He was one of the recognised circle at Madame Recamier's; was one of the staff of the 'Globe' under Guizot's editorship, and a welcome contributor to other liberal and literary journals. In the early part of 1830 he was invited to lecture on literature at

the Athenée of Marseille, and he published the introductory discourse under the title of 'L'Histoire de la Poésie,' 8vo, Marseille, 1830. The course itself laid the foundation of a work published three years later, 'De la Littérature française dans ses rapports avec les littératures étrangères au Moyen Age,' 8vo, Paris, 1833; but M. Ampère was recalled from Marseille to Paris by the events which followed the revolution, and acted at the Sorbonne as substitute for M. Villemain and M. Fauriel. In 1833 he was appointed professor of literature in the College of France, and his lectures were among the more attractive in that brilliant period of the Parisian professorships. The substance of the courses appeared in 'L'Histoire littéraire de la France avant le douzième siècle,' 3 vols. 8vo, 1839-40; and 'Sur la Formation de la Langue française,' 3 vols. 8vo, Paris, 1841.

But while filling the chair at the college, M. Ampère continued to be a frequent contributor to newspapers and periodicals. He also made several long journeys, of some of which he gave an account in the 'Revue des Deux Mondes,' republished in 2 vols. 8vo, 1834, under the title 'Littérature et Voyages (en Allemagne, en Scandinavie, &c.),' 3rd ed. 1863. Later M. Ampère published notes of his visits to Italy, Egypt, Nubia, &c. Among other fruits of these journeys and literary researches made whilst pursuing them, may be mentioned 'la Grèce, Rome et Dante, Études littéraires d'après Nature,' 12mo, Paris, 1848; the 'Promenade en Amérique,' of which a 3rd edition in 2 vols. 8vo appeared in 1868; and the most important of all his works, 'L'Histoire Romaine à Rome,' of which the greater part was first published in the 'Revue des Deux Mondes,' but which as a separate publication forms 4 vols. 8vo, 1856-64, the last two volumes being posthumous. This work, on which M. Ampère's fame will perhaps ultimately rest, exhibits extensive and varied erudition, keenness of perception and observation, much richness of illustration, and an attractive style; but there is a want of grasp and concentration which renders the book unsatisfactory and wearying as a whole, however charming and often brilliant may be separate parts. Much of this may, however, be attributed probably to the piecemeal way in which it was prepared for publication in the pages of the 'Revue des Deux Mondes.' Other publications of M. Ampère were his 'Heures de Poésies,' and 'César. Scènes historiques,' 8vo, 1859.

M. J. J. Ampère was elected member of the Académie des Inscriptions in 1842; succeeded M. A. Guiraud at the Académie Française in 1847; and was made officer of the Legion of Honour in 1846. He died on the 27th of March, 1864. His successor at the Institute was M. Prévost-Paradol.

AMSDORF, NICOLAUS VON, the son of noble parents, was born on the 3rd of December, 1483, at Zschepe, a village near Wurzen, in Saxony. He entered the University of Wittenberg in 1502—the year of its foundation by Frederic, Elector of Saxony—as a student of divinity, and was appointed professor in that faculty in 1511. He became a warm friend and partizan of Luther, whom he accompanied to the disputation of Leipzig in 1519, and in 1521 to the celebrated diet of Worms, on his return from which Luther was carried off with friendly violence to the castle of Wartburg. On the recommendation of Luther, who had reappeared at Wittenberg in the spring of 1522, Amsdorf was appointed in 1524 superintendent and minister at St. Ulrich, in Magdeburg, where he devoted himself with his usual zeal to the propagation of the Reformation. In 1531 he was employed in quelling the religious troubles that had broken out in the imperial town of Goslar; in 1534 he introduced the new religious doctrines into the principality of Calenberg; and in 1537 was one of the framers and signatories of the "Articles of Schmalkalden." On the 20th of January, 1542, Amsdorf was consecrated Bishop of Naumburg by Luther, in presence of the Elector and his brother, John Ernst, Duke of Saxony. This appointment was made on the condition that the sovereignty and temporal rights over Naumburg, which had hitherto belonged to the bishops, should be exercised by the Elector; whilst Amsdorf was to content himself with the discharge of the spiritual functions of the office. Such an arrangement was regarded by the Emperor and the Roman Catholic party as a breach of the constitution of the Empire; yet Amsdorf was maintained in his see by the Protestants till 1547, when the defeat and capture of the Elector, John Frederic, on the field of Mülberg, compelled him to retire to Magdeburg. Here he continued his activity in the interests of the Reformation, and was frequently involved in controversy with other theologians. Against Matthias Flacius he maintained that original sin was nothing substantial, but only a strong accident; and, in a dispute with George Major, he went so far as to maintain that good works, far from being necessary, were pre-

judicial to salvation. In 1552 Amsdorf was appointed superintendent and ecclesiastical counsellor at Erfurt, the residence of the sons of the Elector, John Frederic, who was still in captivity, and who was not restored to liberty till 1554, in which year he died, his last moments being soothed by the consolations of Amsdorf. Although he never recovered the see of Naumburg, Amsdorf continued to receive from his friends the title of bishop; and after having greatly contributed to the foundation of the University of Jena, which was solemnly established on the 2nd of February, 1558, he died at Eisenach on the 14th of May, 1565, in the 82nd year of his age. Amsdorf is the author of numerous theological pamphlets, which are now very rare. In some of these he treats of the doctrines of Christianity, and in others of matters of merely ephemeral interest and significance. The greater part of his productions have a controversial character. He took an active part in Luther's translation of the Bible, and was the editor of the second edition of Luther's works, to which he furnished a preface. The only work which, in addition, it is necessary to particularise as having been written by Amsdorf, is one of considerable historical interest, entitled 'Ein Kurzer Auszug aus der Chronica Nauderi, wie untreulich die Päpste mit den Römischen Kaisern gehandelt,' Magdeburg, 1534, 4to ('A Short Extract from the Chronicle of Nauclerus, to show how unfairly the Popes have acted towards the Roman Emperors').

AMYRAUT, MOYSE (Latinized, Amyraldus, Moses,) was a member of an ancient family, and born at Bourgueil in Touraine, in September, 1596. His father designed him for the legal profession; and reluctantly consented that he should enter upon a course of theological studies at Saumur. These being completed, Amyraut was settled as minister successively at St. Aignan and at Saumur, in the university of which city, soon after his settlement there, he was, in 1633, appointed professor of divinity. Having been deputed, in 1631, to represent the synod of Charenton in laying before the king their remonstrances against certain infractions of the edicts of pacification made in favour of the Protestants, Amyraut, by his firmness and tact, succeeded in placing the Protestant clergy on the same footing with the Roman Catholics, so far as permission to stand in the royal presence was concerned. Previously, the Protestants had been required to approach the king on their knees; and the address which Amyraut displayed in forcing the establishment of a better precedent, won for him the high consideration and permanent regard of Cardinal Richelieu. But Amyraut was the occasion of a protracted and virulent controversy amongst the Protestants themselves. In a work conceived and produced in the interests of peace, he endeavoured to reconcile the predestinarianism of Calvin with the doctrine of universal grace. To Du Moulin and other Calvinistic divines, the work seemed to impugn the decrees of the council of Dort, and to promulgate the heresy of Arminius; so that the question of the writer's deposition was agitated before the synod of Alençon. After an able defence Amyraut was honourably acquitted; but he was enjoined for the future to be silent on the matter in controversy. With this condition his sense of the justice of his cause did not allow him to comply; and when his contumacy was brought to the notice of the national synod of Charenton, that body procured an amicable compromise, or "holy amnesty," which left Amyraut at liberty to defend his position against the attacks of foreign adversaries. The first use he made of this concession was to publish an answer to the attack of Spanheim, in his work, in three volumes, on universal grace. On the same side had enlisted also Rivet, Des Marets, and other writers, whilst Amyraut was supported by the talents of Daillé, Mestrezat, Blondel, and Claude. In the long run the opinions advanced by Amyraut gained the ascendancy, and were so generally adopted in France as to be publicly received by the universities of the Huguenots, with whose dispersion, after the revocation of the edict of Nantes, they rapidly spread through Holland and other countries of Protestant refuge. Amyraut forfeited nothing of personal respect by the part which he took in this controversy. His Protestant opponents esteemed and venerated the intrepid advocate of a creed they repudiated; whilst from the highest dignitaries of the Roman Catholic church, including Richelieu and Mazarin, he received substantial marks of friendship and confidence. The favour of the latter may have been due in great part to the emphasis with which Amyraut publicly maintained the doctrine of implicit obedience to the sovereign authority. To these views he gave prominence in his 'Apology for the Protestants,' published in 1647; and in 1650, in a work on the sovereignty of kings, occasioned by the execution of Charles I.

BIOG. DIV.—SUP.

of England, as well as in the preface to his Latin version of the Psalms, dedicated to Charles the Second. Yet upon occasions when conscience compelled him to opposition, Amyraut could boldly and successfully withstand the orders of the government. He died in July, 1664, leaving behind him an enviable reputation for learning, judgment, amiability, candour, and conciliation; and for a charity which found expression in constant and liberal benefactions to the poor, without distinction of creed. He was a voluminous author; and wrote with equal facility in Latin and French. The principal of his writings not already mentioned are the following:—'A Treatise on Religion,' 1631; 'On the Nature, Extent, &c., of the Gospel,' 1636; 'The Exaltation of Truth and the Abasement of Reason,' 1641; 'On Separation from the Church of Rome' (Latin), 1647; 'Irenicon, designed to promote the Re-union of the Calvinists and Lutherans,' 1648; 'Christian Morality,' 6 vols. 8vo, a work of singular merit, composed with great care; 'A Treatise on the Millennium'; 'A Treatise on Dreams' ('Discours sur les Songes divins, dont il est parlé dans l'Ecriture,' Saumur, 1659); and a Poem entitled 'Apology of St. Stephen for his Judges.'

ANCHIETA, JOSEPH DE, Jesuit missionary, called the Apostle of Brazil, was born at Laguna in Teneriffe, in 1533. Having studied at the University of Coimbra, he entered the Society of Jesus at the age of seventeen. In 1553 he went with six other Jesuits to Brazil, where he acted as schoolmaster in a small mission colony called San Paolo. They suffered many hardships, but succeeded in converting many of the natives. Anchieta studied the language of those around him, and wrote a grammar and vocabulary of the Tupinamban tongue. Having no books, he wrote out all the lessons for his pupils; converted popular songs and ballads into hymns; prepared forms for confession and catechism; and at the same time acted as physician and general adviser. In 1562 he succeeded in establishing a mission, and strengthening the Portuguese authority, at Espiritu Santo. On returning to San Paolo, in 1564, he wrote a poem to the Virgin, consisting of 5000 Latin verses. He was appointed provincial in 1578, was unceasing in his labours for the conversion of the natives, among whom he continued to reside till his death, which occurred on June the 9th, 1597, at the village of Reritiba, near Espiritu Santo. Anchieta left behind him a reputation among the natives and converts for powers little less than miraculous. Out of ten works attributed to Anchieta, only two have been published separately,—a grammar of the Tupi language; and the poem on the Virgin. A Latin memoir by him on the natural products of Brazil has been printed by the Academy of Sciences.

ANDERSON, REV. JOHN, was born in 1671, and educated at St. Andrews, where he took the degree of M.A. This is nearly all that is known of his early life, for twenty-five years of which he states, in one of his works, he had resided in Edinburgh. He was preceptor to John Campbell, second duke of Argyll; and, from a satirical expression of "Curst Calder," one of his literary opponents, who calls him "an old pedantic dominie," it is probable that he had been at one time a schoolmaster. In 1704, he was appointed minister of Dumbarton; and about the commencement of the year 1717, received an invitation from the people of Glasgow to become one of their ministers. But the ministers of Glasgow, upon whom he had reflected in a letter addressed to Walter Stewart of Pardovan, withstood his appointment, which, after being canvassed in the synod, was at length carried into effect in 1720, by his translation to the North-west or Ram's Horn Church, in Glasgow. Almost immediately after the confirmation of his appointment, he died, leaving a reputation, to use the words inscribed on the monument erected by his grandson, of "a pious minister and an eloquent preacher, a defender of civil and religious liberty, and a man of wit and learning," who "lived in the reigns of Charles II., James II., William III., Anne, and George I." His literary activity was almost entirely controversial, and he appears as the advocate of Presbytery against Episcopacy, and labours to establish the Genevan, and not the English, origin of the liturgy which was used in Scotland for some years after the establishment of the Presbyterian discipline. The principal work of Anderson, and that by which he is at present chiefly known, is 'A Defence of the Church Government, Faith, Worship, and Spirit of the Presbyterians, in answer to a Book entitled "An Apology for Mr. Thomas Rhind,"' 4to, 1714.

ANDERSON, LARS. [ANDRÆ, LAURENTIUS, E. C. S.]

ANDERSON, ROBERT, a provincial poet of considerable celebrity, was born at Carlisle, February 1, 1770. Of poor parents and the youngest of nine children, he was educated in

a charity school till, at ten years of age, he was set to work with his brother a calico-printer. Having shown some talent for drawing he was apprenticed to a pattern drawer, but seems to have been harshly treated, especially during the last years of his term, which were spent in London. It was whilst here that he wrote his first verses, some ballads, which were purchased by the proprietors of Vauxhall Gardens. In 1796 he returned to Carlisle and shortly after published a volume of poems, which, however, attracted no notice. His first real success was with a ballad in the Cumberland dialect called 'Betty Brown,' which became very popular, and was followed by others of a similar description, until enough had accumulated to form a volume, 'Ballads in the Cumberland Dialect, by Robert Anderson, with Notes and a Glossary by Thomas Sanderson,' 8vo, 1805. The work passed through several editions, but from this Anderson, having sold the copyright, derived no advantage. He now took a situation at Belfast, where he remained several years. Returning to Carlisle he was persuaded to collect and publish his scattered verses, which accordingly appeared in 1820, in two volumes, accompanied by an autobiography of the poet, and an 'Essay on the Characters and Manners of the Peasantry of Cumberland,' by the author's friend Mr. T. Sanderson. During his last years the friends and admirers of the humble poet raised a subscription by means of which a monthly payment was made him sufficient for his support. He died at Carlisle, September 27, 1833, and was buried in the cathedral cemetery. The ballads and poems of Anderson afford clever, humorous descriptions of local manners and customs, told in the purest and raciest local idiom, and have consequently maintained their local popularity; but they have little originality, depth of feeling, or inherent power, and are not calculated to win renown on a wider stage.

ANDRADA, JACINTO FREIRE DE, a Portuguese writer, was born at Beja in Alemtejo in 1597. While abbot of the monastery of Santa Maria de Chaus, he aided in establishing John of Braganza as King of Portugal in 1640, and was a man of much social and political influence until his death, which took place at Lisbon, May 13, 1657. Andrada was a polished and witty writer of verses, in which he ridiculed the stilted style of the Portuguese poets of those times. His best work is a life of Dom João de Castro, viceroy of Portuguese India, 'Vida de Dom João de Castro, Quarto Visorey da India,' fol. Lisbon, 1651. This was the best biographical work in the language at the time it was written, and is still regarded as a model in Portuguese composition. It was translated into English by Sir Peter Wyche, folio, London, 1664.

ANDRADA E SILVA, JOSÉ BONIFACIO, a Brazilian politician, was born at Santos in Brazil in 1762. Having taken degrees in jurisprudence and natural philosophy at Coimbra University, he was sent at the government expense in 1790 to travel in Europe, in order to extend his knowledge in chemistry, mineralogy, and metallurgy. He was away ten years, during which time he visited France, Holland, Scandinavia, Germany, and Italy, and became acquainted with Fourcroy, Duhamel, Justeiu, Brongniart, and Werner. On his return to Portugal he was appointed general superintendent of mines, professor at Coimbra, and secretary of the Academy of Sciences at Lisbon. Returning to Brazil in 1819 he exchanged science for politics, and with his two younger brothers, Antonio Carlos and Martin Francisco, became mixed up in the proceedings connected with the establishment of Brazil as an empire independent of Portugal. As the principal author of the measures which led to this result, José was entrusted by the Emperor Pedro with the general direction of affairs; but the Andrada ministry did not long retain popularity or power. His ministry was dissolved in July, 1823, but in a few months the brothers were again restored. This time their measures led to a collision with the assembly. The military were called out, but the emperor intervened; the Andrades were all three arrested, placed on board a vessel of war, and carried to France, where they remained about five years. They returned to Brazil, were arrested on landing, but allowed to retire to their estates. A reconciliation soon, however, took place with the emperor, and Don Pedro, before his abdication in 1831, nominated José Andrada guardian of his children, including his infant son and successor. He remained regent till September, 1834, when, in deference to the popular demands, he resigned and retired into private life. He died at Rio, April 6, 1838. José Andrada wrote a few papers, in French and Portuguese, on the mines and mineralogy of Brazil, and some on economical subjects printed in the 'Annales de Chimie,' and 'Transactions of the Lisbon Academy,' as well as one or two political pamphlets.

*ANDRAL, GABRIEL, an eminent French physician, was born at Paris on the 6th of November, 1797. His father, Guillaume Andral, was a member of the Académie de Médecine, and had seen much active service as a surgeon in the French army. Gabriel Andral, being thus early accustomed to medical studies, became a doctor of medicine in 1821, and at the age of 25 was elected member of the Académie de Médecine, as well as assistant professor to the Faculté de Paris. Before the age of 30 he succeeded Bertin as professor of hygiene; an office which he exchanged in 1830 for that of professor of internal pathology. In 1839 he succeeded Broussais in the chair of general therapeutics and pathology. He was elected a member of the Institute in 1843; and in 1858 was made Commander of the Legion of Honour. Besides his acknowledged skill as a teacher of the medical sciences, Dr. Andral has written many professional works of great value. One is 'Clinique Médicale,' Paris, 1823-26; of which the fourth edition, in 5 vols. 8vo, appeared in 1840. Others are 'Précis d'Anatomie Pathologique,' Paris and Montpellier, 3 vols. 8vo, 1829; 'Cours de Pathologie interne, professé à la Faculté de Médecine, recueilli et rédigé par M. Amédée Latour,' Paris, 3 vols. 8vo, 1836; of which a second edition appeared in 1848. He has also published a valuable work, written in conjunction with Meriadec Laennec, 'Notes et Additions au Traité de l'Auscultation médiate de Laennec,' Paris, 8vo, 1837, and many memoirs in the medical journals, including an important series of investigations 'Sur les modifications de proportions de quelques principes du Sang.'

ANDREA PISANO. [PISANO, E. C. vol. iv. col. 843.]

ANDRÉE, ABRAHAM, an ecclesiastic who took an active part in the introduction of the Reformation into Sweden, was born in Angermannland, and after some foreign travel was appointed in 1576 rector of the School at Stockholm. Having resolutely opposed the attempt of King John, son of Gustavus Vasa, to re-introduce Roman Catholicism, Andrée, who had married the daughter of the first Protestant archbishop of Upsal, was dismissed from his rectorship. Andrée retired to the island of Aland, where he wrote and published a pamphlet exhorting the clergy to remain firm in the Protestant faith. The king ordered his arrest upon a charge of sedition; but he escaped into Germany, where he was supported for thirteen years by Swedish Protestants. In 1593 King John was succeeded by Sigismund, an avowed Romanist. The clergy of Sweden assembled at Upsal and took the bold step of unanimously electing Andrée to be their archbishop; and so strong was the national feeling that Sigismund was compelled to confirm the election. On the 19th of February, 1594, Andrée was consecrated as archbishop, and then he crowned the king. Later the regent, Duke Charles, having conceived an enmity towards Andrée, accused him in 1599, before the States, of complicity in seditious schemes; the archbishop was sentenced to deprivation, subject to reconciliation on the part of the duke, who however caused him to be imprisoned in the castle of Gripsholm, where he remained till his death in 1607. Archbishop Andrée published four works in Latin, on theological and controversial subjects; of which the one relating most closely to the events of his own life was 'Apologia pro Fugâ ex Regno Sueciæ,' Hamburg, 8vo, 1588. He also published a translation of a commentary on Daniel by Draconitis, and various Latin and Swedish writings of his father-in-law, Archbishop Laurentius Petri of Nereke.

ANDRÉE, GIOVANNI, a learned Italian canonist, was born at Mugello, near Florence, about the year 1272. After receiving rudimentary instruction at Bologna under his father, who kept a grammar school there, he studied canon law under Ægidius and Blaisio; and then Roman law under Syllimani and Malumbra. He was professor of the decretals at Bologna in 1302, and at Padua in 1307. Throughout the long period from 1309 to 1348, he occupied the post of professor of canon law at Bologna, where he was greatly respected, and his judgment much relied on. In 1326 he was arbiter in some internal national disputes; in 1328, and again in 1331, he went on an embassy to the Pope at Avignon; in 1334 he accompanied the papal legate to Florence; in 1337 he was sent on special embassies to Padua and Venice; and in 1340 he assisted Bologna with his advice in a time of distress. He was much valued by the authorities at Rome; for he tried to establish the papal temporal power in Bologna, and interceded with the magistrates to permit a Carthusian monastery to be established. He died in 1348. Of a family of four sons and four daughters, the youngest daughter, Novella, occasionally officiated for her father in lecturing when he was ill; and on these occasions a curtain is said to have been drawn before her, lest her beauty should

distract the attention of the students. Andræ lived almost an ascetic life, but was liberal to the church and to the poor.

Andræ was the greatest authority of the age on the subject of the decretals. He wrote several works, which are still valued for their learning, but more for the notices they contain of his legal contemporaries and predecessors. Among them were (1) 'Glossa in Sextum,' 2nd ed. Strasburg, 1742; a commentary on the sixth book of the decretals. (2) 'Novella in Decretales,' a commentary on the first five books of the decretals, folio, Rome, 1476; Venice, 1489; Pavia, 1504 and 1505; and Venice, 1581, &c. (3) 'Novella in Sextum,' Venice, folio, 1499, 1581, &c. (4) 'Questiones Mercuriales,' Venice, folio, 1499, 1581, &c. (5) 'Additiones ad Durantis Speculum,' a work valuable on account of the biographical notices of canonists and writers on forms of court, contained in the Proœmium. It was written about 1346. His minor writings are very numerous.

ANDRÆ, or ANDRESSON, GUDMUND, an Icelandic pastor and writer, was born about 1630 in the district of Midfjord. After keeping a school at Holum, he became deacon of Reinestad; and it was while holding this post that he wrote a book which greatly influenced his life. It was a defence of polygamy and concubinage—censuring laws which had been passed against those usages in 1564, called the 'Stora Dóm' (Great Doom of Judgment). MS. copies of the book were distributed, and it became very popular. Expelled from his deaconship by the Bishop of Holum, he returned home, and fell into great poverty. Here he wrote a work with the Greek title 'ἑαυτοῦ γινώσκω' (Know thyself). In 1649 Bielke, the newly-appointed governor, arrived in Iceland from Denmark. At the instigation of the bishop, the governor caused Andræ's case to be investigated by the Althing, or General National Assembly. Puzzled how to decide, the Althing remitted the matter to Copenhagen, whither the accused was taken. While under imprisonment, Andræ, who had been allowed a certain freedom of movement, accidentally fell out of a window, and, being unable to find the prison door, wandered into the royal nursery, which was close at hand. Speaking no Danish, and the domestics no Icelandic, he was unable to make himself understood, but was eventually conveyed back to prison. The king, hearing of Andræ's case through this singular adventure, appointed an ecclesiastical commission to report on the offending book. For this purpose it had to be translated from Icelandic into Latin; and it has been conjectured that the translation softened down some of the more offensive passages. At any rate, the report was so far moderate that, on admission of his fault and pleading penitence, he was pardoned on condition of never returning to Iceland. He accordingly remained in Copenhagen, was the next year (1650) admitted into the University of Copenhagen as royal bursar, and rose into favour at court. He died at Copenhagen of the plague in 1654. Andræ wrote many works, of which the chief is 'Philosophia Antiquissima Norvego-Danica dicta Voluspa, alias Edda Sæmundi,' a Latin translation of portions of the Voluspa, or the Edda of Sæmund, published under the care of P. J. Resenius, 4to, 1673. Resenius also published an Icelandic-Latin Dictionary, left in MS. by Andræ, Copenhagen, 4to, 1683, a work never of much value, and long superseded by better dictionaries.

ANDRÆ, JAKOB, an eminent Protestant theologian, was born at Waiblingen, Würtemberg, on the 25th of March, 1528. He was apprenticed to a carpenter; but manifesting superior intellectual qualities, he was sent to study theology at Tübingen under Sneppius. In 1546 he was ordained deacon at Stuttgart. Almost the whole remainder of his life was spent in theological controversy, either going to various places to take part in discussions between Catholics and Protestants, and Lutherans and Calvinists, or in writing on the points in dispute. Some of these proceedings lost him his deaconship at Stuttgart. He died at Tübingen on the 7th January, 1590. Andræ's chief work was in aiding other theologians to write the 'Liber,' or 'Formula Concordiæ,' a summary of articles of faith for the Lutheran Church. He travelled thousands of miles to procure the assent of influential persons—princes, prelates, clergy, nobles, and corporate bodies—to this summary. This work effected a permanent breach between the Lutherans and Calvinists. Andræ's writings, both in Latin and German, are now seldom consulted. The list in Heindreich ('Pandectæ Brandenburgicæ,' pp. 172-176) fills six folio columns. Jakob Andræ's grandson, Johann Valentinus Andræ, published a life of him, in Latin hexameters, Lüneburg, 1649, 18mo.

ANDRÆ, LAURENTIUS, or LARS ANDERSON, a Swedish theologian, who aided largely in the introduction of the Reforma-

tion into Sweden, was born in the latter part of the fifteenth century, according to some authorities in 1480. He studied at Rome, was ordained priest, and in 1522 was archdeacon of Strengnäs, when he was converted from Catholicism to Protestantism by Olof Petri and Laurentius Phase, two Swedes who had visited Luther. His advocacy of the new doctrine attracting general attention, he was in 1623 sent for by the king, Gustavus Vasa, whose favour he secured, and who made him his chancellor. From this time he became the king's chief adviser as to the best mode of introducing the Reformation into Sweden. In conjunction with Olof Petri, Andræ published the first Swedish translation of the New Testament in 1526; the Roman Catholics also published a translation; and each party inveighed bitterly against the errors in the work of the other. Gustavus Vasa having decided in favour of the Protestant version, a fierce struggle ensued between the contending theologians; but the peasantry at length sided with the king and the Reformation. In 1529, Andræ took the post of president of an assembly of the clergy at Örebro, convened to settle a new code of doctrine by compromise. In 1531 he was a candidate for the first Protestant Archbishopric of Upsal; but Laurentius Petri was elected. Some years after this, Andræ fell into disgrace for concealing his knowledge of a plot designed for assassinating the king: his reticence being due to the sacredness of the confessional. His life was spared, but his property was confiscated, and he lived twelve years in poverty and obscurity. He died at Strengnäs in 1552. Besides his share in the translation of the New Testament, Andræ wrote 'En kort Underviisning om Troona och godha Geringar;' Stockholm, 8vo, 1528 (A Short Instruction respecting Faith and Good Works), chiefly a compilation from the writings of Luther.

ANDREANI ANDREA, called MANTUANO, a celebrated Italian engraver, was born at Mantua about 1540. He engraved on copper, but his celebrity depends on his wood engravings in chiaroscuro in the manner of Ugo da Carpi. His finest work is the series of nine prints after the cartoons of the Triumph of Julius Cæsar by Andrea Mantegna, now at Hampton Court, with a tenth containing the portrait of Vincenzo Gonzaga, Duke of Mantua. The drawings were made on the wood by Bernardo Malpizzi; and the work is a masterpiece in its kind, but a fine and uniform set is very rare. Another great work is 'The Triumph of Christianity,' in eight plates after Titian. His other more important prints include 'The Pavement of the Cathedral of Siena,' designed by Beccafumi, in eight plates (also extremely rare in a perfect state and highly prized); 'The Deluge,' and 'Pharaoh overthrown in the Red Sea,' both after Titian, and both large prints in four sheets each; 'Christ before Pilate,' in two large plates, from a bas-relief by Giovanni de Bologna; and 'The Adoration of the Magi,' after Parmigiano, &c. Besides a block for the outline and deep shadows, Andreani used two or three for the middle tints and lights, and thus produced at times a wonderfully rich as well as powerful and painter-like effect. He has been charged by many writers with effacing the signatures on blocks by other engravers and substituting his own; but though Bartsch and others have pointed out blocks which have been so treated, no evidence has been adduced to prove that Andreani was the culprit. As Mr. Wornum has observed, "it is quite as possible that the imposition is the work of some printseller, as of Andreani." Indeed the prints being inferior, it is more likely that an unscrupulous dealer would seek to profit by the popularity of Andreani's name, than that he should imperil alike his fame as an artist and his credit as a man. Andreani died at Rome in 1623.

ANDREOLI, GIORGIO, called GIORGIO DA GUBBIO, or MAESTRO GIORGIO, was by profession a sculptor, but is now chiefly famous as the maker of that variety of Majolica earthenware known as Gubbio ware. Andreoli was a native of Pavia; attained a good position as a sculptor; executed several retables, or carved altar-pieces, for churches and chapels in Pavia and its neighbourhood; modelled some figures in the manner of Della Robbia; and painted some earthenware of the then popular kind now familiar as Majolica. In 1519 he settled in Gubbio, and established there a manufactory for artistic earthenware, in the preparation of which he was assisted by his brothers Salimbene and Giovanni. Andreoli's ware must have found appreciative purchasers. Every public collection in Europe contains examples, and the specimens in private hands appear to be inexhaustible. Andreoli himself was a prosperous man. He was placed in the first rank of citizens, and was made gonfalonier. The date of his death is unknown: he was alive in 1552. Commonly the manufactory is stated to have been carried on by

Maestro Giorgio, from 1519 to 1537; but specimens of Gubbio ware are extant with his mark and the date 1541. If we may judge by the dated specimens, there must have been great fluctuations in the production, those of particular years being very numerous, while for other years they are just as scarce, and for some years not a specimen is known. Giorgio's pottery differs from the ordinary majolica in possessing a brilliant iridescent lustre, produced by the use of a stanniferous glaze, which, if not exclusively his, was of a better kind, and used with a happier effect than by any other maker. The articles are similar to those of the ordinary majolica, alike in shape and in the subjects painted on them. Andreoli's ware is, however, as a rule, better in form than the average, and the painting is generally good of its kind, and characteristic. Some of the female heads, portraits executed for admirers, as love gifts or bridal presents, are executed with rare spirit. Very fine specimens obtain extremely high prices, from 100 to 150 guineas having been given for a plate, and 20 to 25 guineas being an ordinary price. But the Gubbio ware has met the fate of ordinary majolica. Ingenious Italian fabricators copy the old ware with such accuracy, and imitate the marks of age and accident with so much skill, that even experienced dealers and experts have been frequently deceived by their productions, and credulous collectors have been victimised wholesale. The South Kensington Museum possesses a good many specimens with Maestro Giorgio's mark. Andreoli had a son, VINCENZIO, who followed his father's calling: he is sometimes referred to as Maestro Cencio, but little is known respecting him.

ANDRES, JUAN, a learned Spanish Jesuit, was born at Planes, in Valencia, February 15, 1740, the eldest of eleven sons, of a noble family. After studying at the College of Valencia, he entered the Society of Jesuits as a novitiate, at Tarragona, in 1764; and prosecuted his further studies in philosophy under the Jesuit José Bosch at Gerona; and in theology, Greek, Hebrew, Italian, and French, at the Theological College of Valencia. He became professor of rhetoric and poetry in the University of Gandia, Valencia. Thus passed the first twenty-seven years of his life. In 1767, the Jesuits were expelled from Spain; they took refuge in Corsica, where they underwent many privations. Andres opened an academy at St. Bonifazio; and in 1768 removed to Ferrara, where for some years he taught philosophy in an academy. In 1773 appeared his first treatise: 'Prospectus Philosophiæ universæ Disputationi propositæ in Templo Ferrariensi,' which was highly valued for its arrangement, perspicuity, and variety of theses. After acting as tutor to the son of the Marquis Bianchi, at Mantua, he learned English, German, and Arabic, and visited the principal libraries of Italy and Germany to collect materials for his great work, a history of science and literature. In 1786 the first volume appeared, and brought him not only fame, but four pensions from sovereigns and princes. Being obliged to withdraw from Mantua during the siege, in 1796, he resided successively at Colorno, Pavia, Parma, and Naples. Between that date and his death, at Naples, on 12th January, 1817, he filled at different times the posts of director of studies at the University of Pavia, superintendent of education at Parma, preacher and teacher at the re-established College of Jesuits at Naples, prefect of the Royal Neapolitan Library, head of the educational establishments of that kingdom, and perpetual secretary of the Accademia Ercolanese de Archeologia.

Juan Andres published numerous works of more or less importance; chief among them was 'Dell' Origine, de' Progressi, e dello Stato attuale d'ogni Letteratura,' 9 vols. 4to., Parma, 1782, &c., an examination into the history of all branches of human knowledge. Of this work, on which he bestowed a vast amount of erudite labour, there have been seven Italian editions, one Spanish, one German, and one (first volume only) French. Sismondi gives it credit rather for a vast amount of accumulated knowledge than for critical acumen; and it involved the author in a controversy with Tiraboschi. Among other works by Andres were:—'An Essay on Galileo's Philosophy'; 'A Defence of Galileo's demonstration of the descent of falling bodies'; and other essays on the causes of the slow progress of science at the time in which he wrote; on the Music of the Arabs; on the origin and changes in the Art of Teaching the Deaf and Dumb to Speak; and on the state of Spanish Literature. Nearly twenty other works by Andres are known to exist, though unpublished: many of them pointing out the value of ancient MSS. with which he was acquainted.

ANDRES DE UZTARROZ, JUAN FRANCISCO, a voluminous Spanish writer of the 17th century, was born at Saragossa about 1606. Very little is known of the personal events of his life. After studying in the university of his native

city, he in 1638 took the degree of doctor of laws, and in 1647 was appointed chronicler of the kingdom of Aragon. He was employed until his death at Madrid, 18th August, 1653, in arranging, classifying, and indexing the national archives. This official duty, however, left him sufficient time to write nearly a hundred works, mostly relating to historical and antiquarian subjects. Only a minority of these were published. The most important were:—'Annales de la Corona y Reyno de Aragon,' and 'Progresos de la Historia en el Reyno de Aragon.' At his suggestion, a collection was formed of writers in Aragonese history; to aid which he visited all the libraries and collections in the kingdom, adding books to the royal collection, and obtaining extracts from others. Andres was distinguished as an historian, antiquary, philosopher, jurist, and poet, but chiefly in the first two capacities.

ANDROS, SIR EDMUND, governor of New England, was born in London, 6th December, 1637; his father being marshal of the ceremonies to Charles I. Young Andros shared the exile of the royal family; fought under Prince Henry of Nassau in Holland, and held many courtly and military appointments between 1660 and 1674. In this last named year he was appointed governor of New York, recently acquired from the Dutch. His administration was active and vigorous. He got into disputes with the leading merchants, and was summoned to England; but his policy was approved, and he received the honour of knighthood. He was successful in defending the colony from the attacks of Indians. In 1686 he was appointed by James II. governor of Massachusetts, New Hampshire, Maine, New Plymouth, Rhode Island, and Connecticut, under the collective name of New England. He gradually became unpopular by his haughty and arbitrary manner; by levying taxes in the king's name alone; enforcing church of England ceremonies and services; and discountenancing charters previously given to the colonies. On the reception of the news of the abdication of James II., and the landing of William of Orange, Andros was seized and imprisoned by the Boston men. After being kept for some time under arrest, he was sent to England in February, 1690; but the charges made against him were allowed to drop. In 1691 he published a vindication of his conduct. Between 1692 and 1698 he was governor of Virginia, where he effected much benefit by encouraging the cultivation of cotton, and promoting manufactures. In 1704 he was made lieutenant-governor and bailiff of Guernsey. He died at Westminster, 24th February, 1713.

(W. H. Whitmore, *Memoir of Sir Edmund Andros, Knt., Governor of New England, New York, and Virginia*. Prefixed to the *Andros Tracts* of the Prince Society of Boston, N.E., 4to, 1868. Allen; Beverley; Bancroft, &c.)

ANDROUET DU CERCEAU, JACQUES, an eminent French architect, and the author of several important works on architecture, flourished during the second half of the 16th century; but the year of his birth, and that of his death, are alike unknown. A recent biographical dictionary that boasts much and blunders often in its dates, gives 1592 as the year of Androuet's death, but he was alive in 1596. He is believed to have been born at Orleans, though La Croix du Maine says he was a Parisian. D'Argenville says he was one of those French architects who by the favour of Cardinal D'Armagnac were enabled to visit Italy in order to complete their education by the study of the beautiful remains of antiquity; that he was most impressed by the vestiges of the triumphal arch at Pola, in Istria, and that the coupled columns on each side of the arch served him as models alike in his designs, his writings, and his buildings. Coupled Corinthian columns on each side of a large arched opening recur frequently in Androuet's designs, as they do in those of many other architects of that and later periods, but it is too fanciful to speak of this as his fundamental principle of design, or to suppose that of all the works of antiquity which he saw and studied in Italy, this alone produced any fruitful impression.

We can find few dates to assist us in following Androuet du Cerceau's career as an architect: as an author, the materials are somewhat fuller. He appears to have found many excellent patrons, his books probably contributing to extend his credit as a learned architect, as well as an accomplished designer, at a time when a thorough acquaintance with the works of ancient Rome was regarded as the first essential in an architect. For private patrons Androuet erected the Hôtel des Fermes; the Hôtel de Sully; the Hôtel de Bretonvilliers; the Hôtel de Mayenne; and a part of that of Carnavalet. Appointed architect to the king, he commenced in May, 1578, by order of Henry III., the Pont Neuf, a work of great richness and importance; but the civil war

caused its discontinuance, and it was not finished till 1604, under the direction of Guillaume Marchand. By Henry IV. he was charged with the enlargement of the Louvre; and he designed and commenced, if he did not complete, the two grand pavilions of a single order. In 1596 he made the designs for the gallery of the Louvre, and its erection was confided to him. But religious troubles now intervened, as civil troubles had when he was at work on the Pont Neuf. Androuet was a Protestant: he would not abandon his creed; and he was obliged to quit France. He died in a foreign country; but where, and when, are now unknown.

Androuet du Cerceau was one of the leaders in that style of classic renaissance which has become so thoroughly the dominant style in Paris as to be generally considered the representative style of French architecture. Many of his buildings have been destroyed; others altered; but enough by his hand remains to show that—without commanding genius—he was an excellent architect, and that he knew how to impart to a palace a grandiose and palatial aspect.

The first of his numerous publications appears to have been that entered in the catalogue of Callet as 'Premières Etudes de Temples,' 8vo, with 50 plates, and without date, but published at Orleans before 1549. This was followed by 'Exemplaria Templorum Antiquo more constructorum,' folio, 40 plates, Orleans, 1549. 'Quinque et Viginti exempla arcuum partim ab Androuet du Cerceau inventa, partim ex veterum sumpta monumentis,' small folio, Orleans, 1549. 'Duodecim fragmenta structurae veteris,' 4to, 13 plates, Orleans, 1550. 'Liber de eo picturae genere quod Grottesche vocant Itali,' sm. folio, Orleans, 1550; this work met with great success; an augmented edition was published in two series, the first of 60 plates, in 1562, the other of 36 large plates, at Paris, in 1566, under the title 'Livre de Grotesques.' Vivenel says that at least five series are known of the small grotesques designed by Androuet; one series of 30 plates was engraved by Hans Siebmacher of Nürnberg, possibly after Androuet quitted France. 'Vetustissimæ Optices quam perspectivant nominant, xx. figuræ,' &c., sm. folio, Orleans, 1551. 'Livre d'Architecture contenant les Plans et Dessains de cinquante Bastiments tous différens: pour instruire ceux qui désirent bastir, soient de petit, moyen, ou grand estat,' folio, 50 plates, Paris, 1559: another issue appeared the same year, with the title, &c. in Latin; and, in 1611, an augmented edition, with 69 plates. 'Second Livre d'Architecture, contenant plusieurs et diverses ordonnances de cheminées, lucarnes, portes, fontaines, puis, et pavillons, pour enrichir tant le dedans que le dehors de tous édifices,' folio, 68 plates, Paris, 1561: a Latin issue being published the same year. These volumes, of considerable value when they appeared, and now of interest in connection with the history of French renaissance architecture, were followed several years later by a third 'Livre d'Architecture, auquel sont contenues diverses ordonnances de plans et élévations de Bastiments pour seigneurs, gentilshommes et austres qui voudront bastir aux champs; mesme en aucuns d'iceux sont desseignez les basse-courts, avec leurs commoditez particulières, aussi les jardinages et vergiers,' folio, 68 plates, (many copies, however, contain only 38 plates), Paris, 1582. In 1576 appeared the most important of all Androuet's publications, 'Des Plus Excellens Bastiments de France, auquel sont designez les plans de quinze [this in the first volume, as many more in the second] Bastiments et de leur contenu, ensemble les élévations et singularitez d'un chacun,' 2 vols. folio, with 130 plates, Paris, 1576–79. This work is now very rarely met with in good condition, with the plates perfect; and when so found commands a high price, as much as 650 francs having been paid for it at a sale. A second edition was published at Paris in 1607, but in this the plates are greatly worn, and some are mutilated; a third edition, dated Paris, 1648, is in all respects worse. The work is one that cannot be overlooked in an historical examination of French architecture, but the plates are poor in drawing, and the information sadly meagre and unsatisfactory. 'Leçons de Perspective positive,' folio, Paris, 1576: like the greater work just described, dedicated to "La très vertueuse Princesse," Catherine de Medici. 'Petit Traite des Cinq Ordres de Colonnnes,' sm. folio, 12 plates, Paris, 1583.

The plates in Androuet du Cerceau's various architectural publications were usually engraved as well as drawn by himself. But it has not until lately been noticed that he designed and engraved many other prints which were published by him, either separately or in series, and also engraved many from the designs of other artists. Of those drawn by himself, the first place may be assigned to a collection of 'Vases,' which appeared at Turin in 1587, and of which Vivenel enumerates 68 plates. About the

same time also appeared at Turin a series of 'Meubles' (buffets, tables, bedsteads, &c.), in 43 undated prints. From other designers, he engraved 'Les Divinités,' after Caraglio, in 20 plates, and the 'Histoire de Psyche,' after Raffaele, in 32 plates, &c. In all, M. Le Blanc attributes 485 plates to him. M. Callet made a collection of prints by him in 16 vols. folio, which at his sale was secured for the Bibliothèque Impériale at the price of 3700 francs (148l.).

(D'Argenville, *Vies de Fameux Architectes*; Callet, *Notice Historique sur la Vie Artistique et ouvrages de quelques Architectes Français du XVI. siècle*; Vivenel, *Catalogues des Livres, &c.*; Brunet, *Manuel du Libraire*.)

ANEURIN, a Welsh poet of the sixth century, sometimes termed "the Monarch of the Bards," is believed to have been born about 510, and to have been a son of Caw ab Geraint, a chieftain of the northern Britons of that part of Strath Clyde now called Cumberland. It has been suggested that Aneurin and Gildas the historian were the same person; but the opinion has now no adherent. Who Aneurin was is, however, very difficult to determine. According to the semi-mythological narrative, he was one of four Gododin chieftains who, at the defeat of the Britons by the Saxons at Cattraeth, escaped with life, all the other chiefs, 360 in number, being slain, with their leader and the bulk of the army. Aneurin was made prisoner, but released after a time by the son of a brother bard, Llywarch Hen, and took refuge at the court of King Arthur, in South Wales. Afterwards he joined the college of Cadog, formed a friendship with Taliesin the Bard, wrote his poems, and died about 560 or 570, as would seem, from a blow on the head by Eidyn. The poems ascribed to Aneurin were first printed in the 'Myvyrian Archaeology.' Their authenticity was impugned by Pinkerton, and defended by Sharon Turner. Later authors have written on each side, without having settled the question. Many, perhaps most, of the poems attributed to Aneurin are now admitted to be spurious; but that entitled 'Gododin' appears to be authentic. (See the article WELSH LANGUAGE AND LITERATURE, E. C., ARTS AND SCI. DIV., vol. viii., col. 855, &c., where the question is treated at length.) The earliest copy of Aneurin's poems occurs in the MS. called the 'Black Book of Carmarthen,' which is considered to have been written in the 12th century, whilst the diction is certainly of an earlier period. 'Gododin' is generally understood to be a lament over the defeat of the Britons at Cattraeth, and the chieftains slain there, but some Welsh writers conceive it to refer to an altogether different affair, one well-known author, the Rev. Edward Davies, even insisting that it relates to the massacre of the Welsh chieftains by Hengist at Stonehenge. Gray's translation of a portion of 'Gododin,' 'The Death of Hoel,' is well known. A translation of the whole was published by the Rev. E. Davies in his 'Mythology and Rites of the British Druids,' another version was published in 1820 by Mr. Probert; and neither of these being satisfactory, a third was issued in 1858 by the Rev. John Williams ap Ithel.

ANFOSSI, PASQUALE, an Italian dramatic composer, was born at Naples in 1729; but Fétis gives the date 1736. Having entered the Conservatorio at Naples, he first studied the violin, and then composition, under Sacchini and Piccini. His first opera, 'Cajo Mario,' was produced at Venice in 1769; his second, 'I Visionari,' at Rome in 1771; but he had no success until his opera, 'L'Incognita Perseguitata,' was produced in 1773. This work, besides possessing a certain degree of merit, was benefited in its success by the musical war then raging between the Gluckists and the Piccinists. The Gluckists hailed Anfossi as a rival to Piccini, and Anfossi himself appears to have behaved somewhat ungenerously to his old master. From this time he produced in rapid succession, at various Italian theatres, 'Olimpiade,' 'La Finta Giardiniera,' 'Il Geloso in Cimento,' and other operas. He conducted operas in Paris in 1781, and in London in 1782, but unsuccessfully. He produced his 'Il Trionfo d'Arianna' and 'Il Cavaliere per Amore' in Germany in 1783. Operas continued to pour from his pen, until the number reached nearly 50, all now forgotten. Being appointed Maestro di Capella at St. John Lateran, he composed many masses and motets, of which the best known are 'Laudate Pueri' and 'Laudate Jerusalem,' for a full orchestra. He also composed an oratorio, 'L'Assalone.' Anfossi died in 1797.

ANGELIS, PIERRE, French landscape painter, was born at Dunkerque in 1685; studied in Flanders, and afterwards at Düsseldorf, where was then the famous gallery of pictures, since removed to Munich. He came to England in 1712, and soon became a favourite. In 1728 he went to Rome, where he remained three years. He then left for England, but taking Rennes

in his way, was so well received that he decided to stay there; and there he died, in 1734. Angelis painted conversation pictures and landscapes with small figures. Walpole describes his manner as "a mixture of Teniers and Watteau, with more grace than the former, more nature than the latter;" and the description is true of his earlier works; his later productions were more ambitious and less pleasing. He copied many of Rubens' paintings, and aimed at reproducing his colour. He is now chiefly interesting from his residence in this country at a time when almost the only painters were foreigners, who were, however, preparing the way for a native school, and doubtless to a certain extent influenced its early character.

ANGHIERA, PIETRO MARTIRE DE, Italian writer, was born in 1455, at Arona, on Lago Maggiore. He went to Rome in 1477, where he lived ten years, under some sort of patronage from Cardinal Antonio Sforza and the Archbishop of Milan, but without filling any definite post. Removing to Spain in 1488, he lectured at Salamanca on Juvenal. Having gained favour at court, he in 1492 took orders, and was appointed instructor to the royal pages, and so continued for nine years. In 1501 he was sent on missions to Venice and to Cairo, on the return from which he wrote an account of Lower Egypt, '*Legationis Babylonicae, libri tres*,' printed with the Decade noticed below. Between 1502 and 1505 he was appointed member of the Council of India, apostolic protonotary for the pope, and prior of the cathedral church at Granada. He died at Granada in 1526. Anghiera is chiefly known for two works—(1) a collection of letters, extending from 1488 to 1525, published four years after his death; the letters are valuable for their personal details concerning eminent men of the period. (2) '*De Rebus Oceanicis et Orbe novo Decades*' (folio, Alcalá, 1530)—Decades of the Ocean, a history of the progress of American discovery from the first voyage of Columbus to 1525, a work that has been translated into French, German, and English. Anghiera's connection with the Spanish Court enabled him to treat this subject with effect and value.

ANGUIER, FRANÇOIS, a distinguished French sculptor, was born in 1604, at Eu, in Normandy. The son of a joiner, he early showed so much skill in carving in wood, that he was sent to Paris, and received into the atelier of the sculptor, Simon Guillain. He afterwards came to England, where he earned sufficient to enable him to proceed to Rome. There he studied a couple of years, and formed a close friendship with Du Fresnoy, Poussin, and Mignard. On his return to France he acquired the favour of the King, Louis XIII., who gave him apartments in the Louvre, and made him keeper of his cabinet of antiquities. He found ample employment, being regarded as one of the first sculptors of the day. Many of his works have been destroyed, but those which remain, though marked by the conceits of the time, justify the opinion of his contemporaries. His most celebrated work was the costly monument of Henri, last Duc de Montmorency, beheaded at Toulouse in 1632. It was erected in 1658, at the cost of the widow of Montmorency, in the Church of the Religieuses de Ste. Marie, at Moulins, of which it is still the most cherished ornament. It comprises a recumbent statue of the duke, armed; the duchess in mourning habiliments at his feet, seated statues of Valour and Liberty, while four columns support a semi-classical shrine, on which are a central cinerary urn, statues of Nobility and Piety, angels, &c. Other important works were the marble monument of the Cardinal de Bérulle, in the Oratoire, Rue St. Honoré; those of Henry Chabot, Duc de Rohan, and of the Duc de Longueville, in the Church of the Celestines, at Paris; the statues of J. A. de Thou and his wife, at St. André-des-Arcs; and the tomb of Jacques Souvré, Grand Prieur de France, at St. Jean-de-Latran. A marble statue of the Virgin, executed for the high-altar of the last-named church, was also greatly admired. François Anguier died at Paris, August the 8th, 1669.

ANGUIER, MICHEL, younger brother of the preceding, born at Eu in 1612, like him learnt to carve in wood at home, and studied sculpture under Guillain at Paris. He followed his brother to Rome in 1641, trusting to his industry for a maintenance. He found employment under Algardi, then in the height of his renown, and filled all his spare time in the study of the masterpieces of ancient art. In 1651 he returned to Paris, to assist his brother in the execution of the Montmorency monument and other works. The first independent production of Michel Anguier which secured attention was the model for a statue of Louis XIII., heroic size, which he was commissioned to cast in bronze for the city of Narbonne. Somewhat later he had the good fortune to be patronised by the Queen, Anne of

Austria, whose apartments in the Louvre were superbly decorated by him with statues, reliefs, garlands, carved framing for paintings, &c. He also executed for her, among other things, a Nativity, for the altar of the Church of Val-de-Grace, one of his finest works; a Pietà; the Attributes of the Virgin, &c. A marble crucifix for the Church of the Sorbonne, and 'Our Lord appearing to St. Denis and his companions,' the altar-piece for St. Denis-de-la-Châtre, are by some regarded as the best of his religious, and the sculptures on the Porte St. Denis (commenced in 1674) the most successful of his secular, designs.

Michel Anguier was elected member of the Academy in 1668, and at the same time appointed assistant professor; somewhat later professor, and in 1671 rector of the Academy. He died on the 11th of July, 1686, and was interred by his brother in the Church of St. Roch.

ANSALDI, INNOCENZIO, Italian painter and writer on art, was born in 1734, at Pescia, in Tuscany, and received an excellent education at the College of Florence. He had been intended for a learned profession, but his inclination for painting was so decided, that his parents yielded, and sent him to Rome, where he studied for some years. Returning to Florence, he executed many pictures for the churches of that city and elsewhere, and numerous easel pictures, some of which have found a place in the public collections. But though a graceful and accomplished artist, his works display little original power, and are now not much valued. His principal literary productions are—'*Descrizione delle Pitture, Sculture, ed Architetture delle Città e Subborghi di Pescia nella Toscana*,' 8vo, Bologna, 1772; '*Cataloga delle migliori Pitture, &c., della Valdinievole*,' printed in the '*Istoria di Pescia*;' a translation in verse of Du Fresnoy's Art of Painting, '*Il Pittore Instruito*,' published, with a memoir of Ansaldo by Canon Moreri, Bologna, 1820. He died in 1816.

ANSALDO, ANDREA, an eminent Italian painter, was born in 1584, at Voltri, in the Genoese territory. He was a scholar of Orazio Cambiaso, of Genoa, but by frequent copying of the works of Paolo Veronese, of whom he was a devoted admirer, he soon surpassed not only his master, but most of the other painters in Genoa. On leaving Cambiaso he returned to Voltri, and painted the Decollation of St. John the Baptist for the church of San Rocco, and two others for the Church of SS. Niccolò ed Erasmo, which were greatly admired, and produced numerous commissions. He painted both in fresco and oil, and is especially commended by Lanzi for "his great talent in the decoration of the vaultings of churches, which may be regarded as the highest grade of the art of painting;" Ansaldo, he adds, "is one of the few masters who have painted both much and well." His most celebrated works in this class are—'*San Carlo Borromeo Staying the Plague at Milan*,' in the church of SS. Niccolò ed Erasmo; '*St. Ambrose Absolving the Emperor Theodosius*,' for the oratory of S. Ambrogio; '*The Martyrdom of S. Sebastian*,' an altar-piece for the cathedral of Cadiz; '*The Last Supper*,' for the oratory of S. Antonio Abate, at Genoa, which was regarded as uniting the splendour of Venetian colour with the detail and finish of the Dutch masters. His frescoes of '*The Assumption of the Virgin*,' in the cupola of the Nunziata, were also greatly esteemed, but having become injured by damp, they were repainted in 1700 by Gregorio de' Ferrari. His best works in a different class are some frescoes in the Spinola Palace, representing the exploits of the Marquis Federigo Spinola in Flanders. Ansaldo's success excited the jealousy of rival artists. He was wounded by Giulio Benso, previously the leading artist of the school, who had painted some frescoes in the choir of the Nunziata, which those painted by Ansaldo in the adjoining cupola were supposed to have eclipsed; but the rivals became afterwards fast friends. Some time later Ansaldo received a more serious wound, from an unknown hand. During his confinement from this wound he wrote a comedy. He died at Genoa in 1638.

ANSELME, or ANSEL, of LAON (Latinized, Anselmus Laudunensis), and generally known as Scholasticus, was born before the middle of the 11th century, at Laon, a town of France, which was then the capital of the Pays Laonnais. His parents were agricultural labourers. He is supposed to have been sent to the abbey of Bec to study under St. Anselm, who was then prior of that abbey. About the year 1076 Anselme began to teach publicly in Paris; and to him has been attributed the revival of literature and of the study of theology which now began to distinguish that capital. He may therefore be considered one of the founders of the University of Paris, for he was the earliest teacher of the "school of Paris," from which sprang the university. Before the commencement of the 12th century, Anselme returned to his native town of Laon, to superintend the schools

connected with the cathedral church there, of which he had been elected chancellor, or scholasticus, and which, under his direction, presently became the most celebrated in Europe. The teaching of Anselme was aimed first and especially at the heart; and his theology consisted of a simple exposition of the Holy Scriptures, supported by the authority of the Fathers, whom he studied all his life. His brother Raoul, or Radulphe, who taught the *Literæ Humaniores* and Dialectic, seconded him in his system of teaching. Students thronged to Laon from Italy, Spain, Germany, England, and the extremities of the north. Men already advanced in years, and who had long been teachers,—as professors or bishops—were fain to repair to Laon and there to become pupils of the illustrious brothers. “The school of Laon was almost as celebrated in its age under Anselme, as the school of Alexandria, under Origen.”

Anselme died on the 15th of July, 1117, and was buried in the abbey of St. Vincent; and an epitaph was placed on his tomb, which has been erroneously supposed by some to be an epitaph upon Anselm of Canterbury. The works of Anselme have all been attributed to various authors, particularly to Anselm, the Archbishop of Canterbury; but the authority of manuscripts, which date up to the time of Anselme of Laon, proves that he was the author of the following works:—An interlinear gloss upon all the Old and New Testament, in which the text of Scripture is explained by short notes, drawn chiefly from the Fathers, a work which furnished abundant material to subsequent expositors of scripture; A Commentary on the Song of Songs, and on the Apocalypse; Commentaries on St. Matthew; on the Psalms; and on St. John.

ANSELME DE SAINTE-MARIE, commonly called *Le Père ANSELME*, a learned writer on genealogy, was born at Paris in 1625. His original name was Pierre de Guibours, but he adopted the name by which he is known on entering the order of Barefooted Augustines, in 1644. His life was the most uneventful possible. It was spent in his convent, and he conformed to all the observances and austerities of his order, but he was relieved from monastic duties in order that he might pass his days in the undisturbed pursuit of his researches. He died at Paris, January 17, 1694. His great work is the *Histoire généalogique et chronologique de la Maison royale de France, et des grands officiers de la couronne*, Paris, 2 vols. 4to, 1674. Father Anselme for the remainder of his life laboured at the revision of the history, and after his death his friend Du Fourny, and later the Augustine Fathers, Ange de Ste. Rosalie and Simplicien (Raffard and P. Lucas), and after the death of Simplicien, the Father Alexis (Pierre Caquet) continued the task. The result of their labours was the publication of a greatly enlarged and improved edition, in 9 vols. folio, Paris, 1726-33. This is the best edition; other editions appeared in Paris (2 vols. folio, 1712) and at Amsterdam (folio, 1713), but they are very inferior. The value of the work was shown by the great use made of it by Moreri and Bayle. It is in truth difficult, as the last editor observes, to estimate the toil and drudgery this good father must have voluntarily undergone in collecting and verifying so many names, marriages, births, and dates of all kinds as he has here brought together. It is not exempt from faults, but then, as that capital compiler Dom Chaudon naively asks, what compilation is? Every student of French history has need to be grateful to the humble Augustine. The purpose of *Père Anselme's* other works is sufficiently explained by their titles—*‘Le Palais d’Honneur, contenant les généalogies historiques des illustres Maisons de Lorraine et de Savoye, et de plusieurs nobles familles de France, ensemble l’origine et l’explication des armes, devises et tournois, l’institution des ordres militaires, les cérémonies des sacres des Roys et Reyne de France, leurs entrées solennelles, baptêmes,’* Paris, 2 vols. 4to, 1663-64. The second volume, which forms in effect a distinct work, has for its title—*‘Le Palais de la Gloire, contenant les généalogies historiques des illustres Maisons de France, et de plusieurs nobles familles de l’Europe.’* Like the preceding, this is a work of immense research; but, unlike it, has not been benefited by revision and extension after the first publication. *‘Le Science Heraldique,’* 4to, 1675, is but little esteemed.

ANSLAY, or ANNESLEY, BRIAN, of whom all that is known is that he is the author of a curious volume called *‘The Citie of Dames,’* printed, in 1521, by Henry Pepwell, who in some rhymes prefixed states that—

“Of late came into my custody
This forseyde book, by Brian Anslay,
Yeoman of the seller with the eight King Henry.”

The book appears to be a translation of the *‘Trésor de la Cité des Dames,’* of Christine de Pisan. Warton, *‘Hist. of Eng. Poetry,’* vol. iii. p. 79 (Park’s ed.), says that Anslay “translated a popular French poem into English rhymes, at the exhortation of the *gentle earl of Kent.*” But the book is in prose, not rhyme. It is printed throughout in black letter, and ornamented with curious woodcuts. Its value is mainly bibliographical.

ANSTER, PROF. JOHN, LL.D., was born in 1793 at Charleville, co. Cork, Ireland. He was educated at Trinity College, Dublin, where he obtained a scholarship in 1814, and in 1825 took the degree of LL.D. In 1825 he was called to the Irish bar; for several years went the Munster circuit; in 1837 was appointed registrar of the Admiralty Court, Ireland, and in 1849 was nominated Regius Professor of Civil Law in Dublin University. He died June 9, 1867. Without attaining high rank, Dr. Anster was favourably known as a writer. In 1819 he obtained the prize offered by Trinity College for a poem on the death of the Princess Charlotte, and he published it with other poems in the same year. In 1820 he published translations of portions of Göthe’s *‘Faust,’* and fifteen years later a complete translation of the First Part, to which in 1864 he added a version of the Second Part. Though never popular here, it has been much admired and has been two or three times reprinted in Germany. *‘Xeniola,’* published in 1837, comprises translations from Schiller and others. Dr. Anster was a frequent contributor to *‘Blackwood’s Magazine,’* the *‘Dublin University Magazine,’* the *‘North British Review,’* and other periodicals; and in 1849 published his *‘Introductory Lecture on the Study of Civil Law.’*

ANSTIS, JOHN, a learned herald and antiquary, was born at St. Neot’s, Cornwall, September 28, 1669; was educated at Exeter College, Oxford; entered of the Middle Temple in 1688; and elected member of parliament for St. Germain’s in 1702. In 1703 he was appointed deputy-general to the auditors of the imprest, and the following year one of the chief commissioners of prizes. In 1711 he was elected M.P. for St. Maw’s, and in 1714 for Launceston. But while thus seemingly fully occupied with departmental and parliamentary life, his real devotion was for heraldry and genealogy, and his acquirements in that line having been brought under the notice of Queen Anne (and along with them no doubt his constant support of the government), she, in April, 1714, granted him a reversionary patent for the office of garter-king-at-arms. But Anne died, and Anstis, who was a thorough-going Tory, fell under suspicion of being a partizan of the Pretender, and, on the death in 1715 of Sir Henry St. George, garter-king-at-arms, though Anstis claimed his office in virtue of his patent, the appointment was given to Vanbrugh, the dramatist-architect, who had for some time served as *clerc d’armes*. Anstis prosecuted his claim in the law-courts, where ultimately judgment was given in his favour, and he was instituted garter-king-at-arms in April, 1718. From the first he applied himself with the greatest zeal to the duties of the office, and, as he had the good fortune to wear down the prejudice of the court, he, June 8, 1727, obtained a fresh patent, not merely securing to him the post of garter-king for life, but the reversion to his eldest son. Anstis died at his residence, Mortlake, on the 4th of March, 1744. An enthusiast in his special departments, and a good general antiquary, having access to a great body of inedited archives, and of unwearied industry, Anstis was able to prepare several works, which, from their learning and accuracy, are of great value to the historical student. His chief work is *‘The Register of the Most Noble Order of the Garter, from its Cover in Black Velvet usually called the Black Book; with Notes placed at the Bottom of the Pages, and an Introduction prefixed by the Editor,’* London, 2 vols. fol. 1724. *‘The Form of the Installation of the Garter,’* appeared in 4to in 1720. *‘Observations Introductory to an Historical Essay on the Knight-hood of the Bath,’* London, 4to, 1725: in itself little more than a compilation of authorities, by bringing together in conjunction and methodical order all that could be collected on the subject, it supplies the materials for a complete history of the order. *‘Letters to a Peer concerning the Honour of Earl Marshal,’* 8vo, 1706, contains only the first letter of the intended series. *‘Curia Militaris; or, a Treatise of the Court of Chivalry; in three books,’* is said to have been printed, but it was never published, and only a few sheets are now known to exist. He also wrote a great many treatises on detached subjects, which were printed in various publications of the time, and left several MSS. either complete or nearly so, on heraldic and genealogical matters, and one or two on Cornish parochial antiquities. Among his collections were several folio volumes on the history of heralds, which

passed into the possession of Sir George Naylor, garter-king-at-arms, and were made use of by Noble in preparing his 'History of the College of Arms.' A pretty full account of his unpublished MSS., as well as of his printed works, is given in the Biographical Dictionary of the Society for the Diffusion of Useful Knowledge, article, Anstia.

*ANTHON, CHARLES, LL.D., was born in the city of New York, in the year 1797. He was the fourth of six sons; and after receiving a good preparatory education, entered in 1811 as a student of Columbia College, New York, where he graduated in 1815. He now entered the law office of his brother, Mr. John Anthon, who is favourably known in America for his 'American Precedents,' 'Nisi Prius,' 'The Law Student,' and other works belonging to his profession. In 1819, Charles Anthon was admitted to the bar of the Supreme Court of the State of New York. Whilst a student of law, he had applied himself assiduously to the study of classical authors, and especially of the Greek; his proficiency in which procured for him, in 1820, the appointment of Adjunct Professor of Languages in Columbia College. This office he held till the year 1835, when, upon the resignation of Professor Moore, Anthon was elected to the vacant chair. In 1830 he had been appointed Rector of the College Grammar School; and in 1831 had received from his *Alma Mater* the degree of LL.D. The publications of Dr. Anthon are numerous. Soon after his appointment to the adjunct professorship, he compiled a new edition of 'Lempriere's Classical Dictionary,' which was very favourably received, and immediately republished in England. In 1830, he brought out his larger edition of Horace, with various readings and a copious Commentary; a smaller edition of which appeared in 1833. In 1835, Professor Anthon, whose life-long effort has been to promote the improvement of the character of classical scholarship in America, projected, in conjunction with the publishing house of Messrs. Harper, a classical series which should comprise as well the text-books used in academies and schools preparatory to college, as those usually read in colleges and universities. This series includes some of the most important Greek and Latin authors—Homer, Xenophon, Cæsar, Virgil, Horace, Juvenal, &c. Dr. Anthon's classical series has proved one of the most successful enterprises of the kind in America, and has met with a wide reception and approval in this country. He has also published important works in Ancient Geography; Greek and Roman Antiquities, in connection with which it may be mentioned that the first American edition of Potter's 'Archæologia Græca,' or the Antiquities of Greece, appeared at New York, 1825, 8vo, "with additions and corrections by Charles Anthon." He has further largely illustrated the classical mythology and literature generally, so that his various works amount in the aggregate to about fifty volumes.

ANTIQUUS, JOHANNES, a distinguished Dutch painter, was born at Groningen, October 11, 1702; learned glass painting under Gerard Vander Veen; afterwards studied history and portrait painting under Benheimen and Wassenberg; in 1725 went to Amsterdam, and thence to France and Italy. At Florence he entered the service of the Grand Duke, acquired some reputation by his paintings, and was elected a member of the Academy, to which body he presented the sketch for his large picture of the 'Fall of the Giants.' He stayed in all six years in Florence; visited Rome, where he was much noticed by Pope Benedict XII.; Venice, where he found a patron in General Schulembourg; and Naples, where he made the acquaintance of Solimena. On the death of the Grand Duke he returned to Holland with a great reputation as an artist. At the invitation of the Prince of Orange, he settled in 1741 at Breda as court painter, and died there in 1750. His most celebrated pictures are 'Mars disarmed by the Graces,' and some other classical pieces in the palace at Loo. Antiquus designed learnedly and correctly, and painted with much refinement, but in an artificial manner. His portraits are much praised.

ANTOINE, JACQUES-DENYS, an eminent French architect, was born at Paris the 6th of August, 1733. The son of a cabinet maker, and himself a working mason, he owed his great success entirely to his own energy and ability. By some authorities he is said to have lived for some years in Switzerland, and to have erected several buildings there. In Paris he appears to have established himself in the first instance as a builder and contractor. He made himself known by the skilful construction of the galleries over the Salle des Pas Perdus of the Palais de Justice. In the Hospice de Charité, he introduced a Grecian Doric order of unusual purity, and adapted the body of the building to it with marked propriety. But the structure that

secured his fame was the Hôtel des Monnaies, Paris, an edifice of large size and imposing dignity, begun in 1768, and completed in 1775. In this the central feature is an open vestibule, with six Ionic columns and an attic. It is said that Antoine was compelled greatly to retrench his original design in consequence of a portion of the sum allotted for the building having been diverted by the minister D'Angivilliers to the erection of an hotel for himself. Antoine designed the Salle des Archives Nationales, and several other buildings at Paris, at Nancy, at Berne, and at Madrid. He died of apoplexy, August 24, 1801.

ANTOLINI, IL CAVALIERE GIOVANNI, professor of architecture at Milan, was born in 1755. He was for over ten years, 1780-90, in Rome, closely engaged in studying its ancient architectural remains. Little more is known of his life, and he does not appear to have had the opportunity of applying practically his extensive knowledge. For Napoleon I. he prepared the designs for a Forum, which the emperor proposed to erect at Milan, but which the march of events left unaccomplished. Antolini published his designs in 25 large folio plates, with the title, 'Opera d'Architettura, ossia Progetto del Foro che doveva eseguirsi in Milano,' 1814. From this it appears that the Foro Bonaparte, as it was to have been named, would have comprised a vast amphitheatre 1,771 feet in diameter, surrounded with a complete series of public buildings, united by Grecian Doric colonnades, and having a grand central edifice about 200 feet square. Judging from the plates, however, the Foro would have been more remarkable for magnitude than beauty. Antolini published several works, some of them of value: 'Il Tempio di Minerva in Assisi, confrontato colle Tavole di Palladio,' Milan, folio, 1803; 'Idée Elementari d'Architettura civile per le Scuole del Disegno,' Bologna, folio, 24 plates, 1813; 'Le Rovine di Vileia, misurate e disegnate da G. A.,' Milan, large folio, 1819-22, a careful exposition of the remains of the ancient city of Villeja; 'Il Tempio di Ercole in Corsi, e quello di Minerva in Assisi,' Milan, folio, 1828. He also edited, with notes and original observations, Milizia's 'Principles of Civil Architecture,' Milan, 1832. He died at Milan in December, 1841.

*ANTONELLI, GIACOMO, cardinal-deacon of S. Agata alla Suburra, was born on the 2nd of April, 1806, at Sonnino, a village near Terracina, which enjoys a double reputation for the brigandage of its men, and the picturesque costume of its women. His father, who is stated to have belonged to an ancient and respectable family, but personally to have been a woodcutter, sent him to be educated at the Grand Seminary of Rome; to be a student of which, in a state where the clergy were almost the only high functionaries, was a necessary step to every aspirant for political employment. Of this institution he became known as one of the most remarkable pupils. He succeeded in gaining the favour of Pope Gregory XVI., who named him a *prokato*, appointed him an assessor of the superior criminal tribunal, and delegated him successively to Orvieto, Viterbo, and Macerata. In 1841 Antonelli became Under-Secretary of State to the Ministry of the Interior; in 1844, Second Treasurer; and in the year following, Grand Treasurer of the two Apostolic Chambers (finance minister), in the place of Tosti. He was raised to the dignity of a cardinal-deacon on the 12th of June, 1847, by Pius IX., to whose liberal disposition he recommended himself by something like enthusiasm in the same direction. In March, 1848, Cardinal Antonelli was President and Minister of Foreign Affairs, in a liberal cabinet composed of nine members, only three of whom were ecclesiastics. To this cabinet it was that the Roman people owed the framing of the famous "Statuto," or Constitution, which had been almost wrung from the Pope, and which was proclaimed on the 14th of March, 1848, but of which the principal articles were very soon violated or eluded. For a moment Antonelli was extremely popular; but the liberalism of the national party was too advanced and rapid to keep pace with the measured step of a prince of the Church; and on the 1st of May he resigned the presidency of the cabinet into the hands of Count Mamiani. Nevertheless, Cardinal Antonelli continued to control the Pope, to whom he acted as confidential adviser in all questions of home and foreign politics. Through his influence Mamiani was superseded by an able but unpopular minister, Pellegrino Rossi, who had formerly been a peer of France, and French ambassador to Rome. Count Rossi was assassinated November 15, 1848; and on the 24th of the same month the Pope, whose palace of the Quirinal had been assaulted by the populace, retired to Gaeta, in the Neapolitan territory. His flight hither was advised and directed by Cardinal Antonelli, who, presently rejoining him there, protested in his own name and that of his sovereign against the Provisional Government of

Rome, and appointed a commission for the administration of the Papal States. He was afterwards named secretary of state of the court of Gaeta. On the 18th of February, 1849, he addressed collectively to the representatives of Austria, France, Spain, and Naples, a circular in which he appealed to all Christendom to effect the re-establishment of his spiritual sovereign on the throne of St. Peter. Meanwhile he continued to profess his respect for the "Statuto" of the 14th of March, 1848. On the 9th of April, 1849, when already the French troops had landed at Civita Vecchia, he was named president of a special commission charged with the reforms of the church. After the capitulation of Rome, Antonelli counselled the Pope to use a great reserve with the French, and not to precipitate his return to Rome. When Pius IX. consented to re-enter Rome, April 12th, 1850, he named his faithful servant secretary of state for foreign affairs, an office which he still continues to hold, conjoined with the presidency of the council of ministers, and the prefecture of the Sacred Apostolic Palaces.

The measures of Cardinal Antonelli were now recognised as repressive and reactionary; and were such as occasionally to call forth the opposition of members of the Sacred College, and the remonstrances of foreign governments. During the last war in Italy, and since its termination, the report of the resignation of Cardinal Antonelli has been frequently spread; but the Pope has honoured him with renewed marks of confidence. Several circulars of Antonelli have attracted attention; especially those relative to the coldness which arose between the Court of Rome and the Cabinet of the Tuileries, and to the difficulties and conflicts resulting from the presence of French troops in the midst of the Roman people. It was Cardinal Antonelli who answered the interpellations of the Russian Ambassador on the subject of the allocution of the Pope in favour of Poland (1864). Antonelli, indeed, is a master of the art of palliation; and no one understands better than he how to apologise for pontifical politics. His language on the subject of the Encyclical of 1864 was full of a spirit of moderation which it was somewhat difficult to conciliate with the text of that famous document. In the Ecumenical Council, which began its sittings in December, 1869, Cardinal Antonelli has already found a worthy field for his tact and ability in rescuing the more impulsive pontiff from the effects of his zeal and impetuosity.

ANTONIDES VAN DER GOES, JOHANNES, an eminent Dutch poet, was born on the 3rd of May, 1647, at Goes, in Zealand, but taken by his parents when four years old to Amsterdam, where he learned Greek and Latin under Cocceius. His poetic exercises at school being much praised, he essayed translations of the Latin poets, which were so greatly admired by Vondel, that he was induced to undertake a long and elaborate poem in his native tongue on the river Y. When the 'Ijstom,' as it is entitled, was published in 1671, it met with an enthusiastic reception; and, though its descriptions now appear overwrought and conventional, it is still regarded as one of the great national poems. Antonides began another long poem, an epic on the subject of St. Paul; but his circumstances were narrow, he was depressed in spirit, and of feeble health, and he did not live to complete it, dying from the breaking of a blood-vessel, on the 18th of September, 1684, at the early age of 37. A collected edition of his works was published by his father in 1685; and several later editions have appeared: that of 1714 has an excellent portrait, engraved by P. Van Gunst from the original by Bakhuizen.

ANTONINUS, SAINT, Archbishop of Florence, was the son of a Florentine notary, whose name varies with different authorities as Niccolò di Pierozzo and Niccolò di Forciglioni. He was born at Florence in 1389. His Christian name was Antonio, for which the diminutive Antonius, or, in Latin, Antoninus, was substituted on account of the smallness of his stature. In early youth he became a Dominican friar, and entered the convent of Fiesole, which had just been founded. His learning was various, and, considering the age in which he lived, profound. He was well versed in casuistry, in canon law, and in ecclesiastical history; and occupied himself also with public affairs with singular tact and vigour of understanding. His choice of a political party was a prudent one; he attached himself zealously to Cosmo de' Medici, of whom Machiavelli has spoken ('History of Florence') in terms of such rare panegyric. Antoninus became successively prior of more than one convent, auditor of the Roman rota, and vicar-general of his order for Tuscany, and afterwards for Naples. In 1445 he was nominated to the then vacant archbishopric of Florence by Pope Eugenius IV.; but did not overcome until the following year the reluctance he

BIOG. DIV.—SUP.

felt to enter upon that high office. He held the see for about 14 years, during which he distinguished himself, as he had done in all his previous offices, by his zeal in practical reform, and in asserting for the clergy, whom it was his object to elevate in character and influence, their claims to jurisdiction and immunities. More than once he acted as ambassador of the Florentines to the Court of Rome. He died in the year 1459, and was buried in the church of St. Mark, the principal Florentine convent of his order; in which may still be seen a splendid chapel dedicated to his memory, erected in 1588 from a design by Gian Bologna, and containing a bronze statue of him by that artist. He was canonised in 1523 by Pope Adrian VI.: the day assigned to him in the Roman calendar is the 10th of May.

The principal works of Antoninus that have been printed are the three following:—'Defecerunt' [the first word of the book], 'sive Summa Confessionalis,' first printed at Rome in 1472, 4to, and reprinted about twenty times, in Italy and elsewhere, before the end of the 16th century. There is also an Italian translation of it, 'Istruzione de' Sacerdoti, ovvero Somma Antonina composta volgarmente,' Bologna, 4to, 1472, and in several subsequent editions. 'Summa Summarum, sive Summa Theologica, in Quatuor Partes distributa,' Nürnberg, 1478, 4 vols. fol., black-letter. This work, which had been previously printed, in successive volumes, at Venice, was afterwards reprinted about twenty times, the latest and best edition being that of Verona, 1740, 4 vols. folio. Many of the treatises of which this work is composed have had a frequent separate publication; and the whole is intended as a systematic summary of Roman Catholic morality, and is generally acknowledged to have been the earliest work in which an attempt was made to carry the treatment of such topics beyond the scholastic limits. As a digest of doctrines and authorities, the 'Summa' long held a venerated place amongst the standards of the Roman Catholic Church. One other published work of St. Antoninus remains to be mentioned—'Summa Historialis, sive Chronica, Tribus Partibus distincta, ab Orbe condito ad Annum 1459.' Mazzuchelli names an edition of 1480, Venice, 3 vols. fol., the existence of which recent bibliographers pronounce doubtful. The oldest certain edition is that of Nürnberg, 1484, 3 vols. fol., black-letter. Other editions (all in folio) are those of Basel, 1491; Strasburg, 1496; Paris, 1512; Lyon, 1517, 1525, 1543, 1585; and one or two later ones, which are said to contain interpolations. In the plan of this Chronicle there are two features particularly deserving of notice. The one is its comprehensiveness: it aims at delivering a history of intellect as well as of politics and religion. The other is its steady attempt at philosophical exactness of sub-division: each department of human thought or action is treated in a separate section. A revised edition containing all the works of St. Antoninus, under the title 'Antonini Archiepiscopi Florentini Opera omnia, ad Autographorum Fidem nunc primum exacta, Vitâ Auctoris variisque Dissertationibus et Annotationibus aucta, Curâ et Studio Th. Mar. Mamachi et Dion. Remedii,' was to have been published in 8 vols. folio, Florence, 1741, &c., but only two volumes (each divided into two parts), and containing the Summa, were issued, sufficient subscribers not having been found for the complete collection.

ANTONIO VENEZIANO [VENEZIANO, ANTONIO, E. C. vol. vi. col. 314].

APRÈS DE MANNEVILLETTE, JEAN BAPTISTE NICOLAS DENIS D', a distinguished French hydrographer, was born at Havre, 11th February, 1707. His father, in the service of the French East India Company, educated him for the maritime profession, and took him out on a voyage to India in 1719—21. Appointed fourth officer to a vessel, he was wrecked on a voyage to Senegal in 1727. The experience gained on this voyage of the imperfection of the existing charts of the Atlantic had much influence on his later exertions. In 1730 he went as second officer to India. In 1732 he married Marie Madeleine Jaquette de Binard. While engaged on various voyages between 1733 and 1742, he was the first to use Halley's Sextant in determining longitudes by lunar distances; he also made a vast number of soundings in the seas which he traversed. His 'Neptune Oriental,' published in 1743 at the expense of the Company, after approval by the Académie des Sciences, gave correct charts and sailing directions for various parts of the India and China Seas. He then obtained leave to make hydrographical explorations, as a means of adding to the value of his charts, &c. In 1750 he set out in the 'Glorieux,' and visited Rio Janeiro, the Cape of Good Hope, the Isle of Bourbon, the Isle of France, and Madagascar, collecting materials for new and valuable charts. In 1762 the Company appointed him Inspector of Charts, &c., at the dépôt at Brest. By the year 1766 he

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prepared complete sailing directions from France to India, for which he was decorated by the King. A second edition of the 'Neptune Oriental' (1775) was greatly improved by the assistance of D'Anville and La Caille. D'Après died on the 1st of March, 1780, while preparing a supplement to this work. The King purchased all his charts, plans, and drawings, and placed them in the Dépôt de la Marine.

APROSIO, LUIGI, on entering the order of St. Augustine, ANGELICO, but commonly known in his own day as 'IL PADRE VINTIMIGLIA,' a learned Italian writer and bibliographer, was born on the 19th of October, 1610, at Vintimiglia, in Liguria. At the age of 15 he was received into the order of the Eremitani di S. Agostino della Congregazione di Genova; passed in succession through the convents of Genoa, Siena, Monte S. Savino, Pisa, Trevigi, Feltre, Losina, Venice, Murano, and Rapalla; settling ultimately in that of Vintimiglia, when he was appointed Vicar-General of the Congregation of S. Maria della Consolazione. Aprosio mixed much in society; was intimate with the men of learning and celebrity in all the cities in which he had resided; and was a member of a great many of the academies for which Italy was then renowned. From childhood he had a passion for books, which in manhood he took every opportunity of gratifying, and he had the reputation of being the best bibliographer of his time. When established in his native city, he resolved to found there a good library. He commenced it in 1648, and in 1678, writing to J. Fiorelli, he states that he had then collected upwards of 7000 volumes. This library, which became celebrated as the Biblioteca Aprosiana, still exists, but has lost most of its rare books and choice MSS., and contains now, it is said, less than 5000 volumes. Aprosio wrote a catalogue raisonné, which was published to the end of the letter C, under the title 'La Biblioteca Aprosiana, Passatempo autunnale di Cornelio Aspasio Antivigilmi,' Bologna, 12mo. 1673, pp. 666. In this curious volume Aprosio gives many particulars of his own life, and accounts of the friends from whom he received the volumes he describes. Sixty years after it was printed, J. C. Wolff published a Latin translation of it (Hamburg, 8vo, 1734). Brunet states that the continuation of the 'Biblioteca,' in 4 vols. 4to, entirely in the handwriting of the author, is preserved at Genoa. Aprosio died February 23rd, 1681. He wrote and printed a great number of short pieces both in prose and verse, but all under fictitious names. Thus under the pseudonym *Galistoni* he wrote some criticisms—'Il Vaglio' (the Sieve), 'Il Buratto, (the Boulter), &c.—on Stigliani's poem 'Il Mondo Nuovo,' and in defence of the 'Adone' of his friend Marini, which Stigliani had somewhat rudely assailed; and retorted on Stigliani's reply, 'L'Occhiale' (the Spy-glass), by 'L'Occhiale Stritolato' (the Spy-glass broken), under the assumed name of Scipio Glareano. Aprosio's other publications include 'La Visiera Alzata,' Parma, 12mo, 1689, now extremely rare, and prized for its information on literary and bibliographical matters; 'Le Vigilie del Capricorno,' Venice, 12mo, 1667 and 1678; and several more, generally trifling, and not always clerical in character. His verses, both Latin and Italian, are given more or less fully in the collections.

APTHORP, EAST, D.D., was born in 1733 at Boston, in New England. His father, a merchant, sent him to England to complete his education at Jesus College, Cambridge. In 1755 he won the Chancellor's Medal, and in the following year the Members' Latin prize; graduated in 1757, and in 1758 took his M.A. degree, and was elected fellow of his college. In 1761 he was sent by the Society for the Propagation of the Gospel in Foreign Parts as missionary to Cambridge in Massachusetts; but having become involved in controversy with the Congregationalists of Boston, he returned to England about 1764. He was now employed by Archbishop Secker to defend the sending of bishops to America, and in reward was presented by the archbishop with the vicarage of Croydon. About this time he issued a prospectus of an edition of the Latin historians, but the scheme was abandoned. In 1778 he published the work by which he stands the best chance of being remembered: 'Letters on the Prevalence of Christianity before its civil Establishment; with Observations on a late [Gibbon's] History of the Decline of the Roman Empire.' It was received with great favour, and Gibbon himself praised it in his semi-sarcastic way. "If I am not mistaken," he writes ('Vindication of some Passages in Chapters of the Decline and Fall of the Roman Empire,' p. 92), "Mr. Apthorp was the first who announced to the public his intention of examining the interesting subject which I had treated in the two last chapters of my History. The multitude of collateral and accessory ideas which presented themselves to the author,

insensibly swelled the bulk of his papers to the size of a large volume in octavo. . . . When Mr. Apthorp's Letters appeared, I was surprised to find that I had scarcely any interest or concern in their contents. They are filled with general observations on the study of history, with a large and useful catalogue of historians, and with a variety of reflections, moral and religious, all preparatory to the direct and formal consideration of my two last chapters, which Mr. Apthorp seems to reserve for the subject of a second volume. I sincerely respect the learning, the piety, and the candour of this gentleman, and must consider it as a mark of his esteem, that he has thought proper to begin his approaches at so great a distance from the fortifications which he designed to attack." The second volume never appeared, and Gibbon's Chapters remained uncorrected as far as Mr. Apthorp was concerned. But the book brought its author copious reward. The Archbishop of Canterbury (Cornwallis) bestowed on him the lucrative rectory of St. Mary-le-Bow, and the annexed rectories of St. Pancras, Soper-lane, and All-Hallows, Honey-lane (all in the city of London); appointed him to preach the Warburton Lecture, and conferred on him the degree of D.D. For these preferments Gibbon laughingly claims the credit. "I enjoyed the pleasure," he says ('Memoirs of my Life and Writings,' p. 29) "of giving a royal pension to Mr. Davis, and of collating Dr. Apthorp to an archiepiscopal living." Dr. Apthorp published his Lectures in 1786 in 2 vols. 8vo, under the title of 'Discoveries on Prophecy; read in the Chapel of Lincoln's Inn, at the Lecture founded by Wm. Warburton, late Lord Bishop of Gloucester;' but though marked by learning and moderation, they possess no distinctive value. In 1790 Dr. Apthorp was made a prebend of St. Paul's, and shortly after offered the bishopric of Killaloe, but this he declined on the ground of failing health. He soon after became blind, but he probably found some compensation in the good will of his old Croydon parishioners, who, in testimony of their esteem and sympathy, made him a present of nearly 2000*l.* In 1793, Dr. Porteus, Bishop of London, collated him to the rich prebend of Finsbury, but to retain it he was compelled by the archbishop to resign his other preferments. He now retired to Cambridge, where he died in 1816. Besides the works already noticed, Dr. Apthorp published several Sermons, a volume of 'Select Devotions for Families,' and three or four pamphlets.

AQUILA, CASPAR (German KASPAR ADLER), one of the most distinguished Protestant divines of the Reformation period, was born on the 7th of August, 1488, at Augsburg, of which place his father, Leonard Adler, was syndic. On leaving the Academy of Augsburg, he went to Ulm and thence to Bologna to complete his education. In 1514 he was appointed preacher in Bern, but after a brief sojourn left for the University of Leipzig, whence, in 1516, he joined Franz von Sickingen, who appointed him his field preacher, or military chaplain. The following year he was chosen preacher at Jengen, near Augsburg. Here he devoted himself to a closer study of theology, and soon adopted the views of Luther, which he set forth in his sermons. For this he was arrested by order of Christoph von Stadion, Bishop of Augsburg, and confined in an unwholesome dungeon at Dillingen during the winter of 1519—20, and then only released through the intervention of Queen Isabella of Denmark, sister of the Emperor Charles V. He now joined Luther at Wittenberg, and thence proceeded to the Castle of Ebernburg to teach the children of Franz von Sickingen. Whilst here he narrowly escaped a strange death. The soldiers of the castle wished him to baptize a cannon, and on his refusal, forced him into the mouth of a huge mortar with the intention of blowing him from the castle wall. Their efforts to ignite the powder failed, however, and at length an officer succeeded in rescuing him. From 1524 he resided at Wittenberg as preacher and teacher of Hebrew, at the same time rendering Luther valuable assistance in translating the Bible and in advancing the doctrines of the Reformation. By Luther's recommendation he, in 1527, was appointed to the office of pastor at Saalfeld, where in the following year he was made ecclesiastical superintendent. When the Interim was put forth, Aquila vehemently opposed it both by his personal influence and in two publications, 'Christlich Bedenken auf das Interim' (1548, reprinted in 1549), and 'Das Interim illuminirt' (Augsburg, 1548). His opposition so incensed the Emperor Charles V., that he declared Aquila an outlaw, and offered a reward of 5000 florins for his head. Aquila was obliged to fly from Saalfeld, taking with him only a Hebrew psalter. But the Countess of Schwarzburg gave him an asylum in her castle of Rudolstadt, where he remained till the excitement about the Interim had calmed down, when she obtained

for him (1550) the deanery of Schmalkalden. In 1552, after the Treaty of Passau, he was restored to his office at Saalfeld, and there he quietly pursued his religious duties till his death on the 12th of November, 1560. Besides the works above cited, and several sermons, Aquila published 'Christliche Erklärung des Kleinen Katechismus,' Augsburg, 1538; and 'Fragstücke der Ganzen christlichen Lehre,' Augsburg, 1547.

(J. G. Hillinger, *Lebensbeschreibung Casparis Aquila*, Jena, 8vo, 1731; C. Schlegel, *Bericht vom Leben und Tode C. A.*, Leipzig, 4to, 1737; J. Avenarius, *Kurze Lebensbeschreibung, C. A.*, Meiningen, 4to, 1718.)

AQUILANO, or DELL' AQUILA, SERAFINO, one of the most popular Italian poets of the 15th century, was born in 1466 at Aquila, in the Abruzzo, whence the name by which he is known—his family name is conjectured by Mazzuchelli to have been Cimino. While very young he was placed in the court of the Count of Potenza, where he learned music under G. Flamand. He is said to have next spent three years in the study of Dante and Petrarch, after which he went to Rome in the suite of Cardinal Ascanio Sforza, with whom he stayed for about six years. He had now acquired great skill in improvisation and in accompanying his verses on the lute, and his performances in this way were eagerly sought after. In 1491 he was invited to the court of the Duke of Calabria, afterwards Ferdinand II. of Naples, with whom he stayed three years; then visited in succession the courts of Guidobaldo, Duke of Urbino, Francisco Gonzago, Marquis of Mantua, and Lodovico Sforza, Duke of Milan, from which last he was driven by the occupation of the territory of Milan by the French. At Rome he was cordially received by the Cardinal Borgia, and afterwards by Cesare Borgia, Duke Valentino, who obtained for him, in 1499, the appointment of Knight of Jerusalem, and the post of commander with a handsome income. He did not, however, long enjoy his good fortune, dying of fever on the 10th of August, 1500, in his 34th year.

A reader of Aquilano's poetry would find it difficult to account for the extraordinary popularity it enjoyed, unless he was acquainted with the circumstances under which it was produced. The language was still but imperfectly formed, and Aquilano was the first since Petrarch to mould it with perfect ease and harmony. His poetry was always animated, full of fancy, not altogether devoid of imagination and feeling: it was exactly in accord with the tone of sentiment of the best society of the day, and it was recited in turn at the chief courts of Italy by the author himself, with all the charm of an accomplished actor and musician. The number of editions of his collected poems was remarkable. The first appears to have been that of Francisco Flavis—'Opera del facundissimo Seraphino Aquilano,' Rome, 4to, November 29, 1502, of which an 8vo edition was issued on December 24, 1502, and which was reprinted at Bologna, in 8vo, 1503. 'Opera dello elegante poeta S. A., finite et emendate, con la loro Apologia (di Angelo Colocci a Silvio Piccolomini) e la vita de esso poeta,' (di Vincenzio Calmeta), Rome, 4to, 1503. Other editions appeared at Fano, 8vo, 1505; Venice, 1505; Milan, 1516; Florence, 8vo, 1516, by F. di Giunta, esteemed the best of the old editions; Florence, 8vo, 1517, by B. Zuchetta; Venice, 4to, 1519, reprinted 1526; Milan, small 8vo, 1523; Venice, 1529—1530, corrected edition by Marco Guazzo; an edition, 'Opere dello elegatissimo Poeta S. A. cō molte cose aggiunte di nouo,' Venice, 8vo, 1538, contains on the title page the announcement that the poems are divided into 165 sonetti, 3 egloghe, 7 epistole, 20 capitoli, 3 disperate, 27 strambotti, and 19 barzelette. Several other editions are given by Mazzuchelli and Brunet; the latest is that of A. de Bondoni, 1550; there are also separate editions of his strambotti.

ARAGONA, TULLIA D', a celebrated Italian poetess, born in the early part of the 16th century. She was the illegitimate daughter of Tagliavia, Archbishop of Palermo, and afterwards Cardinal, who gave her so good an education that while yet a child she was proficient in Latin, and became the most accomplished woman in Italy in music and singing. Very beautiful, and possessed of a liberal income, her house became the favourite resort of the most eminent wits and scholars, with whom she used to exchange sonnets, and who were unbounded in their admiration of her loveliness and genius. Arrighi declares that her beauty is overpowering as that of the sun; Nardi that she is fitly named Tullia, as inheriting the eloquence of Cicero (Tullius). Unfortunately she was not so preeminent in other virtues; but she married, and after the death of her husband, retired to Florence, where she died about 1560. Her works are: (1) 'Rime della Signora Tullia di Aragona e di diversi a lei,' Venice, 12mo, 1547 (reprinted 1549 and 1560), in which are

printed the sonnets addressed to her by Cardinal Ippolito de' Medici, Francesco Molza, Ercole Bentivoglio, Filippo Strozzi, Benedetto Varchi, Pietro Manelli, Lattanzio Benucci, and the most ardent of all her admirers, Girolamo Muzio, with the lady's answers. (2) 'Dialogo della Infinità di Amore,' Venice, 12mo, 1547; the lady in this again sustaining one part only of the performance, and her praises being the main subject of the other two speakers. (3) 'Il Meschino,' Venice, 4to, 1560 and 1594, a sort of epic in 36 cantos of ottava rima. Tullia professes to have taken the story from a Spanish romance, but it is really a versification of the popular Italian romance of Guerino Meschino. Tullia's poem was greatly admired at the time of publication, and Crescimbeni compares it to the Odyssey; but no one since his time has probably found resolution enough to read half way through it.

ARBRISSEL, or ARBRISSELLES, ROBERT D', derived his name from the place of his birth, Arbrissel, now called Arbresec, a village near La Guerche, in the diocese of Rennes. His parents were of the middle class; and from the time of his birth, about 1047, gave him such an education as their neighbourhood afforded. In 1074 Robert went to Paris, and was soon after admitted to priests' orders. From 1085 to 1089 he acted as arch-priester and vicar-general to Silvestre de la Guerche, Bishop of Rennes, a man of no learning himself, but a patron of the learned. For four years Arbrissel carried on a crusade against the crying abuses of the time, whether amongst the clergy or the laity, and made himself so obnoxious by the opposition he had given to prevalent vices, that when he lost the support of the bishop, by the death of the latter in 1089, he found it necessary to quit the diocese of Rennes. He repaired to Angers, and taught theology there for the space of two years; when, conceiving a despair of the world, and of himself as dwelling in the world, he went with one companion and buried himself in the forest of Craon, which was towards the confines of Anjou and Bretagne. Here he soon acquired a reputation for his extreme mortification, and at length found himself at the head of a small community. In 1096 Arbrissel was invited by Urban II. to preach the sermon at the dedication of the church of St. Nicolas at Angers, and acquitted himself so much to the satisfaction of the Pope, who assisted in person at the dedication, as to be named by him "apostolic preacher," with a commission to exercise his priestly office throughout the whole world. And on the day after the sermon, Reginald, the lord of Craon, made over to him a portion of the forest of Craon, that he might found an abbey in it. Such is the origin of the abbey of La Roë (de Rota). After discharging the duties of prior of La Roë for two years, Robert, conceiving that his commission from the Pope not only permitted but necessitated his itinerancy, set out upon an evangelistic tour in company with two other preachers, and their joint labours resulted in the conversion of numbers of men and women of all shades of immorality. Robert founded several monasteries for his converts, of which the most celebrated was the abbey of Fontevrault, in the diocese of Poitiers, on the confines of Touraine and Anjou. The site of this abbey was a valley covered with thorns and brambles, which was called Fontevraud, or Fontevaux. The natives called it Frontevaux, and its correct Latin title is Fons Ebraidi. Here Robert at first constructed some huts, but in a short time the abbey contained within one enclosure monasteries for men and women. They were, however, separate buildings; and the three monasteries for females were devoted respectively to virgins, widows, and reformed magdalens. The order of Fontevrault adopted the rule of St. Benedict; but Robert introduced a novelty, the wisdom of which has been much questioned, the government, namely, of all the monasteries, male and female, by one abbess. He vindicated the subjection of men to women, a point on which he strictly and solemnly insisted, by the example of Christ, who recommended St. John to the Virgin Mary, and ordered that beloved disciple to be obedient unto her as to his own mother. The date of the foundation of the abbey of Fontevrault is probably the year 1101. The institution was confirmed by a bull of Pascal II., dated March 26th, 1106; and again by a bull of Pope Callistus II., dated September 15th, 1119. Not long after the death of Robert the number of the religious of both sexes amounted to nearly 5000. Fontevrault became at last the most magnificent of all the female monasteries of France. The order was suppressed at the French Revolution.

In 1104 Robert resigned the direction of the monastery into the hands of a noble widow named Hersinde or Hersende de Champagne, or de Clairvaux. The title of abbess, however, was given first to Petronille, who succeeded Hersinde on the 28th of October, 1115. Having thus provided for the administration of

the abbey, Robert resumed his missionary activity, preaching against the vices of the day, and from time to time visiting Fontevrault, where it is remarkable that he claimed a peculiar exemption from the authority of the superioress. He died at Orsan, a monastery of his order in Berri, on the 25th of February, 1117. Here his heart was left, the rest of his body being transported, according to his request, to Fontevrault. In 1633, Louise de Bourbon, abbess of Fontevrault, placed his remains in a magnificent marble tomb, on which was inscribed the epitaph which Hildebert, Bishop of Mans, wrote in honour of Robert.

ARBUCKLE, JAMES, was born in Glasgow, about 1700. Nothing certain is known of his life. In 1719 he published a mock-heroic poem, entitled 'Snuff,' which, though of little value, was of greater promise as a juvenile poem than his subsequent works fulfilled. It was followed by an occasional poem on the Death of Addison, and in 1721 by 'Glotta,' an extravagant description of the Clyde. Some miscellaneous verses appeared at intervals, but he does not appear to have ventured on any further sustained flight. The last work ascribed to him is 'The Letters of Hibernicus, published in the Dublin Journal,' London, 1729. He died in 1734.

ARCHDALL, REV. MERVYN, learned Irish antiquary, was born at Dublin in 1723. Having gone through the usual course of study and taken orders, he was appointed domestic chaplain to Pococke, Bishop of Meath and Ossory. Devoting his attention to antiquarian subjects, he had to regret the want of a work for Ireland corresponding to Dugdale's 'Monasticon Anglicanum,' and, encouraged by Bishop Pococke, set himself to supply the deficiency. The collection and preparation of the materials cost him several years of close application, but in 1786 appeared in a 4to volume of 840 pages, the 'Monasticon Hibernicum; or an History of the Abbies, Priors, and other Religious Houses in Ireland.' The necessity for confining it to a single volume compelled Mr. Archdall, sorely against his inclination, to abridge or epitomise the original documents, but he has done this with scrupulous good faith, and the arrangement of the whole is very convenient. Mr. Archdall's only other separate work is a revised edition of Lodge's 'Peerage of Ireland,' 7 vols. 8vo, 1789. He died rector of Slane, August the 6th, 1791.

ARCHDEKIN, JOSEPH (or as it is sometimes printed in his titlepages, Arsedekin), a learned Irish Jesuit, was born at Kilkenny, about 1619. In 1642 he entered the society of Jesuits at Mechlin, and in 1662 was made professor of moral and scriptural theology at Louvain. His first publication was a treatise, 'Of Miracles, and the New Miracles done by the Relicks of St. Francis Xavier, in the Jesuits' College at Mechlin,' Louvain, 8vo, 1667. It is printed in English and Irish, being as is believed the first book printed in the two languages, and is now extremely scarce. But a work that excited much more attention was his 'Præcipue Controversiæ Fidei ad facilem methodum redactæ,' Louvain, 8vo, 1671. With it is usually bound up, though sometimes it is met with separately, a life of St. Patrick, 'Vitæ et Miraculorum Sancti Patricii, Hiberniæ Apostoli Epitome: cum brevi Notitia Hiberniæ, et Prophetiâ S. Malachiæ,' also printed at Louvain in 1671. The success of the 'Controversiæ Fidei,' which is a summary of the doctrines of the Church, was wonderful. New editions were rapidly required; it was reprinted without the knowledge of the author, and manuscript copies were made for the use of the students at the University of Prague. The editions issued by the author were corrected and extended till what in the original was a modest 8vo volume of 500 pages, in the eighth edition, Antwerp, 1686, had swelled to three bulky quartos, while the title was changed to 'Theologia Tripartita Universa.' This enlarged edition was dedicated to James II., and contains much additional matter respecting Irish Church history, and memoirs of Peter Talbot, Roman Catholic Archbishop of Dublin, who died in prison in Dublin in 1680, and of Oliver Plunket, Roman Catholic Archbishop of Armagh, executed in London in 1681. But though so popular with his co-religionists, the book failed to give satisfaction at Rome, and in 1700 it was prohibited till corrections should be made in it by the Congregation of the Index. An edition with these corrections, the 13th of the work, was published at Antwerp in 1718, and none has since appeared. Archdekin was made professor of classics at Antwerp in 1670, and of philosophy in 1671. He died at Antwerp, August the 3rd, 1693.

ARCHER, THOMAS, an English architect of the first half of the 18th century, who is chiefly remarkable for the extreme alternations in the criticisms bestowed upon him. Of his life little is told. Where he learnt architecture, or whether he ever had any regular instruction in it, is as uncertain as in the case

of Vanbrugh. That Archer was a follower, if he was not a scholar of Vanbrugh, we, however, know. Vanbrugh has indeed been credited, perhaps untruly, with assisting him in his designs. Like Vanbrugh, he seems to have had something besides architecture to depend upon. Walpole, writing of Vanbrugh's immediate successors, says, "There was a Mr. Archer, the groom-porter, who built Hethrop, and a temple at Wrest." When and how long Archer was groom-porter is not stated. In a note Walpole is even more contemptuous:—"St. Philip's Church at Birmingham, Cliefden House, and a house at Roehampton (which as a specimen of his wretched taste may be seen in the 'Vitruvius Britannicus') were other works of the same person; but the chief d'œuvre of his absurdity was the Church of St. John, with four belfries, in Westminster."—('Anecdotes,' vol. iv. p. 85.) Vanbrugh was the butt of two or three generations of wits, and the chief d'œuvre of his most successful disciple, which they said was so preposterous that it must have been designed by the master and borrowed or stolen by the scholar, was not likely to be left unassailed. Its unusual form, "with four belfries" at the angles, afforded a ready topic for ridicule. By some it was likened to a parlour-table with the legs uppermost; by others to an elephant sprawling on its back with its legs in the air. The scoffers prevailed, and for long St. John's, Westminster, was never referred to, except in mockery. At last came the reaction; Vanbrugh and his Italian were accepted as at once poetical and picturesque, and even St. John's found not only defenders, but admirers. Probably it would have found admirers still, but that the mediæval current set in, and in ecclesiastical architecture bore all before it. Yet apart from preconceptions, it is hard not to feel that there is something of character and individuality in the exterior of St. John's Church, though some central or predominant feature is sorely needed, and objections occur at every turn to the details. St. Philip's, Birmingham, the earlier of the two churches, is likewise the more conformable to the approved type; but it has a tower, surmounted by a cupola of somewhat original and decidedly effective outline. Like St. John's, it is placed in the midst of a square—the Birmingham square, however, having much the larger area—and it consequently fairly shows itself on all sides. The Birmingham interior is far the better of the two, St. John's being very poor. St. Philip's Church was commenced in 1711, consecrated in 1715, and completed in 1719. St. John's was begun in 1721, and consecrated in 1728, but not finished till some years later. It is only fair to add that many alterations were made in St. John's during the progress of the works, and in opposition to the wish of the architect: Archer's original design will be found in the Crowle Pennant in the Print Room of the British Museum. Archer's contemporaries had sufficient confidence in his ability. He had numerous commissions, and when he died, April 23, 1743, he left a fortune of over 100,000*l.* "to his youngest nephew, H. Archer, Esq., member for Warwick."

ARCKENHOLTZ, JOHANN, celebrated Swedish writer, was born in Finland in 1695. In 1730 he accompanied a Swedish nobleman named Hildebrand in a tour through Europe, and whilst in Paris he wrote some remarks on the connection between France and Sweden, in the course of which he reflected somewhat severely on Cardinal Fleury, then prime minister of France. Though the cause of much trouble, this served to bring Arckenholtz conspicuously into notice. Eight years after his return to Sweden, Arckenholtz's MS., through the indiscretion of a friend, fell into the hands of Count Gyllenborg, the leader of the French party, who transmitted it through the French ambassador to Cardinal Fleury. The cardinal demanded satisfaction of the Swedish government, and the king, after vainly attempting to remove his anger, was reluctantly forced to dismiss Arckenholtz (1738) from the post he held in the Swiss chancery. Arckenholtz found it convenient to travel abroad. King Frederick, as elector of Hesse-Cassel, gave him, 1746, the post of court librarian at Cassel, which he held for 20 years, when he was recalled to Stockholm (1766), and appointed historiographer, the States granting him a pension of 1200 dollars on condition of his writing the life of his patron, King Frederick, a duty he never fulfilled. His last years seem to have been mostly taken up with speculations and visions of the spirit world, after the example of Emmanuel Swedenborg. He died on the 14th of July, 1777.

Cardinal Fleury's excessive anger at Arckenholtz's remarks gained him credit for extraordinary literary skill, but his writings by no means satisfied the expectations which had been raised. His most important work was 'Memoires concernant Christine, Reine de Suède,' four large volumes 4to, Amsterdam, 1751-60. The book

when it appeared excited prodigious interest, but it was soon ruthlessly attacked by d'Alembert and Voltaire, and with less wit but equal vigour by the Danish historian, Baron Holberg. At the end of a century it retains its character as an invaluable collection of materials, but French critics are as much disturbed as ever by its harsh and lumbering style. Arckenholtz replied to his assailants in a 'Réponse à la Lettre de M. le Baron de Holberg,' 8vo, 1753, and a 'Lettre à M. G[essner] à l'occasion des Reflexions sur Christine par M. d'Alembert,' 8vo, 1754; and in some respects he had the better of the fight. But in a literary sense the attack was so damaging that he (or his publisher) deemed it prudent to place the materials he had collected for a companion work, the 'Life of Gustavus Adolphus,' in the hands of Mauvillon, who wrought them into his 'Histoire de Gustave-Adolphe.' Arckenholtz afterwards published, 'Recueil des Sentimens et des Propos de Gustave-Adolphe,' Stockholm, 12mo, 1769; 'Lettres sur les Lapons et les Finnois,' Frankfurt, 8vo, 1756; 'Memoires de Rusdorf,' Frankfurt, 1762; an historical sketch of Frederick of Hesse-Cassel; an attempt at a Pragmatical History of Conventions and Treaties of a Free State with Neighbouring Powers; and one or two other essays, all of them written in French.

ARESON, JON, the last Roman Catholic bishop of Iceland, was born at Grita, Eyafjord, in 1484. Although poor, and scantily educated, he had high notions of genealogy, and he (or his friends for him) claimed to be eighty-fifth in direct descent from Adam. He entered the church at the age of twenty, as priest of Helgastad. Under instructions from Bishop Gottskalk of Holum, he undertook two missions to Norway, which brought him much reputation. After filling the posts of Dispensator and Officialis, he was appointed Bishop of Holum in 1522; but Ogmund, Bishop of Skalholt, claiming the right of nomination, sent an armed force against Areson, and drove him out of Iceland. An appeal to Archbishop Olaus at Drontheim resulted in Areson's reinstatement and consecration in 1524. After the lapse of many years, circumstances made Areson as violent in his conduct as Ogmund had been. Frederick III. of Denmark, having accepted the Reformation, sent orders in 1540 to prepare for it in Iceland. Nearly all the clergy yielded assent except Areson, who not only defied the king and the Althing, or annual assembly of Iceland, for years together, but began in 1549 a bitter persecution of the Protestant Bishop of Skalholt. Areson had taken a mistress while a priest, and had sons by her, who intermarried with the best families in Iceland; and when he was outlawed by the king for contumacy in 1549, two of his sons joined him in a fierce war against the Protestants. All three were captured, and beheaded, November 7th, 1550. The Reformation was quietly completed after this tragic episode.

Areson was the best Icelandic poet of his time. He introduced printing into Iceland in 1530 with the aid of John Matthiæ from Sweden. His published works are 'Manuale Pastorum,' 'Pinslargátr,' or a Lamentation for the Passion; a Paraphrase on the 51st Psalm, and Miscellaneous Poems.

ARETINO, D'AREZZO, or DE ARRETINUS, is an addition of frequent occurrence to the Christian names of distinguished Italians. It implies that they are citizens of Arezzo in Tuscany, or connected with the place by birth or residence. PIETRO ARETINO [E. C. vol. i. col. 300], and SPINELLO ARETINO [ib. col. 302] are examples. The following may be noticed in this Supplement.

ARETINO, ANGELO, a distinguished jurist of the 15th century, was of a family named Gambiglionni, and took his doctor's degree at Bologna in 1422; was assessor at Perugia, and afterwards held judicial offices in Rome, Città di Castello, and Nescia, where he was imprisoned for a year on an unjust charge of misconduct. On his release he was appointed to lecture on the Institutes at Ferrara; afterwards, 1438, at Bologna; and then again, 1445, at Ferrara, where he continued with the highest reputation till his death, which probably occurred shortly after 1450. He wrote several works which were long regarded as authorities, and one 'Tractatus de Maleficiis,' fol. 1472, and many times reprinted, which is still found in good law libraries.

ARETINO, BONAGUIDA, a celebrated jurist and glossator of the 13th century, was born at Arezzo, taught the canon law in that town, and practised as an advocate during the pontificate of Innocent IV. (1243-54). His writings refer to forms of process as well as to the principles of canon law. Savigny gives a full account of his writings as well as those of Angelo Aretino.

ARETINO, CARLO, one of the most distinguished scholars of the court of Cosmo de' Medici, was the son of Gregorio Marsuppini, at one time governor of Genoa, and was born at Arezzo

about 1399. He learnt Latin under John of Ravenna, Greek under Manual Chrysoloras; early secured the favour of Cosmo de' Medici; for some time lectured in Florence on the classic writers; in 1441 was appointed to the honorary office of apostolic secretary; and in 1444 to the important post of chancellor to the republic, which he filled with so much credit that on his death in April, 1453, he was decreed a splendid public funeral in the nave of Santa Croce. Carlo Aretino was regarded as one of the greatest Greek and Latin scholars and orators of his age, though few specimens of his literary ability have been printed. A selection of his Latin poems is given in vol. vi. of the 'Carmina Illustrum Poetarum Italorum,' Florence, 1720; and a translation of the 'Batrachomyomachia' into Latin hexameters was published at Parma, 4to, 1492, and reprinted with the original and an Italian version by the Abbé Lavagnoli, Venice, 4to, 1744.

ARETINO, FRANCESCO. [ACCOLTI, FRANCESCO, E. C. S. col. 15.]

ARETINO, LEONARDO. [BRUNI, LEONARDO, E. C. vol. i. col. 978.]

ARETIUS, BENEDICT, learned Swiss botanist and divine, was born at Bern about 1505; studied in his native city; was in 1548 appointed professor of logic at Marburg, but in the following year returned to Bern as principal of the gymnasium; was nominated professor of languages in 1563, and later professor of theology; and died April 22nd, 1574. Aretius was a laborious scholar, and in theology a devoted, or as he has been styled, fanatical disciple of Calvin, going the length of writing a treatise in defence of the execution of Valentinus Gentilis for holding Arian views—a treatise that was translated into English. His spare time was given to botanising in the country around Bern, carrying out his investigations at home, or in correspondence with men of science and learning. Conrad Gessner makes frequent reference to Aretius in his works, and gave his name to an Alpine plant which he was the first to describe (*Aretia helvetica*). The reputation of Aretius as a botanist rests on a description of the flora of the Niesen and Stockhorn mountains, 'Descriptio Stocchorni et Nessi montium in Bernatium Helveticorum ditione et nascentium in eis stirpium,' printed in a folio edition of the works of Valerius Cordus and in Gessner's 'Hortus Germaniæ.' Sprengel states that about 40 plants were for the first time described in it. Aretius also published a work on the history and nature of comets, 'Brevis Cometarum Explicatio,' 4to, Bern, 1556; and edited an old medical treatise 'Opus Physicum et Medicum de gradibus et compositionibus medicamentorum,' 8vo, Zurich, 1572. Of his numerous theological publications the following are perhaps the most important:—'Censura Conclusionum quod Baptismus non successerit circumcissioni contra Pædo-baptistas,' Geneva, 1567; 'Examen Theologicum, brevi et perspicua methodo conscriptum,' 1572; 'Problemata Theologica, folio, Lausanne, in three parts, of which the first and second' appeared in 1574, and the third (posthumous) in 1576. His lectures on the Lord's Supper, 'Lectiones vii. de Cena Domini,' Lausanne, 1578, passed through several editions, as did also his (posthumous) commentary on the New Testament, 'Commentarii in Libros Novi Testamenti,' fol. 1580; 'Commentarii Breves in Mosis Pentateuchum,' Bern, 8vo, 1602. To these should be added his commentaries on Pindar, 'Commentarii absolutissimi in Pyndari, Olympia, Pythia, Nemea, Isthmia,' Geneva, 4to, 1589.

ARETUSI, CESARE, called also CESARE MODENESE, was born at Modena about the middle of the 16th century; studied the works of Raminghi and Correggio; acquired reputation as a portrait painter; and was admitted a citizen of Bologna, but on the invitation of Duke Ranuccio he removed to Parma, where he died in 1612. Aretusi belonged to a stage in Italian art when facility of execution and skill in imitating the manner of the masters of the preceding period were sufficient to secure fame. Both these faculties he possessed, and he was far above the average as a colourist. He was accordingly employed to make a copy for the cathedral of San Giovanni, at Parma, of Correggio's famous picture of the Notti now at Dresden, and he executed his commission with so much ability that probably Mengs was not singular in believing that the possession of the copy would compensate the loss of the original. At any rate the authorities were so well satisfied, that having decided to erect a new tribune to the cathedral, they directed Aretusi to make copies from the frescoes by Correggio which adorned the old tribune, and these being made, the old pictures were destroyed with the walls on which they had been painted. Aretusi's dexterity in assimilating Correggio's manner seems to have been exercised on easel as well as mural paintings; and as it was evidently appreciated by his contemporaries, it is not unlikely that

many 'duplicates' and some 'originals' ascribed to the great painter are due to the pencil of his copyist. Aretusi had little inventive or original power. Some of his best so-called original works were produced in conjunction with Gio. Battista Fiorini, an artist of whom little is known beyond his co-partnership with Aretusi.

ARGENTRÉ, BERTRAND D', a learned French jurist and historian, was born at Vitré, in Brittany, in 1519. He at first applied himself to the study of history and general literature, and wrote a Latin history of Brittany; but it was never printed, and the MS. is in the Bibliothèque Impériale. D'Argentré, in 1547, succeeded his father as Sénéchal of Rennes. He had deeply studied jurisprudence, and became the acknowledged leading authority on the customary law of Brittany. He was in 1579 appointed one of the commissioners for the reformation of that law. In the performance of this task he took high ground in maintaining the feudal and seignorial privileges, and would have strengthened the position of the lord as against the vassal had he not been checked by the more liberal views of his coadjutors. On the completion of the commission, the States of Brittany invited D'Argentré to write a history of that province, which, by the aid of some memoirs prepared by his great-uncle, Pierre le Baud, he completed in three years. The work was published at Rennes, in 1582, but proved to be little more than a dry detail of facts. By the Parliament of Paris it was, however suppressed, on account of the freedom with which he had spoken of the ancient rights and independence of Brittany. D'Argentré revised, modified, and republished his history in 1588. It became his duty to act against the League in 1589; and this duty occasioned him so much pain, harass, and vexation, that he died 13th February, 1590. D'Argentré wrote a great number of works on the customary law of Breton, and on the feudal rights, privileges, and prescriptions. Several of these works were printed in his lifetime, and all were collected and published by his son in 1608 under the title, 'Commentarii in Patrias Britonum Leges, in lucem editi cura et studio Caroli d'Argentré.' A life of D'Argentré, by Mionec de Kirdanet, was published at Rennes in 1820.

ARGENTRÉ, CHARLES DU PLESSIS D', Bishop of Tulle, was born at Du Plessis, near Vitré, the 16th of May, 1673. After studying philosophy at the college of Beauvais, and theology at the Sorbonne, he joined the order of Friars Minors; was admitted into the Society of the Sorbonne in 1698, and received a doctor's degree in 1700. In the same year he was nominated to the Augustine abbey of Sainte-Croix de Guingamp. In 1702 he obtained the deanery of Laval. He was elected, in 1705, one of the deputies of the second order to represent Tours at the General Assembly of the Clergy of France. In 1707 he became vicar-general to the Bishop of Tréguier; in 1709, almoner to the King; and in 1725, Bishop of Tulle. For some years after this he was one of the deputies of the first order representing the province of Bourges at the General Assembly of the Clergy. He continued diligently in the discharge of his diocesan duties until his death, which took place October 27th, 1740. D'Argentré published fourteen works between 1698 and 1734 on theological subjects. Many were controversial, directed against the writings of Jurieu, Fénelon, and Holden. His principal works were 'Analyse de la Foi, avec un traité de l'essence et des marques qui distinguent la véritable Église de Jésus-Christ,' two vols. 12mo, Lyon, 1698; 'Elementa Theologica,' &c., 4to, Paris, 1702; 'Lexicon Philosophicum,' La Haye, 4to, 1706; 'De Supernaturalitate,' &c., Paris, 4to. He also published a large number of sermons, funeral orations, pastoral letters, &c.

ARINGHI, PAOLO, an Italian antiquary of the 17th century, was born at Rome, entered at an early age the Congregation of the Oratory, and remained in it till his death in 1676. As an investigator of the ancient remains of his native city, he did good service to the study of Christian antiquities by his 'Roma Subterranea,' two vols. folio, Rome, 1651; Cologne, 1659; Paris, 1659. Substantially a Latin version of Ant. Bosio's 'Roma Sotterranea,' though much extended and improved, Aringhi's book is practically superseded by the later and more elaborate works of Bottari, Louis Perret, and Rossi, but no original investigator can afford to leave Aringhi unreferred to. His other works are 'Monumenta Infelicitas, sive Mortes Peccatorum pessimæ,' 2 vols. fol., Rome, 1664; 'Triumphus Poenitentia,' fol., Rome, 1670.

ARLER, PETER VON, German mediæval architect, was born about 1333 at Bologna, where his father, Heinrich von Gemünd, in Suabia, had recently settled. Peter von Arler was,

in 1356, already in Germany, and though so young, must have acquired some reputation, since in that year was entrusted to him the completion of the cathedral of St. Vitus, in the Hradschin, or royal quarter, Prague. This magnificent structure, in many respects one of the finest examples of German Gothic architecture extant, was commenced by Mathieu d'Arras in 1343; Von Arler continued the works for thirty years, till they were interrupted by his death in 1386, and unhappily they were left incomplete, only the choir and one of the towers having been erected. The tower, the highest in Europe, being 506 feet high, was reduced after a great fire in 1541 to its present height of 314 feet. The original design, still preserved in the Schatzkammer (treasury) of the cathedral, was probably by d'Arras, but its present aspect, and particularly the exceeding richness of the decoration, is no doubt due to Von Arler. The Allerhelighi Kirche, in the same city, was also erected by Von Arler, and the famous bridge over the Moldau, between the Altstadt and the Kleinseite, with its fifty-six statues of saints, was commenced by him, though not completed till a century and a quarter after his death. The only other work of importance attributed to Von Arler is the church of Kolin on the Elbe.

ARLINCOURT, CHARLES VICTOR PRÉVOT, VICOMTE D', French writer, was born at the château de Mérantrais, near Versailles, September 28, 1789. His father, of an old family of Artois, was one of the royalist victims of 1793, and the boy was taken by his mother into Picardie, where he was educated under an abbé. At ten years of age he is said to have written a poem of many thousand lines on the effect of the passions, but happily it was consigned to the flames. The young count was noticed by Napoleon I., who appointed him successively to posts in the establishment of Madame Mère; in the diplomatic service in Spain; and as auditor of the council of state. On the fall of Napoleon I., M. d'Arlincourt transferred his services to Louis XVIII., who made him maître des requêtes; but he was dazzled by the reappearance of the Emperor, and after the Hundred Days he was superseded by Louis; nor, though his Bourbonism went on increasing in fervour, did he succeed in regaining the confidence of the family till after the events of 1830. His first literary venture was in a fragment of an epic poem, published in 1810, under the title of 'Une Matinée de Charlemagne,' in which some incense was skilfully administered to the living Charlemagne; but when the completed epic was published in 1818 as 'Le Caroléide,' Charlemagne had fallen, and the tone was sensibly modified. However, it had a certain amount of popularity, and a third edition was published in 1824. But though he continued occasionally to write verse, it was to his prose romances that he owed his exceptional celebrity. Of these the most popular was 'Le Solitaire' (1825), which passed through numerous editions, was transferred to the stage in most European capitals, and was made the subject of a successful opera-comique. 'L'Étrangère,' 'Le Renégat,' and 'L'Ipaiobé,' were very similar in character and conduct, all glancing at current events, and satirizing present manners under old names and times. The ejection of Charles X. from the throne of France turned his pen to political satire, and from this time he poured forth a stream of romances which, under historic pseudonyms, are filled with extravagant laudation of the Bourbons, and denunciations of their successors, and of all who fail to appreciate their high qualities: the titles of a few will serve as examples, 'Les Rebelles sous Charles V.' (1832); 'Bannissement et retour de Charles VII.' 'Le Brasseur Roi' (1833); 'Les Trois Châteaux'; 'Les Pèlerins'; 'Les Trois Royaumes' (1845); 'La Tache de Sang,' and so forth. The revolution of 1848 strongly excited him, and he issued a violent political pamphlet, 'Dieu le veut!' (1848), which led to a prosecution, and of which a 60th edition appeared in 1849. This was followed by a second brochure, 'L'Italie Rouge,' which went through seven editions. The enemies of M. d'Arlincourt, who, as may be supposed, were pretty numerous, attributed the apparent success of his numerous works to the means he took to ensure their circulation, but much of it may be accounted for by his position, his trenchant language, and thorough-going partizanship. None of his productions are likely to live. He made a couple of dramatic attempts; first with a tragedy, 'Le Siège de Paris' (1826), then with a less regular play, 'La Peste Noir,' in 1845; but both were unsuccessful. M. d'Arlincourt died January 22, 1856.

ARMANI, or ARMANNI, GIOVANNI BATTISTA, one of the most distinguished of the modern extemporaneous poets of Italy, was born at Venice 14th March, 1768. After serving for two years as a military cadet with the Venetian expedition

to Africa, and studying for a time at the University of Pavia, he began, at the age of twenty, to support himself by travelling about Italy as an improvisatore. When the stirring times of the Napoleonic wars began, Armani was appointed in 1797 Vice Secretary of the Committee of Public Safety at Venice. For eighteen years after this appointment his fortunes fluctuated with the changing political events in Italy. He died June 15th, 1815, while filling the post of Chancellor of Taxes, at Adria. Many of Armani's extemporaneous effusions were collected and published by the Abate Segalini in 1814, under the title 'Squarcio di Versi estemporanei di G. B. Armani.' His verses are curious rather than admirable; often rhymes to fit certain endings presented to him of eight lines. One, on the Death of a Cricket, had to bring in three lines from Petrarch. Another, a sonnet, had not only the endings to fit to prescribed rhymes, but the fourteen lines to begin with the letters of 'Amor vince tutto.' Two dramas by him, 'Mehamet III.' and 'Sofia,' were acted without success. Several translations from his pen were printed, but are forgotten. He also made collections for a History of Extemporaneous Poetry in Italy, but the work was never written, and the materials are lost.

ARMATI, SALVINO, the reputed inventor of spectacles, was born at Florence in the latter half of the 13th century, and died in 1317. The credit awarded to him is based on several slight facts. Roger Bacon in 1292, Vanni del Busca in 1299, and G. del Rivolto in 1305, all allude to spectacles in a way that points to the probable invention about 1280 or 1290. Other testimony supports the claim of Armati rather than that of Alessandro Spina, of Pisa, who has also been credited as the inventor.

ARMENGAUD, JEAN GERMAIN DESIRÉ, French writer on art, was born at Castres, department of Tarn, in 1797, and educated at Lavaur and Toulouse. Against his will he was placed in a commercial establishment, but he was after a time enabled to devote himself to the more congenial pursuit of art. After spending some time in the museums of France, he visited the principal galleries of Europe, and thus prepared, commenced the publication of a work of importance, the 'Histoire des Peintres du toutes les Écoles depuis la Renaissance jusqu'à nos Jours,' 4to, with engravings, 1849; the completion of the book was, however, left for M. Ch. Blanc. M. Armengaud's next publication was even more ambitious in character than his first—'Les Galeries Publiques de l'Europe,' of which the first volume, large 4to, devoted to Rome, appeared in 1856, and was reprinted in small folio in 1859. This, in its wood engravings, paper, and printing, is one of the handsomest and best got up volumes which have ever issued from the Parisian press; it was patronised by the Pope, who, as a mark of his appreciation, bestowed on M. Armengaud the Order of St. Gregory the Great; and it was largely subscribed for; but the text was not satisfactory, and several years elapsed before another volume was issued, and with that the series seems to have come to an end. M. Armengaud's other works are—'Chefs-d'œuvre de l'Art Chrétien,' Imp. 8vo, 1858; 'Les Trésors de l'Art,' 1859, with 47 engravings on steel; 'Les Chefs-d'œuvre de Rubens à la Cathédrale d'Anvers,' 1859; and 'Le Parthénon de l'Histoire,' 1863—64,—like some of the preceding, more remarkable for the brilliancy of the illustrations than for the value of the text. M. Armengaud died in March, 1869. His brother, JULES EDOUARD ARMENGAUD, is an able designer, and, partly in conjunction with a still younger brother, Charles, has published several important works on the mechanical and industrial arts, including 'Publication industrielle des Machines, Outils et Appareils les plus perfectionnés et les plus récents, employés dans les différentes branches de l'Industrie Française et Étrangère,' 11 vols. 8vo, with folio plates, 1840—58; 'Nouveau Cours raisonné de Dessin industriel appliqué,' 8vo, with folio plates, 1848—50; 'Cours élémentaires de Dessin industriel à l'usage des Écoles primaires,' 4to, with plates, 1850; 'Le Génie Industriel,' 4to, 1851—56, &c.

*ARMITAGE, EDWARD, A.R.A., was born in London, May the 20th, 1817. His artistic education was acquired in Paris, where during 1836—38 he studied in the atelier of Delaroche, obtaining that precision of drawing and firmness of handling which have ever since characterised his productions, and which induced the great French painter to select him as his assistant in executing the Hemicycle in the École des Beaux-arts. Mr. Armitage, we believe, exhibited his first picture, 'Prometheus,' at the Salon in 1842. In 1843 he obtained by his 'Landing of Julius Cæsar in Britain' one of the first-class prizes at the cartoon competition in Westminster Hall; in 1845 he won a 200l. prize for his 'Spirit of Religion,' and in 1847 a 500l. prize for the 'Battle of Meane,' the last of which he received a com-

mission to paint in oil for the Queen. Mr. Armitage now spent two or three years in Italy, with great benefit, especially in colour, in which he had previously been somewhat deficient. This was apparent in his 'Mother of Thomas à Becket seeking Gilbert,' exhibited at the Royal Academy in 1849, but still more in his 'Aholibah,' 1850, and 'Samson,' 1851, the first of the scriptural pictures in which he gave evidence of distinctive style combined with careful study. From this time Mr. Armitage has continued to paint subjects of an elevated class, and always in a serious and conscientious spirit. Of those contributed to the annual exhibitions of the Royal Academy the following may be specified:—'Hagar,' 1852; 'The City of Refuge,' 1853; 'The Lotos Eaters,' 1854; 'The Mother of Moses hiding after having exposed her Child on the river's brink,' 1860; 'Pharaoh's Daughter,' 1861; 'The Burial of a Christian Martyr in the time of Nero,' 1863; 'Ahab and Jezebel,' 1864; 'Esther's Banquet,' 1865; 'The Remorse of Judas,' and 'The Parents of Christ seeking Him,' 1866; 'Christ Healing the Sick,' 1867; 'Herod's Birthday Feast,' a very fine work, 1868; 'Hero lighting the beacon to guide Leander across the Hellespont,' a production of rare grace and beauty; and 'Christ calling James and John, the sons of Zebedee,' 1869. With the multitude of visitors these have not perhaps been popular pictures, but it may be doubted if any have during these years done more to sustain the credit of the English school of painting. We are not called upon here to enter upon their merits, but we are bound to record the earnestness of purpose and thorough study on the part of the artist which each in succession has displayed. Besides these, Mr. Armitage has painted some frescoes in the Houses of Parliament; a life-size series in the Roman Catholic church of St. John, Duncan-terrace, Islington, and a large commemorative picture of 'Henry Crabb Robinson surrounded by his Friends,' on the wall of University Hall, Gordon-square, London. In 1855 Mr. Armitage visited the Crimea, and afterwards painted some of the incidents of the war there; and in 1867 he was elected Associate of the Royal Academy.

*ARMSTRONG, SIR WILLIAM GEORGE, a distinguished civil and mechanical engineer, was born at Newcastle-on-Tyne in 1810. His father was a merchant, and, in one year, mayor of that town; his mother was a daughter of Mr. Potter, of Walbottle Hall, Northumberland. From a child he evinced a liking for mechanical pursuits. When not more than six years old, he planned a method of setting a number of old spinning-wheels in motion by means of weights descending on strings from top to bottom of his father's house; and the wheels, thus set spinning, were made to act upon imitative water-pumps, corn-mills, &c. Young Armstrong, at a proper age, was articled to Mr. Donkin, a solicitor at Newcastle; and he afterwards studied special pleading in London with his brother-in-law, Mr. (the late Baron) Watson, with a view to the adoption of the legal profession. His interest in mechanical and scientific pursuits continued, however, to be the leading feature in his character. This bias became more decided in 1835, when his attention was riveted by observing the great waste of power in some of the Yorkshire cascades and rapids. He felt that something better might be done than merely work a few water-wheels with the descensive force, by bringing down the water in a closed instead of an open channel, and thus preventing the waste of nineteen-twentieths of the power. This was the germ of important works in later years. In 1840 he made another observation fruitful in results. He found that steam, escaping through cement round the safety-valve of a boiler, was in an electric state. This suggested a course of experiments which led to the construction of his hydro-electric machine, the most powerful apparatus known for producing frictional electricity. This invention, induced by a discovery, led to Mr. Armstrong's election as a Fellow of the Royal Society. It was not, however, until 1847 that he abandoned the law as a profession. Shortly before this date he had acted as chief promoter of, and solicitor to, a scheme for providing Newcastle with water; and then, when an act was obtained for the purpose, he brought his love for hydraulic science into immediate usefulness. His plan was adopted of applying water-pressure, by descent through the pipes of the Whittle Dean Waterworks, to various mechanical purposes in the town, especially that of working hydraulic cranes on the quay. The success was so complete, that Mr. Armstrong resolved to establish himself as a mechanical engineer. He and a small circle of friends founded the Elswick Engine Works near Newcastle. About the same time he was elected a member of the Institution of Civil Engineers, and was warmly encouraged by the late Mr. Rendel. Mr. Hartley, Engineer of the Liverpool Docks, introduced the hydraulic

cranes there; and ever since that time the Elswick Works have been busy in the construction of similar machines. Mr. Armstrong's 'Accumulator' has greatly increased the efficiency of his hydraulic machinery. Where a head of water cannot be obtained by mere altitude, water is forced up by steam-power into an artificial head, or accumulator, which is constantly available as a moving power for lifting weights, opening and closing ponderous dock-gates, working swing-bridges, pumping water, shipping coal, hauling and lifting waggons, docking ships, crushing ore, working lifts at hotels and lofty buildings, working capstans and turntables, and numerous other purposes. The Armstrong hydraulic machinery has become very extensively employed in these several ways in or on railways, canals, mines, docks, and other engineering works.

Mr. Armstrong's inventions relating to artillery commenced in 1854. Meditating on the difficulty with which guns had been brought into position at the battle of Inkermann, he conceived that ordnance of equal effect might be made of much smaller weight. He received encouragement from the Duke of Newcastle (Secretary for War) to make an experimental gun, which was completed in April, 1855; but he made a very long course of experiments before submitting it for final approval. Adopting wrought iron instead of cast, and a rifled instead of a smooth-bore, he had nevertheless many other points to determine,—such as the mode of building up the gun of coiled slabs or bars of iron, the number of rifle-grooves, their sharpness of twist, the kind of shell and shot to employ, the best kind of fuze, and the relative advantages of breech-loading and muzzle-loading. After numerous experiments, Armstrong submitted a 3-pounder gun to the War Office in 1856, then a 5-pounder, and then an 18-pounder in 1857. In 1858, when General Peel was Secretary for War, a contract was made for a large number of the new guns. Mr. Armstrong ceded all his patents in ordnance matters to the Government; the guns were to be made by the Elswick Company, under certain stringent conditions, in a distinct establishment, to be called the Elswick Ordnance Works. Mr. Armstrong was knighted and made a C.B., and was appointed Engineer of Rifled Ordnance, with a salary of 2000*l.* a year. The guns first made under this contract were breech-loaders, mostly 12, 20, and 40-pounders, but guns of much larger calibre were afterwards made as muzzle-loaders for naval use as well as for land service. Between the years 1858 and 1870 the Armstrong gun and the position of Sir W. G. Armstrong in reference to the Government underwent many changes; but the leading feature of the gun, whether rifled or smooth, muzzle-loading or breech-loading, is in the coiling of one wrought-iron tube over another until a sufficient thickness is built up. His ordnance, of various kinds, has ranged from a 1-pounder up to a 600-pounder (the latter familiarly named in 1863 "Big Will"). The Armstrong gun has been largely adopted by the Austrian, Italian, Turkish, Spanish, Danish, Dutch, Norwegian, Greek, Egyptian, Chilian, and Peruvian Governments.

Sir W. G. Armstrong, when president of the British Association in 1863, drew attention to the gradual lessening of our supply of coal, and the probability of actual exhaustion at some future time. The discussion suggested by this important address led to the appointment of a Royal Commission to inquire into all the circumstances connected with our national coal supply, and he was nominated a member of this commission. Sir William strongly opposes the patent laws in their present form; his opinions thereon are embodied in evidence given before a Royal Commission, which has been published in the parliamentary papers. Sir W. G. Armstrong is president of the Institution of Mechanical Engineers, and also of the Newcastle Literary and Philosophical Society. The University of Cambridge has conferred upon him the degree of LL.D.

ARNALDUS, or ARNOLDUS, DE VILLÀ NOVÀ is said to have been born at Villeneuve, in Provence, about 1240, and to have been educated at Barcelona under John Casamila, a celebrated professor of medicine. He had to quit the place suddenly, in consequence of having predicted the death of Peter of Aragon. After travelling through Italy, he visited Paris, and became a teacher in the University of Montpellier. He became famous as a physician, and as such, was sent for by several sovereigns, and even by the Pope. He was skilled in the science of his time, and also in the Hebrew, Greek, and Arabic languages. As an astrologer he calculated the age of the world, and predicted that it would come to an end in 1335. (Brande, 'Hist. Chim.' says 1376.) For this, and several other of his opinions, he was condemned as a heretic, but he was protected by the Pope, although compelled to leave France. He died in 1313, while proceeding to visit

Pope Clement V., who was ill, at Avignon; some say he was shipwrecked on the coast of Genoa. His works, 21 in number, were published in a folio volume at Venice in 1505. There were seven later editions, the last of which was published at Strasburg in 1613. His *Rosarium* ('*Rosarius Philosophorum*') is a compendium of alchemy in theory and practice; the latter part, subdivided into 32 chapters, contains minute directions for making the philosopher's stone. Dr. Thomson ('*Hist. Chim.*') read it carefully, but found it in many parts quite unintelligible.

Arnold, in common with other alchemists, regarded mercury as a constituent of the metals. He admits some reservations in his account of the philosopher's stone. His favourite medicines were gold and gold-water, but he also used mercury and bismuth (naming the latter *marcasite*). He distilled oil of turpentine, oil of rosemary, and spirit of rosemary, which afterwards became famous as *Hungary water*.

Arnold is one of the worthies included in the once celebrated apology of Mundæus, a learned Frenchman of the 17th century, entitled, 'An Apology for all the Wise Men who have been unjustly reputed Magicians from the Creation to the Present Age.' Arnold did not fail to suffer from the tendency of the middle ages to denounce superior knowledge as magic, and magic as a criminal pursuit.

ARNAUD DE MARVEIL, a Provençal troubadour, was born at Marvelh, in Perigord. The dates of his birth and death are not known, but both were in the 12th century. He entered the service of Roger II. Viscount of Bézières, to whose wife, in accordance with the fashion of the troubadours in those days, but under various fanciful names, he addressed passionate songs of praise and love. He appears to have received handsome gifts in return for these effusions. Alfonso, King of Castile, also an admirer of the countess, brought about the removal of Arnaud, who had to find an asylum with the lord of Montpellier. There is a great variety of metres in his love songs, some of which have been printed in various collections. One poem by him, in 400 verses, breathes a tone of disappointment at the morals and conduct of the world. Raynouard, Sismondi (who gives several specimens of his verse), and other recent writers on the poetry of the troubadours, place Arnaud de Marveil at the head of the amorous poets of his age and country; but Petrarch, who styles him "the lesser Arnaud," is much less favourable in his estimate.

(Millot, *Hist. Lit. des Troubadours*, vol. i. pp. 69—84.)

ARNDT, ERNST MORITZ [E. C. vol. i. col. 350]. Notwithstanding his great age, Herr Arndt continued active in mind and body; writing or translating poetry, taking pleasure in the cultivation of his garden, in walking, visiting his friends, still more in receiving those who came with feelings akin to reverence to pay their respects to the venerable patriot. Mr. Crabb Robinson, who saw him at Bonn in 1856, notes that he found him "the same as ever. . . . His flow of talk or declamation was in quantity equalled only by Coleridge; the tone different—Arndt having a sharp, loud, laughing voice; his topics always recurring—the difference of race and the science of ethnology." So the old man lived on, over his 91st birthday, which was celebrated as a festival, till he passed away on the 29th of January, 1860. A fine bronze statue of him, by Afinger, was erected by the subscription of "the German people."

ARNGRIMSSON, EYSTEIN, the author of the most famous religious poem in the Icelandic language, was a monk of the 14th century, who having for repeated acts of insubordination been excommunicated in 1358 by Bishop Girdar, of Skalholt, in proof of his penitence composed a poem in honour of the Virgin Mary. The bishop was so much delighted with the poem that he not only removed the ban, but received the author into his friendship, and made him his official. Arngrimsson died in 1361, shortly after his arrival at Drontheim from a voyage in which he had been shipwrecked. 'The Lily,' the poem above referred to, is the only composition of Arngrimsson's which has come down to us. It comprises a hundred stanzas of eight lines each, and is written in a strain of elevated devotion to the Virgin. When the country became Protestant 'The Lily' ceased to be a household poem, but it has never ceased to be reckoned the finest specimen of Icelandic verse. It has been often printed, the first time, in Icelandic only, being at the press of Holum in 1612, but somewhat altered in its religious tone by its editor, Arngrim Jonsson (Jones): perhaps the best edition is that of Finn Magnusson, 1818, who has accompanied it with a Danish translation.

ARNHEIM, or ARNIM, GEORG BARON VON, a distinguished soldier and statesman of the time of the Thirty Years'

War, was born about 1586 at Boitzenburg, in Brandenburg. Although belonging to a noble family, he presented a characteristic example of the soldier of fortune, one who takes up arms as a profession without much regard to patriotism or international politics. He entered early the Swedish army, in the service of Gustavus Adolphus; but Wallenstein induced him to change masters, and join the Imperial forces. In the command of a regiment Arnheim shared in the victories of the Imperialists at Domitz, &c., in 1626. Wallenstein then employed him on a mission to Gustavus Adolphus, to induce the latter to join in an attack on Christian IV.: Sweden to have Norway, and the emperor Denmark, as a partition of the spoil. Instead of succeeding in this mission, Arnheim discovered that Gustavus had a scheme for appropriating all the provinces on the south shore of the Baltic, assuming to himself the title of "Protector of the Protestant Faith in Germany." Wallenstein changed his plan accordingly, with a view to frustrate intrigue by counter-intrigue. In his projects he estimated very highly the aid of Arnheim, who by astute negotiations gained over Mecklenburg and Pomerania to the Imperial side. Arnheim conducted the siege of Stralsund in 1628, and then went to aid Sigismund of Poland against the Swedes. When, in 1630, Wallenstein was dismissed by the Emperor, Arnheim quitted the Imperial service. He next became field-marshal and commander-in-chief of the Elector of Saxony's forces, which he led against the Swedes. Wallenstein, restored to favour in 1632, marched against his old friend and supporter, Arnheim, with (it is believed) some kind of secret understanding between them. New intrigues arose after the death of Wallenstein in 1634, which led to Arnheim fighting once more against the Imperialists, whom he defeated at Liegnitz. After the signing of the peace of Prague in 1635, Arnheim retired to his castle of Boitzenburg; here he was surprised and seized by the Swedish general Wrangell, and taken to Stockholm in 1637. He escaped, and, while planning a scheme of revenge, died suddenly, June 29, 1641. Cardinal Richelieu characterised Arnheim as the ablest Protestant whom the Pope could have trusted and honoured.

ARNIM, LUDWIG ACHIM VON, an eminent Prussian poet, was born at Berlin, January 26, 1781. After studying medicine and the natural sciences at Göttingen, he took the degree of M.D., though he never practised as a physician. He wrote several works, some poetical and some scientific, and then went to travel in Germany, the romantic scenery of which strengthened his natural love for the primitive simplicity of popular legends and poems. In conjunction with Clemens Brentano, he published at Heidelberg, in 1803, a collection of popular songs, under the title 'Das Knaben Wunderhorn.' After marrying Brentano's sister, (Goethe's correspondent Bettina, see the next article), he resided quietly in and near Berlin until his death, which took place January 21, 1831. Arnim's writings were only appreciated gradually: his romantic, imaginative, gentle tone seeming to have little to do with the actual world around him. His most popular work is the collection above-mentioned. His best original work is the novel, 'Armuth, Reichthum, Schuld und Busse der Gräfin Dolores' (1810), in which all his peculiarities are distinctly marked. He also published 'Halle und Jerusalem, Studentspiel und Pilgerabenteuer,' and ten or a dozen other poems and novels, besides many pieces in verse and prose contributed to periodicals, all of which have been published in a collected form, 'Sämmtlichen Werke,' 19 vols. Berlin, 1839—46.

ARNIM, ELIZABETH VON, better known as BETTINA, wife of Ludwig Achim von Arnim, and sister of the poet Clemens Brentano, was born April 4, 1785, at Frankfurt, and educated partly in a convent, partly under the direction of her aunt, the celebrated Sophie Laroche. She was early known in a wide circle for her talents, her fondness for poetry, and her wayward manners, but she made her name and peculiarities familiar throughout Germany, and soon throughout Europe, by the publication of 'Goethe's Briefwechsel mit einem Kinde,' 2 vols., Berlin, 1835, which she translated into English under the title of 'Goethe's Correspondence with a Child.' The first volume is devoted to the correspondence of the poet, the second to that of his mother, and the third (Tagebuch) to the diary of the Child. Its publication was perhaps indiscreet, but it preserved many fine passages from the aged poet's pen—when the correspondence commenced he was over 60, and 'the child' Bettina already on the wrong side of 20—many pleasant passages in his life and character, and many amusing ones in her own. It was followed by 'Die Gündertode,' 2 vols. Grunberg and Berlin, 1840, a sentimental sketch, with the correspondence, of Mademoiselle

Gündertode, who had acquired notoriety from having committed suicide, in consequence of an unrequited attachment for Creuzer, the distinguished scholar. Bettina now turned to social politics, took an active part in efforts that were making to ameliorate the condition of the working classes of Berlin, and wrote on the subject and dedicated to the King a work, 'Dies Buch gehört dem Könige' (This Book appertains to the King), 2 vols. Berlin, 1843, that would perhaps have called forth a severe rebuke if it had come from any other than one now recognised as a sort of petted, wilful, clever woman. A few years later she published 'Ilius Pamphilus und die Ambrosia,' 2 vols. Berlin, 1848, the substance of a correspondence on industrial and philanthropic subjects with the manufacturer Nathusius. Her latest works were 'Gespräche mit Dämonen,' and a sketch of her brother Clemens Brentano, with passages from his inedited poems. She died at Berlin on the 20th of January, 1859.

* ARNOLD, MATTHEW, eldest son of Dr. Thomas Arnold, of Rugby [E. C. vol. i. col. 354], was born at Laleham, Middlesex, December 24, 1822. He was educated at Winchester; under his father at Rugby; and at Balliol College, Oxford, where he was elected scholar in 1840. At Oxford he won the Newdigate Prize in 1843 by his poem 'Cromwell'; graduated second class in Literis Humanioribus, Michaelmas, 1844; was elected fellow of Oriel the following year, and in due course proceeded M.A. In 1847 Mr. Arnold was appointed secretary to the Marquis of Lansdowne, an office he retained till his appointment in 1851 to a government inspectorship of schools. This post he has retained (advancing in grade) till the present time, having while holding it acted as commissioner to visit the schools of France and Germany, his reports on which have been printed and much valued. To bring his opinions on education more distinctly before the public, Mr. Arnold published the essay he prefixed to his first report under the title of 'The Popular Education of France, with Notices of that of Holland and Switzerland,' 8vo, 1861: the leading idea, which he enforces at much length, being the benefit of the direct control of the state in all educational matters; that alone, as he seems to think, being sufficient "to prevent the English people from becoming with the growth of democracy Americanized." This view he further developed, but at the same time somewhat modified, in a second work, 'A French Eton; or, Middle-Class Education and the State,' 8vo, 1864, in which, while admitting that "our actual middle class" is "traversed by a strong intellectual ferment," and has "real mental ardour, real curiosity, . . . is the great reader," he denies that it has "the fine culture or the living intelligence which quickened great bodies of men" in better times, and proposes as the only remedy the establishment for their especial behoof of public schools by the State and under State control: the model of such schools being the French Lyceum. In a further report, published in 1868, under the title of 'Schools and Universities of the Continent,' Mr. Arnold gives a sketch of the Prussian and Italian as well as the French and Swiss systems of education, employing it still further to enforce his favourite idea of the necessity of bringing all middle-class schools under direct "State action and State control," which he would extend to the books used, as well as to the systems of instruction adopted in the schools.

But though he has written so much and so earnestly on education, it is as a poet and essayist that Mr. Arnold is chiefly known to the public. A slight volume of original verse, 'The Strayed Reveller, and other Poems, by A.,' appeared from his pen in 1848, and though it did not attract general attention, was regarded as a work of promise. 'Empedocles on Etna, and other Poems,' appeared in 1853. The following year he published a volume of 'Poems,' the first volume to which his name was attached, and containing a selection from the poems previously published with several new pieces, together with a preface, in which he enunciated his preference for a finished and classic style over a freer manner, and for a narrower but cultivated audience, rather than a wide public and popular sympathy. In 1867 Mr. Arnold published a volume of 'New Poems,' including 'Thyrsis,' a number of sonnets and short pieces, and the 'Empedocles,' which he had withdrawn, but now reproduced at the suggestion or request of Mr. Browning. In 1869 he collected as many of his verses as he wished to be preserved, with some new ones, classifying them as (1) 'Narrative and Elegiac Poems,' and (2) 'Dramatic and Lyric Poems,' in 2 vols., bearing the general title of 'Poems, by Matthew Arnold.' This may be regarded as his definite utterance in poetry, and affords a sufficient gauge of his rank as a poet. His verse is elegant, elaborate in construction, highly finished, but deficient in breadth and

spontaneity, and that passionate element which Milton regards as a constituent of all genuine poetry. The best of his longer poems, and that which shows the truest fancy, perhaps, is 'Tristram and Isult.' In 1857 Mr. Arnold was appointed Regius Professor of Poetry in Oxford University, and as he broke away from the customary practice of reading his lectures in Latin, he had a favourable opportunity of setting forth his views on poetry and poetic criticism, whilst the issue of 'Merope, a Tragedy,' served as a practical illustration of his theory. Mr. Arnold's lectures were well attended, excited much interest, and his principles had warm admirers within the university. Outside he met with many opponents when his teaching found its way into print. The 'Three Lectures on Translating Homer,' 1861, gave rise to a rather personal controversy with Professor Newman, whose version he criticised, and who in turn dealt roughly with the hexameters which Mr. Arnold printed as illustrations of the way in which he thought Homer should be translated.

As an essayist, besides occasional papers in magazines, many of which, however, have been reprinted in his volumes, Mr. Arnold has published 'Essays on Criticism,' 8vo, 1865, 2nd edition, 1869; 'On the Study of Celtic Literature,' 8vo, 1867; and 'Culture and Anarchy, an Essay in Political and Social Criticism,' 8vo, 1869. In all these, whatever be the subject, the burden is the deadly evil of 'Philistinism': of the middle-class predilection for what is practical, the absence of culture, of "sweetness and light;" and the superiority of a regulated propriety over unlicensed liberty of speech. Graceful and agreeable in expression and subtle in thought as the essays almost always are, the reader misses in them, as in the author's poems, the breadth of view, firmness of grasp, and straightforward manliness of style, which he would expect to be the natural heritage of the son of Thomas Arnold.

ARNOLD, or ARNOLDE, RICHARD, London chronicler, appears to have been born near the middle of the 15th century. He was a London merchant; a member of the Company of Haberdashers; lived in the parish of St. Magnus, London Bridge, and traded to Flanders, at least occasionally. On one occasion he was imprisoned in the Castle of Sluys, in Flanders, on suspicion of being a spy, but speedily liberated; on another, as we learn from his chronicle, he was suspected of treasonable practices by his own Government. Nothing further is known of him, except the publication of what is commonly but inaccurately called 'The Chronicle of London,' or 'Arnold's Chronicle.' This work was first printed at Antwerp, by John Doesborowe, about the year 1502, but without place, date, or printer's name, under the title, 'The Names of the Balyfs, Custos, Mayres, and Sherefs of ye Cite of London, from the Tyme of Kyng Richard the First, called Cure de Lyon, which was crowned ye iii day of Septēbre y^e yere of our Lorde God xi^e LXXXIX.' A second edition, also without date, place, or printer's name, was issued in folio from the press of Peter Treveris, London, about 1521. Somewhat later another black-letter edition (described at length in Herbert's *Ames*, vol. iii. 1746—51) was published; and it was not again reprinted till 1811, when Francis Douce edited an edition in 4to, under the title of 'The Customs of London, otherwise called Arnold's Chronicle,' &c. The book is a strange farrago, seemingly the common-place book of a citizen of an antiquarian turn, with a particular curiosity about the rights, customs, and dignitaries of the city, and all a Londoner's interest in the preparation of viands. All sorts of information on these several matters is mingled with the lists of mayors, sheriffs, &c., mentioned in the title-page, and as Warton long ago remarked, "between an estimate of some subsidies paid into the Exchequer and directions for buying goods in Flanders," is smuggled in a copy of the fine old English ballad of the 'Nut-Brown Maid.'

ARNOLFO DI LAPO [LAPO, ARNOLFO DI, E.C. vol. iii. col. 805.]

ARRAS, MATHIEU D', French mediæval architect, was born near the close of the 13th century. Nothing appears to be known of his early years. The inscription on his tomb in the cathedral of St. Vitus, at Prague, states that he was a native of Arras; that he was the master builder or architect of this church, which was commenced by order of the Emperor Charles IV. in 1344, and that he carried on the works from its foundation until his death in 1352. The continuance of the works and the character of the building are noticed in the memoir of his successor, ARLER, PETER VON, E. C. S. The designs of Mathieu d'Arras were not carried out in their integrity, but the connection of French ideas with German Gothic architecture of

this time is worth noting. Mathieu d'Arras also began for Charles IV., in 1348, the royal castle of Karlstein, the richest and most remarkable feudal castle in Bohemia, now only preserved with difficulty from ruin.

ARREBOE, ANDERS, a distinguished Danish writer, was born in 1587, at Ærrøe's Kjöbing, in the island of Ærrøe. He studied at the university of Copenhagen, took the degree of M.A. in 1610, and was appointed preacher in the royal palace. In 1618 he was elected Bishop of Drontheim; but three years later he was deposed from his bishopric for several acts of levity and licentiousness, and, in particular, for having sung improper songs and danced improper dances. He lived in misery and poverty for five years. The King then pardoned him, in consideration of his penitence and his having written some excellent psalms, and made him pastor of Vordingborg, which post he held till his death in 1637. Arreboe is ranked by his countrymen as the most distinguished of the early Danish poets; but his writings, though full of poetic imagery and feeling, are expressed in language which has now become almost unreadable by Danes. Among his works were (1) 'Complimentary Poem on a Victory gained by the King of Denmark over the Swedes,' Copenhagen, 1611; (2) 'Poem on the Death of the Queen, Anna Catharina,' Copenhagen, 1612, 4to; (3) 'Hexæmeron,' Copenhagen, 1641, a paraphrase of the French work under the same name, written by Du Bartas. This, which is regarded as Arreboe's masterpiece, opens with a fine invocation to the Deity. The Hexæmeron celebrates the work of the first six days of the first week. Besides numerous psalms Arreboe published a series of fifteen sermons on Christ's Passion, and a similar series on the Vision of the Prophet Ezekiel.

ARRHENIUS, CLAUS or CLAUDIUS, a celebrated Swedish historian, was born at Linköping in 1627. After studying at Upsal University, he was engaged, in 1657, as tutor to Count Gabriel Oxenstierna. On returning from his travels with that nobleman, he was appointed Professor of Logic and Metaphysics at Upsal, in 1667; Professor of History in 1668; and Assessor of the Swedish Collection of Antiquities, in the following year. In 1678 he received the appointment of royal historiographer; and in 1684 was ennobled. His later appointments were—librarian to the University in 1687 (after resigning his professorship), censor of books in 1689, and one of the royal secretaries in 1693. He died at Stockholm in 1695. Arrhenius wrote many historical works; but his fame rests on his 'Historiæ Svecorum Gothorumque Ecclesiasticæ, Libri IV. priores,' Stockholm, 4to, 1689. This work was to have been extended to greater length, but he only completed four books or parts, bringing down the ecclesiastical history of Sweden to the end of the 12th century. Arrhenius contributed some of the text to Dahlberg's splendidly illustrated work, 'Svecia Antiqua et Hodierna.' He also prepared a collection, in eleven volumes, of all the papal bulls and letters relating to Sweden.

ARWIDSSON, ADOLF IVAR, Swedish writer, was born August 7, 1791, at Padasjoki, in Finland, where his father was provost. Having completed his studies at the university of Åbo, he was in 1817 admitted lecturer on history. In 1821 he founded, with some friends, a literary and political periodical, the 'Åbo Morgonblad,' which met with a good share of success, but the freedom of its political articles being objected to by the Russian Government, its publication was stopped. He continued, however, to write in the 'Mnemosyne,' but again gave offence, and in September, 1822, was dismissed from the university, and ordered to quit Finland. He now settled in Sweden, and was employed in arranging the books of the Royal Library, Stockholm, of which, after a while, he was appointed librarian. From this time, abandoning politics, he devoted himself to the duties of his office, and to the study of early Swedish literature. His first publication was an edition of Calenius, 'Opera Omnia,' 3 vols. 8vo, 1830—33. His next was a valuable collection of old Swedish ballads with their proper tunes—'Svenska Fornsänger,' 3 vols. 8vo, Stockholm, 1834—42, a sort of supplement to the work of Azelius and Geijer. Besides some occasional papers, he published an edition of the Frithiof-saga, Stockholm, 1841; a 'Catalogue of MSS. in the Royal Library, Stockholm;' and as secretary of the Stockholm Typographical Society, he contributed to their Repertory many interesting bibliographical and biographical notices. He died when on a visit to his native place, at Wiborg, on the 21st of June, 1858.

ASHPITEL, ARTHUR, F.S.A., architect, was born December 15, 1806, at Clapton, near London; received a good general education under Dr. Burnett; and learnt architecture

in the office of his father, who was in partnership with Mr. Savage. While at school, at about the age of 12, he had a severe fall by which his hip-joint was injured, he was rendered a cripple for life, and his constitution was enfeebled; but, thus cut off from out-door sports and occupations requiring the exercise of physical activity, he was led to the adoption of studious habits, and to a wider range of literary culture than is perhaps usual among architects. Having served several years in his father's office, he in 1842 commenced practice on his own account in Crown-court, Old Broad-street. The earliest building of a public character erected by him was the church of St. Barnabas, Homerton, 1845, since much enlarged in size and somewhat modified in character. Other works were the extension of the London Orphan Asylum, Clapton; the Hutchison Markets; the Wellington Memorial, London Bridge, since removed; and several large private houses and offices. In 1850 he entered into partnership with Mr. J. Whichcord, of Maidstone, and removed to Carlton Chambers, Regent-street. Here, retaining his city connection, he by means of his partner's Kentish ties, greatly extended his general practice, and though the execution of no great public work fell to his lot, he had a busy and prosperous professional career. Among the works erected by him as joint architect were churches at Blackheath (St. John's), Platt, Postling, Godmersham, and three or four other places in Kent; schools at Bexley, Milton, Rainham, &c., and the Kent Ophthalmic Hospital; the Kentish Chronic Lunatic Asylum; the Kent Infirmary; the Cranbrook Union Workhouse; baths and wash-houses at Maidstone, Lambeth, Bilston, Kidderminster, and Tynemouth; and several mansions and villas. When at Poets' Corner, Westminster, he again worked alone, he erected a new church among the ruins of St. Dogmael's Abbey, near Cardigan; others at Vernham Dean, Hampshire; at Ripple, near Deal, Kent (a somewhat heavy Norman structure); at Aldborough Hatch, Essex (a smaller but graceful and well-finished early First Pointed building); restored the churches of Sutton, Kent, Great Ilford, Essex, and some others; built schools, model dwellings for artisans, some London offices, and several villas. But during his later years Mr. Ashpitel was perhaps better known by his personal influence, both in the profession and in general society, than by his buildings. He was vice-president and a leading member of the council of the Institute of British Architects, one of the examiners at its voluntary architectural examinations, 1863-66, and a valued contributor to its Sessional Papers and Architectural Dictionary. He was one of the most zealous supporters of the Architectural Exhibition, and during many years was its treasurer and guarantee for its continuance. He was also a member of the Society of Antiquaries, and of the Royal Asiatic Society, in the proceedings of both of which he occasionally took part; he prepared for the Annual Congresses of the Archaeological Association architectural and antiquarian discourses on the cathedral, or the principal church or monastery in the town or locality in which the meeting was held; he wrote several architectural articles in the *Encyclopædia Britannica*, and one or two in the *Fine Arts Quarterly Review*; was, under the well-known signature A. A., a frequent correspondent of 'Notes and Queries'; wrote occasional verses and translations from the Greek anthology, in the 'Owl' and other periodicals, and altogether had come to be regarded as the literary representative of the English school of architecture, much as Professor Donaldson is regarded as representing its learning. About 1854, having been advised to visit Italy for the benefit of his health, he made a prolonged tour in company with Mr. D. Roberts, R.A., and stayed some time in Rome. As one of the results of his residence in this city he in 1858 exhibited at the Royal Academy 'A Restoration of Ancient Rome,' a large and elaborate drawing, which attracted much attention, and was followed next year by a companion drawing, 'Rome as it is.' The two drawings were subsequently reproduced under his direction in chromo-lithography, and he wrote in 1866 a descriptive pamphlet to accompany the prints. On his way home from Italy he was attacked with intermittent fever at Airolo, in Piedmont, and never wholly regained his former vigour. He died at his residence, Poets' Corner, on the 18th of January, 1869. The drawings of Ancient and Modern Rome, mentioned above, he bequeathed to the South Kensington Museum; his more valuable books and collection of Etruscan vases to the Society of Antiquaries, and a sum of money to the Institute of British Architects in order to found a prize.

(Mémorial by Mr. Wyatt Papworth in the *Architect; Builder; Register; Notes and Queries*, Jan. 1860.)

ASIOLI, BONIFAZIO, an Italian musical composer, was born at Correggio, 30th April, 1769. He was one of those pre-

cious children so frequently met with in connection with music. Before he was eight years old he had composed three masses and twenty other church compositions; besides pieces for the violin and harpsichord. At twelve years of age he displayed some remarkable extempore fugue playing at Venice. While still a boy he officiated as Maestro di Capella at Correggio. By the age of eighteen there had flowed from his pen five masses, an oratorio, twenty-four other church compositions, several overtures, choruses, cantatas, and instrumental pieces, and three operas, viz., 'La Volubile,' 'La Contadina,' and 'La Discordia Teatrale.' In 1787 he went to Turin, where he produced an opera and two lyrical dramas. After a visit to Venice in 1796, he received the appointments of Maestro di Capella and Director of the Conservatorio at Milan. In 1813 he returned to his native town of Correggio, where he remained till his death, which occurred May 26th, 1832. Asioli's best music is in the form of cantatas, nocturnes, and airs and duets with pianoforte accompaniments. His larger compositions are very little known.

ASSELYN, JAN, a distinguished Dutch landscape painter, was born in 1610 at Diepen, near Amsterdam. He was a pupil of Esaias Vandevelde and Jan Miel. In 1630 he went to France and thence to Italy, where he remained several years. He visited Venice, Florence, and other cities; but made Rome his principal place of abode and there formed a close acquaintance with Pieter Laer, and modified his style by the study of the works of Claude Lorraine. Here he was admitted a member of the Netherlands brotherhood of painters, the Roomsche Bent, and received the cognomen of the Crab (Krabbetje) from the fingers of one of his hands being crooked. On leaving Rome he stayed some time at Lyon, where he married in 1645 the daughter of Houwaart Koonman, a merchant of Antwerp, and soon after returned to Amsterdam, where he lived in good reputation till his death, in 1660. The works of Jan Asselyn were much admired and eagerly purchased during his lifetime, but have since scarcely sustained their celebrity. Our own National Gallery possesses no work from his pencil, but four landscapes by him in the Louvre show that he was a very able artist. Struck by the charm of Claude's pictures Asselyn sought to adapt his manner to Dutch landscape. In the attempt he lost much of the distinctive freshness and simplicity of the earlier native painters, but his pictures display true poetic feeling, clear transparent colour, and a light and spirited touch. His figures of shepherds, peasants, and animals are skilfully introduced, but have a somewhat artificial air. Many of his pictures have been engraved. In 1654 Asselyn published an account of the Roomsche Schelder-Bent under the title 'De Broederschap de Schilderkonst.' His portrait has been etched by Rembrandt and by J. Houbraken.

(Houbraken, *de Grootte Schouburgh der Nederlantsche Konstschilders*, vol. iii. p. 64 &c., D'Argenville, Waagen, &c.)

ASSHETON, JOHN, a priest of the 16th century, is remarkable as having been probably the first Englishman to be called to account by the ecclesiastical authorities of his country, for inculcating Unitarian opinions. In the course of his preaching, he denied the Trinity, and the deity of the Holy Spirit; asserted the simple and proper humanity of Jesus Christ, and taught that the only benefit which men receive through Christ consists in their being brought to the true knowledge of God.

On the 28th December, 1648, Assheton was summoned to Lambeth, to appear there, as Strype informs us ('*Memorials of Archbishop Cranmer*,' book ii. ch. 8), before Archbishop Cranmer, "where John Whitwell, the Archbishop's almoner, and Thomas Langley, both priests, and his Grace's chaplains, exhibited a schedule of divers heresies and damned opinions against the said Assheton; which are recited in the abjuration which he made, the tenor whereof is as followeth:—'In the name of God, Amen. Before you, most learned father in God, Thomas, Archbishop, Primate, and Metropolitan of all England, Commissary of our most dread lord and excellent prince, Edward VI., by the grace of God, &c. I, John Assheton, priest, of my pure heart, free will, voluntary and sincere knowledge, confess and openly recognise, that in times past, I thought, believed, said, heard, and affirmed these errors, heresies, and damnable opinions following; that is to say, (1) That the Trinity of Persons was established by the confession of Athanasius, declared by a psalm, *Quicumque vult*, &c., and that the Holy Ghost is not God, but only a certain power of the Father. (2) That Jesus Christ, that was conceived of the Virgin Mary, was a holy prophet, and especially beloved of God the Father; but that he was not the true and living God; forasmuch as he was seen, and lived, hungered, and thirsted. (3) That this only is the fruit of

Jesus Christ's passion; that whereas we were strangers from God, and had no knowledge of his Testament, it pleased God by Christ to bring us to the acknowledging of his holy power by the Testament. Wherefore I, the said John Assheton, detesting and abhorring all and every my said errors, heresies, and damned opinions, willingly, and with all my power, affecting hereafter firmly to believe in the true and perfect faith of Christ and his holy Church, purposing to follow the true and sincere doctrine of Holy Church with a pure and free heart, voluntarily mind, will, and intend utterly to forsake, relinquish, renounce, and despise the said detestable errors, heresies, and abominable opinions: granting and confessing now," &c. Assheton then goes on in his abjuration to confess in detail the orthodox antitheses of the heresies just enumerated; which when he had done, he "subscribed his hand to this confession before the Archbishop, exhibiting it for his act; and lifting up his hand, beseeched his Grace to deal mercifully and graciously to him; and touching the Gospel, gave his faith that he would faithfully and humbly obey the commands of the Holy Mother-Church, and whatsoever penance the said most reverend Father should lay upon him." The sympathisers with the opinions of Assheton express doubts of the sincerity of his recantation; and inveigh, not unreasonably, against the persecution which forced men into violating their consciences in order to preserve the security of their persons.

ASSHETON, WILLIAM, remarkable as the deviser of a peculiar annuity scheme, was a clergyman of the 17th century. Born at Middleton in Lancashire, in 1641, he entered Braenose College, Oxford, in 1658, and having taken his B.A. degree, was elected a fellow of his college in 1663, and went into orders. He was made chaplain to the Duke of Ormond, Chancellor of Oxford University, in 1673, D.D., and prebend of Knaresborough. After this he obtained the living of St. Antholin, Watling Street, and in 1676 was presented to the rectory of Beckenham, in Kent. He was more than once proctor for the diocese of Rochester. Dr. Assheton died at Beckenham in September, 1711. This divine, so fortunate in his preferences, was the author of many polemical and devotional works. He wrote honestly but bitterly against Roman Catholics, Dissenters, Anabaptists, Socinians, and all who differed from the Church of England: indeed he inveighed against any toleration either in religion or politics. Of the twenty-five works which he published between 1662 and 1710, most were of this controversial character. William and Mary caused to be published at two pence each, for extensive diffusion, three tracts written by Assheton against Blasphemy, Drunkenness, and Swearing. In 1706 he published a work in a different strain of thought, 'The Possibility of Apparitions.' But Dr. Assheton is best known by his singular annuity scheme, a scheme that failed because devised by a man of sanguine temperament upon insufficient data. It was a plan for providing for the widows of clergymen and others. As it was necessary to have some substantial body to give guarantees of security, he succeeded after some difficulty in making an arrangement with the Mercers' Company. The company and the trustees signed an agreement 4th October, 1699, which was enrolled in Chancery; and in the same year was published 'A full Account of the Rise, Progress, and Advantages of Dr. Assheton's Proposal (as improved and managed by the Company of Mercers) for the benefit of Widows of Clergymen and others, by Settled Jointures and Annuities at the rate of 30 per cent.' The agreement set forth "That the company would take in subscriptions at any time till the sum of 100,000*l.* should be subscribed, but not more. That all married men at the age of 30 years or under might subscribe any sum not exceeding 1000*l.* That all men not exceeding 40 years might subscribe any sum not exceeding 500*l.* That all married men not exceeding the age of 60 years might subscribe any sum not exceeding 300*l.* That their widows should receive the benefit of 30*l.* per cent. according to the proposal. That no seafaring man should subscribe." The last-named clause was probably suggested by the greater precariousness of seafaring life. It is now well known that so high an annuity as 30 per cent., especially with but little regard to the age of the annuitant, must necessarily fail. The company gradually reduced the rate for new applicants to 18 per cent., but nevertheless lost so heavily as to be obliged to apply to parliament for permission to establish a lottery in 1764, as a means of extricating it from its difficulties. It was not till 1801 that the company was clear of the final engagement.

ASTARLOA Y AGUIRRE, DON PABLO PEDRO DE, a learned Spanish philologist, was born at Durango, June 29, 1762. He studied philosophy and theology in the seminary of

Larrasoro, and was appointed to a benefice in his native town. His uneventful life was spent in the study of languages, of which he is said to have mastered 60; but he also acquired a considerable store of general learning, and he possessed a warm imagination as well as originality and breadth of view. His one great work—the first, as William Humboldt remarked, in which the Basque language was examined in a really searching spirit,—is entitled, 'Apologia de la lengua Bascongada, ó ensayo crítico-filosofico de su perfeccion sobre todas las que se conocen: en respuesta a los reparos propuestos en diccionario geográfico-histórico de España; tomo segundo, palabra Nabarra,' Madrid, 1803. As the title indicates, it was written in order to refute an article in the Dictionary of the Academy of Madrid, by Don Joaquim de Tragia, in which that writer, with a great show of learning, controverts the antiquity usually assigned to the Basque tongue. Astarloa, on the other hand, with equal erudition and greater acumen, establishes the essential identity of the modern Basque with the ancient Iberian language, and proves as a consequence the direct descent of the Basque people from the ancient Iberi. The most learned of the subsequent investigators in the same field of inquiry have acknowledged the value of his researches, and accepted his main deduction, though they have not gone so far in enthusiastic admiration of the language itself, and have very generally rejected his etymologies. The book is written with a warmth and charm of style very uncommon in a philological dissertation. Astarloa died at Madrid on the 3rd of June, 1806. He left a grammar of the Basque language and various MS. collections in the hands of his friend Don Juan B. de Erro y Aspiroz, who is believed to have made use of them in preparing his own publications.

ASTLEY, JOHN, a portrait painter of some notoriety, was born in the early part of the 18th century at Wem, in Shropshire, and was a scholar of Hudson, whose manner he adopted. Reynolds was his fellow pupil, and after leaving Hudson both, as artists were then expected to do, visited Rome. Reynolds gave his time to the study of the great masters; Astley spent most of his in dissipation. He enjoyed, however, the patronage of Sir Horace Mann, the English minister, and found in consequence some employment in painting portraits and in making copies for tourists. As may be supposed, he was often in difficulties. Northcote relates ('Life of Sir Joshua Reynolds,' vol. i. p. 44) that one summer afternoon the English painters having met for a little holiday excursion outside Rome, "the season being particularly hot, the whole company threw off their coats as being an incumbrance to them, except poor Astley, who alone showed great reluctance to follow this general example; this seemed very unaccountable to his companions, when some jokes made on his singularity at last obliged him to take his coat off also. The mystery was then immediately explained, for it appeared that the hinder part of his waistcoat was made, by way of thriftiness, out of one of his own pictures, and thus displayed a tremendous waterfall on his back, to the great diversion of the spectators." Reynolds described him as so illiterate a man that "he would rather run three miles to deliver his message by word of mouth than venture to write a note." On his return from Italy, Astley removed to Dublin, where for three years he practised with much success, when he resolved to push his fortune in London. On his way he stayed for a while in his native place. Here he made a considerable figure; kept his coach, and lived in style. He was tall, well-formed, and of dashing manners, and he caught the eye of the wealthy widow of Sir Thomas Duckenfield Daniell, of Duckenfield. The lady requested him to paint her portrait, and in the course of executing his commission he was emboldened to sue for her hand. She lived but a short time after their marriage, but left him all her property, with the reversion at her daughter's death (which happened a few years later) of the Duckenfield estate, worth 5000*l.* a year. Astley now gave himself up to a life of pleasure. He altered and enlarged Duckenfield Lodge, Cheshire; had a villa at Barnes, Surrey, which he fitted up in a most fantastic manner, and purchased the Duke of Schomberg's house in Pall Mall, which, says Pennant, "he divided into three, and most whimsically fitted up the centre for his own use:" it was afterwards the residence of Gainsborough. He died at his seat, Duckenfield Lodge, on the 14th of November, 1787. He is said to have wasted not less than 150,000*l.* of the fortune he received from Lady Daniell, and yet to have left a large property to his family by a second marriage. Astley's portraits are occasionally met with in private collections. To us they seem an improvement on Hudson's, though they will not bear comparison with those of Reynolds or Gainsborough. He had evidently con-

siderable skill in seizing a likeness, and possessed some power of characterization, but drew carelessly, and was a poor colourist.

ATHELARD, or ADELARD, of BATH, distinguished as "Philosophus Anglorum," one of the earliest and most eminent cultivators of natural philosophy in England, was born probably in the latter part of the 11th century. From the addition "Bathoniensis" to his name in most MSS., it has been supposed that he was a native of Bath, but it is as likely to have signified his place of residence as of birth. Of his personal history little is known beyond what is gathered from his writings. He studied at Tours and Lyon, and at the latter place lectured, one of his scholars being a nephew who is a colloquist in one of his dialogues. Dissatisfied with the state of learning in France, Athelard crossed the Alps to Salerno, and thence went in quest of knowledge to Germany, Spain, Egypt, and Arabia, though some writers think the references to his Arabic studies do not of necessity imply that he visited the country, but rather that he acquired his knowledge of Arabian philosophy in Spain. Before returning to England he seems to have taught Arabian science in Normandy. Altogether he was seven years absent from England. When he came back, Henry I., he writes, occupied the throne. Mr. Wright ('Biog. Brit. Lit.' vol. ii. p. 95) concludes from one of his earliest books written after his arrival being dedicated to William, Bishop of Syracuse, that he must have returned to England before 1116, the date of that prelate's death. Mr. Hunter, in his edition of the Pipe Roll of Henry I., pointed out under the 31st year of that monarch's reign, a gift of 4s. 6d. to Adelard de Bada from the profits of the county of Wilts, and if he is right in supposing that the donation was made to Athelard, the philosopher, by the King in his known character as a patron of learning, it is a proof that Athelard was alive in 1130. Beyond this nothing is known. The time of his death has escaped record. His original writings comprise a treatise or allegory, in the form of a dialogue, on the pursuit of philosophy, 'De eodem et diverso,' in which he defends the Arabic philosophy which Athelard was the first to introduce into England, and which he complains was almost unknown to the scholars of Western Europe. This subject he pursues at greater length in his more popular work, the 'Quæstiones Naturales,' in which he develops the system of natural philosophy he is endeavouring to introduce. Other works, some of them mere tracts, are—'Regulæ Abaci,' a treatise on the Astrolabe, of which there is a MS. in the British Museum, and others on the seven liberal arts, on the compotus, &c., which are named by Tanner and others, but appear to be lost. The Life of St. Dunstan, which Tanner attributed to him, is known not to be his. Another class of writings is of at least equal importance with his original works. These are his translations from the Arabic, but especially his translation of the Fifteen Books of Euclid, by which, indeed, Euclid was first made known in Western Europe, and which there is every reason to believe was the Euclid of the middle ages, and the text of the Latin edition of Campanus (Venice, 1482) the first edition of Euclid printed. His other translations included the Kharismian Tables; the 'Præstigia Astronomica Thebædis'; the 'Isagoge minor Japharis mathematici in Astronomiam,' &c. Very few of Athelard's works have been printed. His 'Quæstiones Naturales,' about 1474, was the earliest, and was several times reprinted; portions of 'De eodem et diverso' are given in Jourdain's 'Recherches Critiques sur l'âge et l'origine des traductions Latines d'Aristote,' 1819. The influence of Athelard was very great upon his contemporaries and immediate successors, and during the next century he was regarded with reverence as the most eminent of English philosophers. He was the forerunner of Roger Bacon, and in some respects little inferior to him.

'ATTÂR FERÎD-UD-DÏN, a Persian poet of great celebrity, but chiefly admired for his profound knowledge of the Sufi doctrines, with which his writings abound, and according to which this world and its affairs are nothing, and spirituality everything. He was born about the year 1119, at the village of Karkan, or Karakdan, one of the suburbs of Nishapur, in Khorâsân. His father, Ibrahim 'Attâr Karkani, seems to have made a considerable fortune in the city of Nishapur as a dealer in perfumes, in which occupation he was assisted, and ultimately succeeded, by the poet. About 1148 the father and son removed to Shâdyâkh, one of the most select suburbs of the city, where the governor and the most distinguished families resided. During his father's life 'Attâr seems to have been left to pursue his mystic studies at his own leisure. He was known to, and in correspondence with, numerous learned men and illustrious sheikhs of that period.

He had also collected a library, consisting of 114 volumes, the works of the most distinguished masters on spiritual matters. After his father's death 'Attâr succeeded to his fortune, and for some time carried on his business, whilst the style of his living and establishment was rather that of a prince than a merchant. The remonstrances of one of his Sufi friends, who had assumed the garb of a darwesh mendicant, aroused 'Attâr to the hollowness of all mundane glory and prosperity. The mirror of his mind became illumined with the rays of spiritual light. He renounced the world, and abandoned his possessions to be appropriated by any one who felt the inclination. After a few years spent in seclusion, divine contemplation, and the severest mortification, in the monastery of the distinguished Shaikh Rukn-ud-dîn Asaf, 'Attâr, when about the age of 40, made the pilgrimage to Mecca; in the course of which he became acquainted with a great number of men illustrious for their learning and sanctity. On his return to Nishapur, he devoted the remainder of his long life to the practice of piety, and the composition of his numerous works in prose and verse. Of the former kind is his 'Tazkirat-ul-awliâ,' or Lives of the Saints—that is, those of his own sect. His writings in verse are numerous and extensive, amounting in all to upwards of a hundred thousand couplets, forming forty different pieces or works, of which the following twelve were favourites in the time of Daulatshâh, the biographer of 'Attâr:—(1) 'The Asrâr-nâma'; (2) 'The Ilâhî-nâma'; (3) 'The Masîbat-nâma'; (4) 'The Ushtur-nâma'; (5) 'The Wasiyat-i Mukhtâr-nâma'; (6) 'Jawâhir-ul-lazzât'; (7) 'Mantik ul-tair'; (8) 'Bulbul-nâma'; (9) 'Gul o Hormuz'; (10) 'Pand-nâma'; (11) 'Haidar-nâma'; (12) 'Siyâh-nâma.'

'Attâr was murdered in the year 1221, in the hundred and second year of his age, by one of the ruthless horde of barbarians who, under Chingiz Khân, desolated the city of Nishapur, at that time the capital of Khorâsân. The city was levelled with the ground, in such a manner that horses might run over it without stumbling, and a few years afterwards its very ruins were obliterated by an earthquake. Its name and shadow only remain.

ATTERBOM, PETER DANIEL AMADEUS, a Swedish poet and historian, was born at Åsbo in East Gothland, 19th January, 1790. Having studied at the gymnasium of Linköping, he went in 1805 to Upsal, where he paid great attention to German literature. In 1807, in conjunction with several friends, he established a poetico-critical society, the Aurora Union, with the main object of purifying Swedish literature, especially poetry, by freeing it from French and other disfigurements. Between 1810 and 1813 they published a journal, 'Phosphorus,' which acquired for them the appellation of 'Phosphorists,' and which contained much bitter and cutting writing. Between 1812 and 1822 Atterbom edited the 'Poetiskkalender'; wrote a drama, 'Rimmerbandet'; and a fragment of a dramatised version of Märchen. After two years' travel in Germany and Italy, he became in 1819 tutor in the German language and literature to the Crown Prince Oscar. In 1821 he became docent of history at Stockholm, in 1822 adjunct professor of philosophy at Upsal, and in 1828 professor of logic and metaphysics at the same university. The last-named professorship he exchanged in 1835 for that of aesthetics. In 1839 he was admitted to the Academy of Stockholm, a step which healed a bitter feud which had existed between the Phosphorists and the Academicians. He died 21st July, 1855, at Upsal. Among other works by Atterbom were 'Lycksalighetens Ö' ('The fortunate Island'), 1824; 'Skrifter,' 1835; 'Samlade Dikter,' 1841; 'Svenska siare och Skaldar,' 6 vols. 8vo., Stockholm, 1841—55 (a literary-historical work of great value). As a poet, Atterbom was reflective in tone and polished in language. As a philosopher, he was a theosophist, combining Christianity with much mystical speculation.

AUDIGUIER, VITAL D', Sieur de la Ménor, a celebrated French writer, was born of a noble but poor family near Villefranche, Guienne, about the year 1569. After a somewhat wild and quarrelsome youth, he made some progress in the study of jurisprudence at college; in 1590 succeeded his father as a magistrate; resigned in the following year; joined the army of Henri IV., and gained much credit during the wars of the League. After the peace he went to Paris, led a dissipated life, and was addicted to gambling. Nevertheless he was a very active writer; for between 1604 and 1624 he produced poems, novels, translations, and miscellaneous essays in rapid succession, and is ranked among those who assisted in refining and polishing the French language. His writings are mostly of a trivial character, but they are full of life and spirit: in 1638 the French Academy placed all his prose writings among the celebrated works in the

language. Several of his prose essays, &c., are included in La Serré's 'Bouquet des plus belles Fleurs.' D'Audiguier was killed in a duel in a Paris gambling-house in 1624.

AUDOUIN, PIERRE, a distinguished French line engraver, was born at Paris in 1768, and learnt engraving under Beauvarlet. He engraved in a clear, firm, and intelligent manner, but without the fine feeling of the greatest masters of the burin. His fame rests on the engravings he made from paintings in the Louvre for the celebrated 'Musée de Laurent, such as 'La Belle Jardinière,' after Raffaele; the 'Portraits of two Men,' called 'Raffaele and his Fencing Master' (No. 386 according to the present arrangements of the Louvre); 'Jupiter and Antiope,' after Correggio; 'The Entombment,' after Caravaggio; 'Charity,' after Andrea del Sarto; three or four after Terburg, and others after Le Sueur and Mieris. He also engraved the portrait of Louis XVIII. after Le Gros, and various other single plates. Audouin held the appointment of engraver in ordinary to the king; and in 1819 received the medal for engraving. He died at Paris in 1822.

* AUERBACH, BERTHOLD, popular German author, was born of Jewish parents, February the 28th, 1812, at Nordstetten, in the Würtemberg Black Forest; studied Jewish theology at Hechingen and Karlsruhe; and then the classics, philosophy, and literature in the gymnasium of Stuttgart and in the universities of Tübingen, Munich, and Heidelberg, completing his academical course in 1835. His independent study was directed in the first instance to the literature of his race, and he published in 1836 a treatise on its recent character and direction, 'Das Judenthum und die neueste Literatur,' this was followed by 'Das Ghetto,' and at a short interval by 'Spinoza,' (2 vols. Stuttgart, 1837; 2nd edition, 1854); and this by 'Dichter und Kaufmann,' 2 vols. Stuttgart, 1839. His study of Spinoza led him to publish a translation of the entire works of the great Jewish philosopher, together with a critical memoir of his life and writings, 'Spinoza's sämtlichen Werken,' 5 vols. 8vo, Stuttgart, 1841. His next work, on the education of the middle classes, was of a kind that addressed itself to a wider audience, and attracted much notice, 'Der gebildete Bürger, Büch für den denkenden Mittelstand,' (Karlsruhe, 1842). He continued to take an earnest interest in education and all questions of social politics, but his next important publication was in a different field, being a series of sketches or novelets depicting village life in the Black Forest—'Schwarzwälder Dorfgeschichten,' (2 vols. Mannheim, 1843). In some respects this work may be compared with Miss Mitford's 'Our Village,' presenting the same bright clear pictures of villages and villagers and of rustic scenery, life, and wants, but with wider knowledge and deeper insight, though without the indescribable charm of manner and freshness and simplicity of style of the English authoress. It was very successful, was translated into English (under the title of 'Tales from the Black Forest'), Dutch, Swedish, and part into French, and several times reprinted in German. Other series have since appeared, and the whole were republished together in 4 vols. in 1853—54, and, under the title of 'Volksausgabe,' in 6 vols. Stuttgart, 1861—62. During 1845—48 Herr Auerbach edited an almanac 'Der Gevattersmann,' in which he sought to popularize and apply his views on social matters and popular literature, views which he set forth more systematically in 'Schrift und Volk: Grundzüge der Volksthümlichen Literatur, angeschlossen an eine Charakteristik J. P. Hebel's,' Leipzig, 1846 (The Press and the People: Sketch of a National Literature in reference to a characteristic of J. P. Hebel). The events of 1848, in which he was deeply interested, led to the publication in 1849 of his 'Tagebuch aus Wien von Latour bis auf Windischgrätz' (Vienna Diary from Latour to Windischgrätz), Breslau, 1849. Since then, though his social and educational views have more or less coloured all his writings, he has for the most part avoided politics. His later writings have been 'Hofer,' a tragedy, 1850; a series of old German tales, 'Deutsche Abende,' (Mannheim, 1850; 2nd edition, 1853); 'Dorfgeschichten' (a village story), and a popular drama, 'Der Wahrspruch' (Leipzig, 1856); 'Joseph in Schnee' (Stuttgart, 1860); 'Edelsweiss,' and a pleasantly written essay, 'Goethe und die Erzählungskunst' (Goethe and Narrative Art), Stuttgart, 1861. His collected works were published in 20 vols. Stuttgart, 1857—59, and in 22 vols. 1863 and following years. Since then his most important publication has been 'Das Landhaus am Rhein, (the Villa on the Rhine), in 3 vols., 1869, which appears to be less popular than his shorter tales, but is a work of much power, displaying alike keenness of observation and depth of reflection. Taken altogether, Auerbach must be regarded as the greatest living novelist of

Germany. Auerbach's frequent change of abode may be pretty well traced in the places of publication of his successive works given above. For some years past he has resided at Stuttgart, previous to which he was for awhile at Berlin.

AUGUSTIN, JEAN-BAPTISTE-JACQUES, a celebrated French miniature painter, was born at Saint-Dié, department of Vosges, on the 15th of August, 1759. Poor and without friends, he acquired the knowledge and practice of his art by his own unassisted efforts; yet when he established himself in Paris, in 1781, the novelty, vigour, and truth of his works produced, as has been said, an entire revolution in the public taste. In truth the elegance of the 'style Pompadour,' as it was called, had been imitated till it had sunk into mere feeble affectation, and the world of fashion, to which the miniaturist primarily addresses himself, is always ready to run from one excess to another. For over a quarter of a century Augustin was supreme in his department, and sovereigns, nobles, and the most distinguished men and loveliest women sought to convey their features to posterity by the aid of his pencil. Napoleon, Josephine, Hortense, Louis XVIII., and Louis Philippe, the Queen of Naples, and the Duchesse d'Angoulême, Lord William Bentinck, and M. Denon, are some among his celebrated portraits. But Augustin lived to experience the ebb of the tide, and in his latter days was without a sitter. He died of cholera at Paris on the 13th of April, 1832.

AURIA, VICENZO, a learned and industrious Sicilian antiquary, was born at Palermo, August 5, 1625. His father, Federigo Auria, who held a high judicial office and was known as the author of some esteemed works on jurisprudence, died while Vincenzo was yet an infant; but his brother, also a judicial functionary of rank and a man of learning and ability, undertook to direct the education of his nephew. Vincenzo's progress as a boy, and afterwards at the Jesuit's College, Palermo, was of uncommon promise, and it was decided that he should adopt the law as a profession. He accordingly applied himself diligently to the study of the civil and canon law; took the degree of doctor of laws in the University of Catania; and commenced the practice of his profession with unusual prospects of success. But along with the jurists and casuists he had been studying the Italian poets and historians with at least equal zeal. He had written Italian and Latin verse, which had already procured for him the appellation of the Sicilian Petrarch; his 'Canzone Siciliane' had found a place in the 'Muse Siciliane,' and he had been elected a member of the Accademia de' Raccensai. His literary pursuits became more and more absorbing, and after a comparatively brief struggle he decided to abandon his prospects at the bar and to devote his life to the elucidation of the history of his native place, with the certainty of never rising above comparative poverty. This resolution he steadily carried out, and the long series of works he wrote, if not very brilliant in character or of any wide interest, are of great value as the foundation of a clear knowledge of Sicilian history and antiquities, and at the same time furnishing much that is of value to the student of general history. Auria was appointed by the viceroy keeper of the national archives in 1679, and in the following year commissioned by him to write a biographical history of his predecessors from the year 1409. On the foundation of the Sicilian Academy, Auria was made a member, and appointed superintendent of the department of precious stones. He died after a long illness, and very poor, Dec. the 6th, 1710. The senate of Palermo decreed him the funeral honours due only to the most illustrious citizens. Auria's published works are very numerous, but referring almost exclusively to Sicilian history, antiquities, poetry, and hagiography, it is unnecessary to give their titles. The following, as among the more important, will be sufficient:—'Dell' origine ed antichità di Cefalù,' Palermo, 1656, of which Havercamp published a Latin translation in vol. xiv. of the 'Thesaurus Siciliae'; 'La Giostra, discorso sopra l'origine della Giostra, in varie parte dell' Europa,' 1690; 'Historia cronologica dell' Signori Vicerè di Sicilia, dall' anno 1409 al 1697,' fol. Palermo, 1697; 'La Sicilia Inventrice, ovvero le invenzioni lodevoli nate in Sicilia,' Palermo, 4to, 1704. Mongitore gives a complete list of Auria's published and unpublished works (which last are rather numerous) in his 'Bibliotheca Sicula,' vol. ii. p. 274; and in Crescimbeni's 'Vite d' Arcadi Illustri,' part iii. pp. 109-28, is an ample memoir of Auria by Mongitore.

AURIFABER, JOHANN, whose vernacular name was Goldschmid, was born in the year 1519, in the county of Mansfeld. He became a student of divinity at Wittenberg, and was successively tutor of the sons of the Count of Mansfeld, and field-preacher in the French war in 1544. In 1545 he returned to Wittenberg for the purpose of teaching divinity, and it is said

that Luther employed him as his "familiar" or private secretary, and that he was present at Luther's death, at Eisleben, in 1546. In 1547 he remained for six months a partner in the captivity of the Elector, John Frederick of Saxony, to which that prince was condemned after being beaten by the Emperor Charles V. at the battle of Mühlberg. In 1551, Aurifaber was appointed Court preacher at Weimar, but was dismissed from his office in the following year. Through the liberality of the Count of Mansfeld, he was enabled to devote four years exclusively to the preparation of a collection of such of Luther's works as were not contained in the Jena edition, in the publication of which he had likewise been active. Besides the Eisleben collection of some of Luther's works and the Jena edition, of which, as just stated, he was co-editor, Aurifaber edited 'Letters of Luther,' in two volumes, and his 'Tischreden,' or Table-Talk, folio, Eisleben, 1566. The 'Tischreden' was reprinted twice in 1567, and a fourth time in 1568. The last reprint is prefaced by some pages from the pen of the editor, who complains of one Dr. Kugling as having, in a rival edition, made material alterations of the text. This rival edition, however, would appear never to have got beyond the manuscript form; at all events, it is unknown to bibliographers. The four editions already specified are exact reproductions, the one of the other, infinite typographical blunders included. In 1569 appeared a new edition (Frankfurt, folio), with an appendix "of prophecies which the venerable man of God, just before his holy death, delivered unto divers learned theologians and ecclesiastics, with many consolatory letters, opinions, narratives, replies, &c., never before made public." The dedication, "to the Council of Rauschemberg," dated March 24, 1568, intimates that the editor, Johann Fink, had derived his new materials from various books and writings of Martin Luther. The Prophecies, it is added, were due to the research of George Walther, preacher at Halle. Fabricius ('Centifolium Lutherianum,' p. 301) mentions two other editions in folio, Eisleben, 1569 and 1577, but no copies of these editions are at present known. Since that period the editors of the 'Tischreden' have been many, and the forms of its issue have been various. The contents of the work were originally gathered from the mouth of Luther by his friends and disciples, and chiefly by Antony Lauterbach, and Johann Aurifaber, who were very much with the great reformer towards the close of his life. They consist of notes of his discourses, of his opinions, his cursory observations, in the freedom of private friendship, in his walks, during the performance of his clerical duties, and at table.

In 1566, Aurifaber was appointed minister of the principal Lutheran church at Erfurt, became senior preacher in 1572, and died there on the 18th of November, 1575. The latter part of his life was embittered by quarrels with his colleagues, which were probably of the same description as those that prevailed among the different editors of the works of Luther, and led to many fanatical charges of heresy and Crypto-Calvinism. Adelung mentions 17 letters of Aurifaber to King Christian III. of Denmark, which were first published by Andreas Schumacher, in 'Briefe gelehrter Männer an die Könige von Dänemark,' 8vo, Copenhagen, 1758.

AURIGNY, GILLES D', a French jurist and poet, was born at Beauvais towards the end of the 15th century, and died in 1553. Very little is known of his life, except that after studying law in his native city, he removed to Paris, where he practised as an advocate. The following are his principal works:—(1) 'Les Constitutions et Ordonnances faites pour le bien et utilité des Agricoles de France par Charles VII., Louis XI., Charles VIII., Louis XII., François I., &c.' Paris, 1527, 8vo; (2) 'Le cinquante-deuxième Arrêt d'Amour, avec les Ordonnances sur le fait des masques,' Paris, 1528, 8vo; (3) 'Le Livre de la Police Humaine, extrait des grands et amples volumes de François Patrice, par M. Gilles d'Aurigny, et traduit en François par Jehan Leblond,' Paris, 1544, 8vo; (4) 'La Peinture de Cupidon,' Poitiers, 1545; (5) 'La Généalogie des Dieux poétiques, nouvellement composée,' Poitiers, 1545, 16mo; (6) 'Le Tuteur d'Amour, auquel est comprise la fortune de l'Innocent en Amour,' Paris, 1546, 8vo, reprinted with additions seven years later; (7) 'Contemplation sur la Mort de Jésus Christ,' Paris, 1547, 8vo; (8) 'Psalmes de David.' D'Aurigny's 'Tuteur d'Amour,' imaginative in subject and elegant in language, but not original in matter or thought, is regarded by some critics as the best French poem of the 16th century.

AURISPA, GIOVANNI, one of the restorers of learning in Italy, was born at Noto in Sicily about the year 1369. Visiting Constantinople about 1418, he brought home from thence many

valuable Greek MSS. Being very poor, he was obliged to pledge these MSS. for bread, but Lorenzo de' Medici redeemed them. Aurispa for a time taught Greek at Bologna and at Florence. Removing to Ferrara, he obtained for several years the patronage of the Este family. He taught the classics, took orders, and filled some ecclesiastical offices. In 1438 he became personally known to the Pope, Eugenius IV., which led to his appointment as apostolic secretary in 1441. Nicolas V. gave him two abbacies. He returned to Ferrara in 1450, and remained there till his death in 1459. Some of Aurispa's epistles and translations from Greek into Latin have been published; but his best services to literature were as a collector of ancient MSS. He brought to Italy MSS. of the poets Pindar, Callimachus, Oppian, and the Orphic verses; the historians Dion Cassius, Diodorus Siculus, and Arrian; and the philosophers Plato, Xenophon, Plotinus, and Proclus; many of the works having been until then unknown in Europe. He also collected many MSS. of the Greek fathers.

AUSTIN, JOHN, was born on the 3rd of March, 1790, and was the eldest of a family remarkable for intellectual powers of a peculiar order. At the age of 16 he entered the army, and served in it for five years, several months of which he passed with his regiment, which formed part of Lord William Bentinck's corps, in Sicily. Acting upon the advice of appreciative friends, he quitted the army, and, becoming a member of the Inner Temple, was called to the bar in 1814. His fellow-students, and the eminent lawyers under whom he studied, had marked the force and clearness of his mind, his retentive memory, and the vigour and precision of his language; and they confidently foretold for him a high place in the profession. In 1819, after an attachment of five years, he married Miss Sarah Taylor, of Norwich, a member of a distinguished family [AUSTIN, SARAH]. The prospects of professional success were, however, clouded by the failure of his health, and the delicacy and sensitiveness of his mental constitution. He was intolerant of imperfection in his work; and such a temper could not readily accommodate itself to the demands of business. After a vain struggle, in which his health and spirits suffered severely, he gave up practice in the year 1825. Fortunately, the foundation of the London University, in 1826, occasioned the opening of a school of jurisprudence, of which Mr. Austin was chosen to be the professor; and he resolved to spend the interval between his appointment and the commencement of his lectures in Germany, where the study of the science could be pursued with advantage in the society of the most eminent Roman jurists. In the autumn of 1827, after visiting Heidelberg, he established himself, with his wife and only daughter, at Bonn, which was then the residence of Niebuhr, Brandis, Schlegel, Arndt, Welcker, Mackeldey, Heffter, and other eminent men, from whose society he received equal pleasure and instruction. He left Bonn after a stay of about six months, in the spring of 1828, master of the German language and of a number of the greatest works which it contains. His lectures opened with a class which exceeded his expectations; and which included several of the men afterwards eminent in law, politics, or philosophy, among whom may be mentioned Lord Romilly, Master of the Rolls, Lord Clarendon, Mr. C. F. Villiers, Sir G. C. Lewis, and Lord Belper. He now appeared to have attained to a position above all others the best suited to him. His peculiar tastes and talents fitted him for the business of a teacher; and he felt with a sort of awe the responsibility attaching to his office. His power of methodising and expounding is said to have been matchless; and he had a natural and powerful eloquence (when he allowed himself to give way to it), which was calculated to rivet the attention and to fix itself on the memory. But in spite of the brilliant commencement of his career as a professor, it soon became evident that this country would not afford such a succession of students of jurisprudence as would suffice to maintain a chair, which, under the circumstances, its holder found himself compelled to resign. This resignation was the real calamity of his life, the blow for which there was no remedy, and from which he never recovered. His failure at the bar was nothing, for that was not his vocation; but there was no one to do the work he could have done as an expounder of the philosophy of law. In June, 1832, he gave his last lecture; and in the same year published a volume entitled 'The Province of Jurisprudence Determined,' having in the previous year published 'An Outline of a Course of Lectures on General Jurisprudence, or the Philosophy of Positive Law.' The reception given to the work was not at first encouraging, and it was left gradually to make its way by its own merits, which, by slow degrees, began to be appreciated.

It is now, to use the words of Marvin's 'Legal Bibliography,' Philadelphia, 1847, "acknowledged to be one of the most valuable contributions to the philosophy of law and legislation that has been produced in modern times, and entitles the author to rank with Hooker and Montesquieu." In the year 1833, Mr. Austin was appointed by Lord Brougham, at that time Lord Chancellor, a member of the Criminal Law Commission. But it appeared to his colleagues that his views were too abstract and too thorough to be reduced to practice; and Mr. Austin, finding himself unable to discharge the duties of his office, according to his own estimate of them, resigned his place. In 1834 he was engaged to deliver a course of Lectures on Jurisprudence at the Inner Temple, a study which Mr. Bickersteth, afterwards Lord Langdale, and others, thought it advisable to foster. But here, as before at University College, it was found that the demand for anything like scientific legal education had to be created; and the lecturer soon saw the inutility of struggling against such obstacles as he had to oppose. He resolved, therefore, to abandon a conflict in which he had met with nothing but defeat, and to seek an obscure but tranquil retreat on the Continent, where he might live upon the very small means at his disposal. Accordingly he retired to Boulogne, where he had been settled about a year and a half, when a proposal was made to him, in 1837, by the Colonial Office, through his friend Sir James Stephen, to go to Malta as Royal Commissioner, to inquire into the nature and extent of the grievances of which the natives of that island complained. Aided by Mr. (afterwards Sir) George Cornewall Lewis, he rendered services to the island which are still remembered there with affectionate gratitude; and he had the satisfaction of seeing every measure he recommended adopted by the Colonial Office. After his return from Malta, in 1838, he was so much worse in health than usual, that in 1840 his medical friends exhorted him to try the waters of Carlsbad, from which he derived much benefit, and to which he returned in the summers of 1841—43. The intervening winters were spent at Dresden and Berlin; at the former of which cities it was that he wrote for the 'Edinburgh Review' his answer to Dr. List's violent attack on the doctrine of free trade. In 1844 he removed to Paris, and was, shortly after, elected by the Institute a corresponding member of the moral and political class. In the same year an appeal was made to him to publish a second edition of 'The Province of Jurisprudence,' but his fastidious taste and scrupulous conscience shrank from the idea of a mere reprint; and his response to the appeal was the drawing up of a prospectus of a work on 'The Principles and Relations of Jurisprudence and Ethics,' in which, as he wrote to his friend Sir William Erle, it was his intention to "show the relations of positive morality and law (*mos* and *jus*), and of both to their common standard or test; to show that there are principles and distinctions common to all systems of law (or that law is the subject of an abstract science); to show the possibility and conditions of codification; to exhibit a short scheme of a body of law arranged in a natural order; and to show that the English law, in spite of its great peculiarities, might be made to conform to that order much more closely than is imagined." Mr. Austin had finally established himself in Paris, when the Revolution of 1848 "once more uprooted him." He remained, however, in Paris for some months, watching the course of events; and the result of his observations was to confirm him in his opinion of the difficulty, if not the impossibility, of reconstructing a society which has once been completely shattered. This opinion, together with his ardent patriotism, found utterance in a pamphlet which he published in 1859, under the title of 'A Plea for the Constitution,' and which was originally intended for a quarterly journal, as a review of Lord Grey's work on Reform. Mr. Austin returned to England in the autumn of 1848. He spent the last ten years of his life at Weybridge, in Surrey, and this decade was the "happiest period of his life." He alternated his studies and literary avocations with a glad and contented communing with nature, and a close scrutiny of the course of political events. He died in December, 1859; at which time only one part of his Lectures had been published. No one seemed so well fitted as Mrs. Austin to prepare such portions of her husband's writings as were left by him in a finished or nearly finished state; and the result of her labours was seen in 1861 in her editing of a new issue of 'The Province of Jurisprudence Determined,' which was followed in 1863 by two other volumes of her husband's 'Lectures on Jurisprudence, or the Philosophy of Positive Law.' A third edition of the whole, revised and edited by Mr. Robert Campbell, appeared in 1869, 2 vols. 8vo, London. The pursuit of truth was ever Mr. Austin's first

object; the diffusion of a knowledge of it, his second. He was frequently reckoned a disciple of Bentham, for whom, indeed, he had a profound admiration, but whom he did not blindly worship or follow slavishly. On certain points he differed from him, and especially on the supposed fitness of the people for the exercise of political power. He always thought that Bentham's secluded habits, and his acute sense of the misgovernment occasioned by what he called sinister interests, blinded him to the no less dangerous evils arising from ignorance.

AUSTIN, SARAH, descended from the Taylors of Norwich, a family which in several generations produced men and women distinguished by literary and scientific ability, was born in 1793, and received in her father's house an education of unusual range and solidity. On her marriage, in 1820, with Mr. Austin, then a barrister on the Norfolk circuit, she came to reside next door to Mr. Jeremy Bentham and Mr. James Mill, in Queen-square, Westminster. Here her house soon collected within its walls the deepest thinkers and most refined men of letters of the time—Bentham; James and John Stuart Mill; the Grotes; the rising lawyers of that day, Bickersteth, Erle, Romilly, and Senior; Charles Buller, Jeffrey, Sydney Smith, and Lord Lansdowne. Much of Mrs. Austin's life was spent abroad. She accompanied her husband during his residences severally at Heidelberg, Bonn, Boulogne, Malta, Carlsbad, Berlin, Dresden, and Paris. In the last-named city her small *salon* had an intellectual stamp and charm not inferior to that of her London circle. During her stay abroad at different periods she contributed valuable "travelling letters" to the 'Athenæum,' and both then, and after her return to England, in 1848, frequently supplied critical and obituary notices to that journal; and in addition, contributed more extended articles to the Reviews. Mr. Austin died in December, 1859, and his widow, whose own death took place on the 8th of August, 1867, occupied half that interval in the responsible duty of arranging for publication those 'Lectures on Jurisprudence,' 3 vols. 8vo, 1861—63, which form the noblest monument that could be raised to the memory of her husband.

Mrs. Austin did not often aspire to original literary composition; and she is chiefly known for singularly able translations of several of the choicest specimens of German literature. Her principal works of this kind were 'The Travels of a German Prince,' London, 1832; 'Characteristics of Goethe, with notes original and translated,' 3 vols. 12mo, 1833, from the German work of J. D. Falk, 'Goethe aus näherem persönlichen Umgange dargestellt'; 'History of the Reformation in Germany,' and the 'History of the Popes,' from the German of Leopold Ranke, to the latter of which the late Dean Milman contributed a preface; 'Collection of Fragments from the German Prose Writers, translated with Notes,' 12mo, 1841; and the 'Story without an End,' which has gone through so many and so varied editions, from the German of F. W. Carové, 'Das Märchen ohne Ende.' Mrs. Austin translated, from the French of Victor Cousin, his 'Report on the State of Public Instruction in Prussia,' and from Guizot, a Discourse designed as an introduction to the History of the Reign of Charles the First, 'On the Causes of the Success of the English Revolution of 1640—1688.' We owe, further, to her pen a work entitled 'Germany, from 1760 to 1814; or Sketches of German Life,' &c.; another 'On National Education,' 8vo, 1839; and 'Two Letters on Girls' Schools, and on the Training of Working Women,' of which the second edition, "with additions," was published in 1857, 8vo. Finally, it should be stated that Mrs. Austin edited Lady Holland's 'Memoir of the Rev. Sydney Smith,' with a Selection from his Letters, 4th edition, 1855, 8vo; and also the charming work of her (Mrs. Austin's) daughter, the late Lady Duff Gordon, entitled 'Letters from Egypt, 1863—65.'

AUVERGNE, GUILLAUME D', or GULIELMUS ALVERNUS or ARVERNUS, bishop of Paris, was born at Aurillac in the second half of the 12th century. After studying at Paris theology, philosophy, and mathematics, he became doctor and professor of theology at the Sorbonne. He was appointed Bishop of Paris in 1228. In 1225 he established the Maison des Filles de Dieu for reclaimed women; in 1229 he founded the priory of St. Catherine, and in 1234 a baptismal church at Crène. But holding strong views on ecclesiastical rights, he was brought into collision with the University of Paris, and excommunicated some of the masters and scholars. In 1230 he was employed in counteracting the treasonable designs of the Duke of Brittany, and succeeded in reclaiming the Bretons back to their loyalty to the king. Next he undertook to suppress the plurality of benefices. He presided over the religious ceremonies

connected with the recovery of the Holy Crown of thorns (1238); baptized the eldest son of Louis IX. in 1244; attended the king in his interview with Pope Innocent IV. in 1245; and subscribed to a solemn condemnation of the Talmud in 1248. He died on the 30th of March, 1249. Bishop D'Auvergne was a good classical scholar, but made that and every other kind of learning subservient to the interests of the church. He opposed all kinds of heresy. As a writer, he was less dry and diffuse than most controversialists of that age. His writings, which were very numerous, were for the most part collected and published at Orleans in 1674, 2 vols. 4to. They comprise controversial, devotional and philosophical treatises. A less perfect edition was published in folio at Venice in 1591. His '*Rhetorica Divina*,' Ghent, 1483, 4to, was the first book known to have been produced in that town with a date, and was the first of his works printed. He wrote an immense number of discourses, but his most important work was '*De Universo*,' a treatise on the authority, origin, nature, and duration of the universe, and of good and evil spirits. It is a work of considerable originality and power, and is of importance in the history of philosophy in the middle ages.

AUVERGNE, MARTIAL D', a distinguished French lawyer, wit, and poet, was born at Paris in 1440. Nearly all that is known of his personal history is told in two epitaphs, one in Latin prose and one in French verse, given in the additions by Joly to Loiseau's '*Offices de France*.' These epitaphs represent him to have been beloved for his virtues, a good Christian, a learned lawyer who was fifty years in the profession, and was the friend and adviser of the poor. According to a narrative in Denis Godefroy's edition of the '*Chronique de Louis XI.*,' Martial d'Auvergne, in the month of June, 1486, threw himself from his chamber into the street, in a fit of frenzy, whereby he broke his thigh and bruised his body all over. He died on the 13th of May, 1508. Martial d'Auvergne was one of the best writers of his time, manifesting both wit and judgment in his several works. His chief work was '*Les Arrests d'Amour*,' an account of fifty (supposititious) decisions pronounced at the Courts of Love by judicial tribunals of ladies, to whom were referred all points of dispute relating to love and gallantry. The arrests or decisions given in the book are satirical, but fair imitations of the questions usually discussed in the Courts d'Amour. They are in prose, with a poetical introduction and conclusion. After two or three undated editions, the first dated edition of this work was published in Paris, 1525, 4to. Numerous later editions have appeared, of which that of 1541 bore the curious title, '*Droits nouveaulx et Arrestz d'Amours, publiez par Messieurs les Senateurs du Parlement de Cupido, sur l'estat et police d'Amour, pour avoir entendu le différent de plusieurs amoureux et amoureuses*.' A second work by him was '*L'Amant rendu Cordelier à l'Observation d'Amour*,' a love-poem of 234 strophes, each containing eight verses. It was first published at Paris, 1490, 4to. A third work was '*Dévoties Louanges à la Vierge Marie*,' Paris, 1482, 8vo. But Martial d'Auvergne's reputation chiefly rests on his '*Vigilles de la Mort du feu roy Charles VII.*,' Paris, 1492, 4to; this consists of between six and seven thousand verses, giving a chronological and very circumstantial account of the misfortunes and exploits of Charles VII., with the principal events of his reign.

AVAUX, CLAUDE DE MESMES, COMTE D', an eminent French diplomatist, son of J. J. de Mesmes, first Comte d'Avaux, was born in 1595. In comparatively early life he obtained responsible appointments: he was successively master of requests and superintendent of finances. In 1623 he became a councillor of state. In 1627 he was nominated ambassador at the court of Venice, and afterwards at the courts of Rome, Mantua, Florence, and Turin. Richelieu, by whom he was highly valued, entrusted him to represent France in the negotiations at the end of the Thirty Years' War; and in this capacity he aided to bring about the peace of Westphalia in 1648. But the envious machinations of his colleague, Servien, led to the recall of d'Avaux by Mazarin (Richelieu's successor) just before the end of the negotiations. He retired to his estates in disgrace, but was re-appointed by Mazarin to diplomatic duties, and died at Paris 19th November, 1650. D'Avaux was a generous and enlightened friend to literary men. The following works by him are of value to the historical student:—1. '*Exemplum Literarum ad Daniam Regem scriptarum*,' Paris, fol. 1642. 2. '*Lettres de D'Avaux et de Servien*,' 8vo, 1650. 3. '*Mémoires touchant les Négociations du Traité de Paix fait à Münster en 1648*,' Cologne, 12mo, 1674; Grenoble, 1674.

AVELLONI, FRANCESCO, a voluminous Italian dramatist, son of Casimiro Avelloni, was born at Venice in 1756, and studied

at the Jesuit College in that city until its suppression in 1773. He then removed to Naples, where, left destitute by the death of his father, and disappointed in hopes of assistance from relatives, he carved out a career for himself. After some vicissitudes, he found a friend in Bianchi, manager of a theatre, and wrote in little more than a fortnight a five-act play for him. When on the road from Venice to Naples, Avelloni had been waylaid and robbed by brigands, and the events which he saw and heard during a temporary captivity among them suggested to him a plot for his play, which he called '*Giulio Assassino*.' It had great success, being performed twenty successive evenings to crowded audiences. Avelloni at once decided to adopt play-writing as a means of living. He wrote forty dramas on stories or plots suggested by the Prince of Sangro, who brought them out under his own name; the prince received whatever honour accrued, while Avelloni received a sum equal to about thirty shillings, together with a ham, for each drama. Having married an actress, Avelloni tried his fortune both as a manager and as an actor, but unsuccessfully, and at last took to private teaching. He wrote the enormous number of six hundred plays, some in verse and others in prose. Most of them have passed into oblivion, but many are still acted, and the collections of dramas usually contain a few of them. They were generally sentimental in style, somewhat after the fashion of Goethe's '*Werter*,' and Kotzebue's '*Stranger*,' easy in dialogue, but strained and improbable in incident. He had some success in the writing of allegorical dramas, of which the best were '*Lucerna di Epitteto*,' '*Le Vertigini del Secolo*,' and '*Il Sogno d'Aristo*.' Avelloni, who, on account of his diminutive stature, was known among his friends as *Il Poetino*, died at Rome in 1837.

AVERANI, the surname of three brothers distinguished among Italian writers for their learning.

BENEDETTO AVERANI, the eldest brother, was born at Florence July 19, 1645. After greatly distinguishing himself in his early studies, he obtained in 1676 the professorship of Greek at the University of Pisa. This he subsequently exchanged for the chair of humanity, which he held till his death, December 28, 1707. He was buried in the Campo Santo of Pisa. Averani passed his life in study and teaching, to which he was strongly attached. He was eminent as a teacher of the Greek and Latin languages and antiquities; he was the leading professor at Pisa; his lectures at the university being extempore and lively, were very attractive; and by them and by his writings he contributed to the revival of the study of the Greek language and literature. His printed lectures comprise 86 on the Greek anthology, 58 on Thucydides, 26 on Euripides, 31 on Livy, 45 on Virgil, and 98 on Cicero. They were much studied in his day, and their merit is still recognised. Some of his Latin works were published by him in 1688, and some by his brother Giuseppe in 1709; but the whole were collected and edited some years later by his brothers Giuseppe and Niccolò, under the title '*Benedicti Averani Florentini Dissertationes habitæ in Pisanâ Academiâ, &c. Accesserunt ejusdem Orationes et Carmina, omnia iterum edita; necnon Epistolæ, quæ nunc primum in lucem prodeunt*,' 3 vols. folio, Florence, 1716—17.

GIUSEPPE AVERANI, the youngest and most distinguished of the brothers, was born at Florence in 1662. In 1684 he became professor of law in the University of Pisa. He acquired great fame as a lecturer, first on the Institutions of Justinian, and then on the Pandects. While advancing in reputation as a jurist and lecturer, he was also prosecuting science. He made experiments on burning-glasses, on light, on electricity, on odours, and on the propagation of sound. The Royal Society of London elected him as one of its fellows. Refusing good offers from Bologna, Turin, and Florence, Averani remained at Pisa till his death, on August 24, 1738, after 14 years of abstinence from lecturing on account of feeble health. Besides jurisprudence and science, he had studied theology, archæology, and the language of his native country; his learning on the last-named subject caused his services as censor of the academy Della Crusca to be greatly valued. Of 12 works written by him the most valued are:—(1) '*Interpretationum Juris Libri Duo*,' published at Leyden by Van der Aa in 1716, and '*Interpretationum Juris Libri Tres posteriores*,' Leyden, 1746; (2) '*Lezioni Toscane*,' 3 vols. Florence, 1744—46—61; containing lectures on philosophy, antiquities, and theology, and papers describing his scientific experiments; (3) '*Monumenta Latina Posthuma J. A.*,' Florence, 1768.

NICCOLÒ AVERANI, the second brother, was born about the middle of the 17th century. He was an advocate by profession, but a mathematician by inclination, and dwelt at Florence till his death, August 4, 1727. The works by which he is remembered,

besides the edition of his brother's Latin lectures (mentioned above), were his edition of the works of Gassendi, 6 vols. folio, Florence, 1726; and 'De Mensibus Egyptiorum, nunc primum edita, Dissertatio,' published ten years after his death by Gori and Cardinal Noris.

AVILA, GIL GONZALES DE, or DAVILA (De Avila being printed on his earlier, Davila on his later title-pages), a Spanish biographer and antiquary, was born at Avila about 1577. His boyhood and youth were spent in Rome, where he received his early education in the household of Cardinal Deza. When about 20 he returned to Spain, and was made deacon and minor canon in the cathedral of Salamanca. He soon after commenced author by the publication of an attempt to explain the purpose of the so-called Bull of Salamanca, a stone effigy which then stood in the *medio puente*, a sort of shrine in the centre of the old bridge of that city, and of similar effigies in other parts of Castile—'Declaracion del Toro de Piedra de Salamanca, y de otros que se hallen en otras partes de Castilla,' Salamanca, 4to, 1597. More important, however, was his next work, 'Historia de las Antiquedades de la Ciudad de Salamanca, Vidas de sus Obispos, y cosas sucedidas en su tiempo' (History of the Antiquities of the City of Salamanca, with the Lives of her Bishops, and the events which happened in their time), Salamanca, 4to, 1606. In this work Avila displayed his predilection for biography, the city and its antiquities occupying less than a twelfth of the volume, the rest being given to the lives of the bishops. A life of Alfonso, Bishop of Avila, 'Vida y Hechos del M. Don Alfonso Tostado de Madrigal, Obispo de Avila,' appeared in a quarto volume in 1611. The following year he was called to Madrid to fill the office of Historiographer Royal to the Two Castiles. In the fulfilment of the duties of this office, in research among the national archives, patient biographical and bibliographical study, and the writing and publication of his books, his days passed quietly till he had numbered his three score years and ten, when his faculties gradually decayed, and his last days were passed in second childishness. He died at Avila, May 1, 1658. Besides the works already named, and some of merely local and temporary interest, he wrote the following:—'Historia del Origen del Santo Christo de las Batallas' (History of the Origin of the Most Holy Christ of Battles), 4to, 1615. 'Teatro Ecclesiastico de las Ciudades y Iglesias Catedrales de España,' vol. i. 1618, was to have been continued, but he subsequently revised his plan, and recast his materials; the matured work appearing eventually under the title of 'Teatro Ecclesiastico de las Iglesias Metropolitanas y Catedrales de los Reynos de las dos Castillas, Vidas de sus Arzobispos y Obispos y cosas memorables de sus Sedes,' in which, as in his former work, the lives of the archbishops and bishops occupy a far larger space than the accounts of their churches. Of this work the first volume was published in 1645, the second in 1647, the third in 1650, and the fourth before 1655; a fifth was to have been added, but does not appear to have been prepared. It is a work of much value for the mass of historical and biographical materials it contains. A brief general account of Madrid, with full biographies of its illustrious natives, appeared at Madrid in 1623 in a handsome folio volume, under the title, 'Teatro de las Grandezas de Madrid, corte de los Reyes Catolicos de España.' In 1638 he published a life of Henry III. of Castile, and biographies of the founders of the two fraternities of the Holy Trinity, 'Historia de la Vida y Hechos del Rey Don Henrique III. de Castilla,' fol. Madrid; and 'Compendio de las Vidas de los gloriosos San Juan de Mata y Felix de Valois,' 4to, Madrid. On the death of Tomayo in 1641, Avila was appointed to succeed him as Historiographer of the Indies, in which capacity he published his 'Teatro Ecclesiastico de la primitiva Iglesia de las Indias Occidentales,' 2 vols. Madrid, 1649—55, in which the churches and ecclesiastics of North and South America are treated in a manner corresponding to that of his great Teatro of the churches and bishops of Castile, to which this was intended as a supplement. He left in MS. a life of Philip III., written by command of Philip IV., which does not appear to have been printed.

AVILA Y ZUNIGA, DON LUIS DE, Spanish historian, born towards the end of the 15th century, is believed to have been a native of Placentia. He appears to have been of humble origin, but he acquired wealth and station by marriage with an heiress of the Zuniga family, whose name he added to his own. He won the favour of the Emperor Charles V., who appointed him grand-commander of the order of Alcantara, and sent him during the papacies of Paul IV. and Pius IV. as ambassador to Rome where he contributed to the resumption of the Council of

Trent. He accompanied Charles V. in his German campaign, and commanded the cavalry at the siege of Metz in 1552. After the abdication of Charles, Avila retired to his mansion at Placentia, and amused his leisure by filling his house with rarities, and by directing the decoration of the walls with paintings of the campaign in Germany. He was a frequent, and always welcome visitor of the ex-emperor at Yuste, and was present at his funeral in 1558. This is the last that is recorded of Avila, the date of whose decease is not known. Avila is the author of a history of the war in which he took part, 'Comentarios de la Guerra de Alemaña, hecha de Carlos V. en el año de MDXLVI. y MDXLVII.' Venice, 1548, and reprinted at Granada and at Antwerp the following year, and at Antwerp and Saragossa in 1550. In 1560 an English translation, by John Wilkinson, was published with the following noteworthy title, 'The Comentarios of Don Lewes de Auela and Suniga, great master of Acanter, which treateth of the great wars in Germany, made by Charles the fifth Maximo, Emperoure of Rome, King of Spain, against John Fredericke, Duke of Saxon, and Philip the Lantgraue of Hesson, with other gret princes and cities of the Lutherans, wherin you may see how god hath preserved this worthy and victorious Emperour in al his affayres against his enemies, translated out of Spanish into English, An. Do. 1555, Londini, in ædibus Richardi Totteli.' An Italian translation was published at Venice in 1548, probably in connection with the issue of the original; a Latin version by William Mallinæus appeared at Antwerp in 1550; one in Dutch, the same year and place; and three in French, by Mathieu Vaulcher, Antwerp, 1550; by Gilles Boilleau de Buillon, Paris, 1551; and an anonymous version, 1672. Avila's is a valuable and well-written book, but its originality no less than its fairness has been questioned.

AVILER, AUGUSTIN CHARLES D', French architect and author, was born at Paris in 1653. His taste for architecture was developed early, and at the age of 20 he gained the first prize for architecture given by the French Academy, which entitled the winner to a royal pension, in order that he might pursue his studies at Rome. Aviler embarked at Marseille along with Desgodets, the architect, and Vaillant, the antiquary, but the felucca was taken by an Algerian pirate, and Aviler and his friends carried to Tunis. Notwithstanding his captivity, Aviler prosecuted his studies, and he was employed to erect a superb mosque in the chief street of the city, the success of which, as much as the representations of Louis XIV., procured him his liberty in 1676. He repaired at once to Rome, where he remained five years occupied in studying the construction and ornamental principles and details of the ancient buildings. On his return to Paris he was employed as assistant to Mansard, then busy on his great works in the capital. Tiring, however, of a subordinate position, he determined to try his fortune in the provinces. He was engaged to erect the triumphal arch in honour of Louis XIV. at Montpellier, known as La Porte de Péron. This excited so much admiration that he received a commission to erect a palace for the archbishop at Toulouse, and several fine buildings at Carcassonne, Nîmes, and Béziers, his satisfactory completion of which obtained for him from the Etats de Languedoc the appointment, in 1693, of architect of Provence. He now settled in Montpellier, married, and was fairly launched on a prosperous career; but he fell into a bad state of health, and he died in 1700, at the early age of 47. Notwithstanding his close occupation as an architect, Aviler found time to write several works of great value in their day. These are (1) 'Cours d'Architecture,' 2 vols. 4to, 1691, which was held in much esteem, but is mainly a commentary on Vignola; it was more than once reprinted; the best editions are those by Mariette, with additional designs and a life of the author, 1750 and 1755. (2) 'Dictionnaire de tous les termes de l'Architecture Civile et Hydraulique,' an exceedingly useful book at the time of its publication, and one which has served as the basis of subsequent dictionaries, Aviler's definitions having been in the main adopted by his successors. Avila is also the author of a translation of Scamozzi's treatise on Architecture with original notes, published at Paris, folio, 1685, and reprinted at Leyden in 1713.

AVRIGNY, HYACINTHE ROBILLARD D', a learned French Jesuit, was born at Caen in 1675. He entered a Jesuit seminary at the age of 16, and gradually rose to the position of professor of humanities in one of the colleges of the order. But being in feeble health, he changed his office for that of procurator. D'Avrigny's favourite subjects of study were ecclesiastical and civil history. He wrote—(1) 'Mémoires Chronologiques et Dogmatiques, pour servir à l'Histoire Ecclésiastique depuis 1600 jusqu'en 1716,' 4 vols. 12mo, 1790; (2) 'Mémoires

pour servir à l'Histoire universelle de l'Europe, depuis 1600 jusqu'en 1716,' 4 vols. 12mo, Paris, 1725 and 1731, reprinted in 1767 in 5 vols. with additions by le Père Griffet. These works, especially the first, brought him into trouble. He was too fearless in investigation and too independent in judgment to suit his superiors; and the mortification produced by the reproof administered by them, and the retrenchment exercised before they permitted the volumes to be published, is said by, Dom Chaudon to have hastened D'Avrigny's death, which occurred April 24, 1719. Both works are useful, even in the mutilated form which they presented when published after his death.

AYLESBURY, or AILESBUURY, SIR THOMAS, born in London in 1576, was educated at Westminster School, and entered as a student of Christ Church, Oxford, in 1598. Here he distinguished himself as a mathematician; took the degrees of B.A. in 1602, and M.A. in 1605. On leaving Oxford he received the appointment of secretary to the Earl of Nottingham, Lord High Admiral, and then served the Duke of Buckingham in a similar capacity. His next offices were as one of the Masters of Requests and Master of the Mint. In 1627 he was created a baronet. On the breaking out of the civil war, he was deprived of his appointments. In 1649, after the execution of Charles I., Aylesbury went to the Netherlands, and lived in a quiet and frugal way at Breda until his death in 1657. His daughter Frances became Countess of Clarendon, mother to the queen of James II., and grandmother to Queens Mary and Anne. Sir Thomas Aylesbury was an excellent scholar, a good mathematician, and an enlightened man, liberal and generous to men of genius and letters.

AYLESBURY, WILLIAM, son of Sir Thomas, was born at Westminster about 1612; entered Christ Church, Oxford, as a gentleman-commoner in 1628; and became B.A. in 1631. On leaving college he was appointed by Charles I. tutor and guardian to the orphan sons of the first Villiers, Duke of Buckingham. While travelling with them on the Continent he was shot in the thigh by a brigand. On his return to England he was commanded by the King to translate D'Avila's 'History of the Civil Wars of France'—a work, however, in which the chief part of the translation was, according to Ant. Wood, done by Aylesbury's coadjutor, Sir Charles Cotterel. Like his father, Sir William Aylesbury was straitened in his circumstances by the events which followed the execution of Charles I.: but, unlike his father, he took office under the Protector, and went out as secretary to the Governor of Jamaica, in which colony he died in 1657.

AYLETT, or AYLET, ROBERT, was born about 1583; educated at Trinity College, Cambridge; took his M.A. degree; in 1608 was incorporated of Oxford University; obtained in 1614 the degree of LL.D. at Cambridge, and, according to Wood, succeeded Sir Charles Cæsar as master of the faculties, on the death of Sir Charles in December 1642. But long before this he had become known as a candidate for the poet's bays. In 1622 was published an 8vo. volume by him, comprising four poems:—'Peace, with her four Garders: Thrift's Equipage: Susanna: Joseph, or Pharaoh's Favorite.' One at least of these pieces, 'Susanna,' is met with separately, but of the same date, and it was perhaps issued first in order to test the reception the volume would be likely to meet with. No other work appears to have been published by Dr. Aylett until he put forth a rhyming argument of 26 pages for and against marriage, 'A Wife not ready made but bespoken, by Dicus the Batchelor, and made up for him by his fellow-shepherd Tityrus: in four pastoral eclogues. The second edition, wherein are some things added, but nothing amended,' Lond. 1653: the first edition has escaped notice. The following years appeared his 'Divine and Moral Speculations, in Metrical Numbers, upon various subjects,' in which the 'Wife not ready made' and the 'Susanna' mentioned above, are included. Another rhyming pamphlet of 15 pages, consisting of a series of brief devotional exercises, issued in 1654, with a portrait by T. Cross, and entitled 'Devotions: viz. 1. A Good Woman's Prayer. 2. The Humble Man's Prayer,' concludes, as far as we know, the list of Dr. Aylett's poetic publications. They are in request among bibliographers, but are forgotten by every one else, and are not worth resuscitating. The year of his death is not mentioned.

AYRES, JOHN, celebrated for his skill as a penman in the latter part of the 17th and the beginning of the 18th centuries, was of humble birth, having served for some time as footman to Sir William Ashurst, a merchant of London. Whilst in this capacity his master taught him writing and arithmetic, and he then opened a school in St. Paul's Churchyard, which seems to

have been a successful enterprise. In 1683 (the first date clearly recorded concerning him), he published 'The Accomplished Clerk,' a book illustrated with engraved specimens of penmanship, which was republished with his portrait in 1700. In 1696 appeared 'A Tutor to Penmanship, or the Writing Master,' comprising a brief history of the art of writing, with 48 folio plates of examples, engraved like the former by John Sturt, who, in an address to the purchaser, refers to several other works executed by him conjointly with Ayres. About the same time was published 'Arithmetic made Easy, for the use of Tradesmen.' The year of Ayres's birth is not known; his death is supposed to have occurred suddenly about 1705.

AYRES, PHILIP, a miscellaneous writer of the second half of the 17th century, of whose personal history nothing appears to be known. His works comprise—1. 'The Fortunate Fool: written in Spanish by Don Alonzo Geronimo de Salas Barbadillo of Madrid,' 12mo. London, 1670. 2. 'The Count of Gabalis; or the Extravagant Mysteries of the Cabalists, exposed in five pleasant discourses on the Secret Sciences,' 16mo. 1680, a translation (with some original 'animadversions' at the end) from the French of the Abbé Pierre Villiers. 3. 'Emblems of Love, in four Languages [Latin, English, Italian, and French]. Dedicated to the Ladies,' 8vo. 1683. This is a very curious work; it comprises a series of 44 poetical emblems, each adorned with a pictorial design, the whole being engraved upon copper plates. 4. 'Lyric Poems, made in imitation of the Italians. Of which many are Translations from other Languages,' 8vo. London, 1687. 5. 'Pax Redux, or the Christian Reconciler. A Project for Reuniting all Christians into One Sole Community. Translated from the French,' sm. 4to. 1688—but said in the preface to have been first published 15 years before. 6. 'Three Centuries of Æsopian Fables,' 8vo. 1689.

AYRTON, EDMUND, a composer of church music, was born in 1734 at Ripon, in the grammar-school of which town he was educated. By his father he was intended for the church; but evincing a preference for music, he was placed under the tuition of Dr. Nares, organist of York Cathedral. At a comparatively early age he became organist, auditor, and chorus master of the collegiate church of Southwell, Nottinghamshire. Here he remained many years, marrying into a good family, and bringing up a large number of sons and daughters. In 1764 he was appointed one of the gentlemen of the Chapel Royal, and soon afterwards vicar-choral of St. Paul's, and one of the lay clerks of Westminster Abbey. In 1780 he became 'Master of the Children of his Majesty's Chapels,' and in 1784 was created Mus. Doc. of Cambridge. When the general thanksgiving was held at St. Paul's on the 29th of July, 1784, for "the termination of the American war," a grand anthem by Ayrton was performed, 'Begin unto my God with timbrels,' with full orchestral accompaniments. This composition was much admired. In the same year he became assistant director of the Festival for the commemoration of Handel at Westminster Abbey; he filled the same post at the similar festivals which were continued annually until the breaking out of the French Revolution, when the minds of men were untuned for music. Dr. Ayrton died in 1808, and was buried in Westminster Abbey. Among his musical compositions were a complete morning and evening service in C; another (shorter) in E flat; two verse anthems, 'I will Sing a New Song,' and 'The King thy Judgments'; two full anthems with verses, 'Thy Righteousness, Oh God, is very high,' and 'Bow down thine ear, Oh Lord'; also several fugues. All his music presents good examples of the English church style, learned in treatment, and yet simple.

AYRTON, WILLIAM, youngest son of Dr. Ayrton, and an eminent musical editor and critic, was born 22nd February, 1777. He married the daughter of Dr. Samuel Arnold, the composer, in 1803. Deriving from his father a general and accurate acquaintance with musical subjects, he became musical and literary critic to the 'Morning Chronicle' when under Mr. Perry. This position he held from 1813 to 1826. In 1817 Mr. Waters, becoming proprietor of the King's Theatre or Opera House, entrusted the management to Mr. Ayrton, who entered upon the task with a determination to raise the standard of public taste in regard to opera, by introducing to the English boards high-class German music. He engaged as his chief singers Mesdames Pasta, Camporese, and Fodor, with Signori Crivelli, Ambrogetti, and Naldi. To Mr. Ayrton belongs the credit of introducing to the English public Mozart's chef d'œuvre, 'Il Don Giovanni,' an opera which had brilliant success. This encouraged him to introduce in succession the same composer's 'Figaro' and 'Clemenza di Tito,' Cimarosa's 'Penelope,' Paer's

'Agnese' and 'Griselda,' and Paesello's 'Molinara.' But he was thwarted by a cabal of singers and dancers, who opposed his plans, and led him to give up the management at the end of the one single season in disgust. Among the 'Letters of Charles Lamb' is a droll rhymed epistle of his to Mr. Ayrton, asking for gallery orders of admission to see 'Il Don Giovanni;' and Talfourd, in his 'Final Memorials of Charles Lamb,' speaks of Ayrton being "mildly radiant at the continued triumph" of that opera, when assembling with other choice friends at Lamb's 'Wednesday Nights.' In 1821, Mr. Ebers having taken the Opera House, sought the aid of Mr. Ayrton as manager. Again was the manager baffled, this time by a committee of subscribers, who insisted on that which Ayrton would not yield—the right of apportioning the operatic characters among the performers. He abandoned the enterprise in a few months. From 1823 to 1833 Mr. Ayrton edited the 'Harmonicon,' in which his literary and critical articles were of a far higher character than had up to that time been customary in musical periodicals. Between 1833 and 1844 he contributed musical articles and biographies to the 'Penny Cyclopædia;' and in 1834–36, he edited 'Sacred Minstrelsy' and the 'Musical Library,' the earliest works in which high-class music was published collectively at a cheap price. He also wrote musical notices for Mr. Knight's 'Pictorial Shakspeare.' Mr. Ayrton was elected F.R.S. and F.S.A., and was one of the original members of the Royal Institution. At the time of his death, which took place 8th May, 1858, he had accumulated a large amount of materials for a 'Philosophical History of Music' and a 'Dictionary of Music.'

AYSCOUGH, REV. FRANCIS, the records of whose early life are nearly entirely summed up in a statement in the 'London Magazine' for October, 1766, that he might with propriety have been called the child of good fortune, was admitted of Corpus Christi College, Oxford, on the 28th of March, 1717. In 1723 he took his M.A. degree, and was subsequently admitted first to deacon's and then to priest's orders; and on the 16th of January, 1727, became a scholar or probationary fellow of his college. On the expiration of his second year of probation, he became a candidate for an actual fellowship. On the day for considering the claim, January 15, 1730, the president and a majority of the fellows voted against his admission, but without assigning any reason. Ayscough hereupon appealed to the Bishop of Winchester, the visitor of the college, who, after a hearing and consideration of the case, decided in favour of Ayscough, and sent an injunction commanding the college to admit him, and requiring those fellows who had excluded him to defray the costs of both parties. Ayscough was admitted accordingly, and he took the degree of D.D. in 1735. From the titles of Sermons which he published, Ayscough is known to have been chaplain to His Royal Highness the Prince of Wales in 1736, and to have become, in or before the year 1752, rector of North Church, Hertfordshire. He also held the office of preceptor to George III. before his accession to the throne, and to his brother Edward, Duke of York; and it was probably owing to his connection with the royal family, and to the influence of George, Lord Lyttelton, whose sister he had married, that he at length received the appointment of Dean of Bristol. He died in 1766.

AYSCOUGH, GEORGE EDWARD, the only son of the Rev. Francis Ayscough, D.D., by Anne, one of the sisters of George, Lord Lyttelton, was a lieutenant in the 1st Regiment of Foot Guards. The time of his birth and the particulars of his early history are unknown, excepting that he was honoured by having George III. and his brother, the Duke of York, for his godfathers. In 1774 he edited, with a dedication to his cousin, the second Lord Lyttelton, 'The Works of George, Lord Lyttelton, formerly printed separately, and now first collected together; with some other pieces never before printed.' This work went through several editions, of which the third, enlarged considerably from its first issue, was published in three volumes, octavo, in 1776. In the last-named year Ayscough published 'Sémiramis, a Tragedy; as it is acted at the Theatre Royal in Drury Lane,' 8vo. This play has an epilogue by Richard Brinsley Sheridan. In the following year Ayscough sought to recover on the Continent the health he had forfeited by dissipation at home, and on his return in 1778, produced, as the literary results of his journey, 'Letters from an Officer in the Guards to his Friend in England, containing some Accounts of France and Italy.' His sojourn abroad appears to have produced no lasting benefit to his ruined health, for he died, after a lingering illness, on the 14th (or, according to the 'Gentleman's Magazine,' the 19th) of October, 1779; leaving behind him the character of an abandoned man, and of a soldier "who gave up his commission to

avoid doing his duty when called upon by his sovereign to fight in America." (Nichols, *Literary Anecdotes of the 18th century.*)

AYSCOUGH, SAMUEL, the son of George Ayscough, and grandson of William Ayscough, both eminent printers at Nottingham, was born in that town in 1745, where he was educated under Mr. Richard Johnson, the author of 'Noctes Nottinghamiæ.' Injudicious speculations on the part of his father brought Samuel to the necessity of working as a labouring miller, from which employment he was rescued by the care of a gentleman who had been his school-fellow, and who now sent for him to London and procured for him the situation of over-looker to some street-paviours. Presently, however, he obtained employment successively in the shop of Mr. Rivington, the bookseller in St. Paul's Churchyard, and at the British Museum as an assistant under the principal librarian. The salary which his skill commanded at this institution, augmented by sums received for occasional employment in the libraries of private gentlemen, was shared by his father, whom he had, with some assistance from his early friend, sent for to London, and whom he maintained in comfort until his death on the 18th of November, 1783.

After having been employed in a subordinate capacity in the British Museum for 15 years, Ayscough was, about 1785, appointed assistant-librarian upon the establishment. In or before the year 1782 he was ordained to the curacy of Normanton-upon-the-Soar, in Nottinghamshire; and he also became assistant-curate of St. Giles-in-the-Fields, London. In 1790 he was chosen to preach the annual Fairchild lecture, at Shoreditch Church, before the Royal Society; which he continued to do until the completion of his series of 15 discourses on Whit-Tuesday, 1804. About a year before his death he was presented, by the Lord Chancellor Eldon, to the living of Cudham, in Kent, about 17 miles from London, where he regularly performed duty, though he continued to reside at the British Museum, where he died, of dropsy on the chest, on the 30th of October, 1804, in his 60th year. He was buried in the cemetery of St. George's, Bloomsbury, behind the Foundling Hospital.

Ayscough's labours, especially in connection with the library of the British Museum, were of exceeding value, but commonly of a kind in which it would be difficult to distinguish what is his from that which is by his colleagues. The following works, however, appear to have been wholly by him, and most of them were published with his name:—(1) 'A Catalogue of the Manuscripts preserved in the British Museum, hitherto undescribed, consisting of five thousand volumes; including the collections of Sir Hans Sloane, Bart., the Rev. Thomas Birch, D.D., and about five hundred volumes bequeathed, presented, or purchased at various times,' 2 vols. 4to, 1782. (2) 'Remarks on the Letters of an American Farmer; or, a Detection of the Errors of Mr. J. Hector St. John, pointing out the pernicious tendency of those Letters to Great Britain,' 8vo, 1783. (3) 'A General Index to the Annual Register,' from 1758 to 1780, both inclusive. (4) 'A General Index to the Monthly Review, from its commencement to the end of the seventieth volume,' 2 vols. 8vo, 1786. (5) 'A General Index to the first fifty-six volumes of the Gentleman's Magazine, from its commencement in the year 1731 to the end of 1786,' 2 vols. 8vo, 1789. (6) 'An Index to the remarkable Passages and Words made use of by Shakspeare, calculated to point out the different meanings to which the words are applied,' 8vo, 1790. (7) 'A General Index to the first twenty volumes of the British Critic,' 8vo, 1804; a continuation of which Index was subsequently compiled by Dr. Blagdon. And in addition Ayscough either compiled, or assisted largely in compiling, various Museum catalogues, the principal of which, the catalogue of printed books, 'Librorum Impressorum qui in Museo Britannico adservantur Catalogus,' 2 vols. fol. 1787, was compiled in about equal proportions, by Ayscough, Dr. Maty, and Mr. Harper.

AYTOUN, WILLIAM EDMONSTONE [E. C. vol. vi. col. 967]. In 1858 Professor Aytoun edited the 'Ballads of Scotland,' 2 vols. 8vo, Edinburgh and London; and in the following year published, conjointly with Mr. Theodore Martin, a Translation of some of the Poems and Ballads of Goethe. In 1861 he made a not very successful attempt after fame as a novelist, by publishing 'Norman Sinclair,' 3 vols.; and in 1863 gave utterance to his loyalty in a 'Nuptial Ode on the Marriage of the Prince of Wales.' Professor Aytoun was son-in-law to Professor Wilson (Christopher North), and was proud of his

wife as her father's daughter. He died August 4th, 1865, in Morayshire, at his country residence of Blackills, near Elgin.

AZEGLIO, MASSIMO, MARQUIS D', an eminent Italian statesman, artist, and author, and one of the chief agents in bringing about Italian union and freedom. He was the youngest son of CESARE TAPARELLI, MARQUIS D'AZEGLIO (b. February 10, 1763, d. Nov. 29, 1831), the representative of an ancient Piedmontese family, who served with credit against the French, was made prisoner in 1795, and kept in captivity till the peace of 1796; removed to Florence when the French annexed Piedmont; was sent in 1814 as minister from King Charles to congratulate the Pope on his return to Rome; then, with the rank of general, quietly returned to the management of his private affairs and to literary studies, during his last years being the director of a widely circulated journal, 'l'Amico d'Italia.'

Massimo d'Azeglio was born at Turin on the 24th of October 1798. His early education was directed by his father, a devout Catholic, and a strict, almost stern, disciplinarian. In due time he proceeded to college, but at the age of 16 entered the Urban Guard, when his regular academic instruction ceased. In 1814 he accompanied his father to Rome as a member of the diplomatic staff, and availed himself of the opportunity to take lessons in music and drawing. On his return to Turin he was appointed to a cornetcy in the royal guard, which he exchanged after a time for a higher rank in an infantry regiment. Becoming tired and ashamed of the idle and dissolute life he was now leading, he made a resolution (1817) to give up his wild associates, and set about learning to paint in oil, but after "six months of furiously hard work" he fell ill. On his recovery he was allowed to revisit Rome. Here he continued to study painting, selecting as his instructor one Marten Verstappen, of Antwerp, a clever but boorish left-handed landscape painter, under whom he learnt to paint directly from nature. But along with painting he read and even wrote poetry, among his compositions being a tragedy, the early scenes of a comedy, and some "frantic odes and sonnets about Italy." Miss Cornelia Knight, then resident at Rome, taught him English, and introduced him to other English families. It was a pleasant life, but Azeglio felt that it was an unsatisfactory one. He was dependent on his father, whose property had been wasted whilst his country had been held by the foreigner. His drawings had been admired, and he believed he could support himself by his pencil. That he might remove the objections which he knew his parents would feel to such a scheme, he went to Turin. His proposal was a serious blow to their notions of the obligations of nobility, and was especially repugnant to his father's family pride. But he prevailed, and with a trifling allowance (about 70*l.* a year) he returned to Rome, free to follow his inclinations, and to support himself by his own exertions.

He at once renounced all his fashionable acquaintances, dropped his title, and set hard to work. Socially, as he remarks, "it was a very perceptible fall. From having two or three horses and a servant, I was about to find myself minus horses and lodging—everything changed for the worse." But he never regretted the change: he was convinced, as he wrote just before his death, that "if every young man started in life with only 150 francs a month, the world would be more worthily peopled than it is." But though painting was now the business of his life, he did not limit his thoughts to the study of art. One of his first engagements was to rise two hours before dawn to take lessons in history of a professor named Garello. So he worked on, making steady progress till he was able to submit his pictures to public exhibition. One, 'Leonidas at Thermopylæ,' was sent to Turin, and his father offered it to King Charles Felix, who sent the artist a diamond snuff-box, which he, "as is the custom, hastened to sell for the sake of his memory." In 1825 he ventured on a more ambitious subject, 'The Death of Montmorency,' which he painted on a large scale, and which proved a decided success when exhibited at Rome, whilst "at Turin it was looked upon as quite a marvel." He was satisfied now that he had mastered his tools, and that it was time to quit Rome. He had stayed six years, sketched all the surrounding country, and visited Naples, Venice, Florence, and Switzerland, travelling over much of the ground "with his traps at his back," and he now determined to settle as a painter in Milan. The death of his father made some increase in his means, but he continued to work steadily at his profession, and during the fourteen years he remained at Milan (1831–45) he took a high position as an artist, and painted several pictures which hold honourable rank among the best productions of recent Italian art. The first pictures he exhibited at the Brera

(the Milanese Academy), 'The Challenge of Barletta,' 'The Interior of a Birch-wood,' and 'The Battle of Legnano,' took the Milan art-public by surprise—the thoroughly Italian subjects and the novelty and beauty of their execution contributing equally to the pleasure of the spectators—and they were at once purchased, 'The Birch-wood' by the Viceroy, the others by Italian noblemen. Nor did his paintings ever after lack purchasers, they mostly, indeed, when not commissioned, being bought whilst in his studio: "in one winter," he writes, "I painted twenty-four pictures, nearly every one of which was commissioned beforehand." The titles of a few of the pictures (there were 61 in all, about a-third being landscapes) exhibited by him at the Brera from 1833 to 1843, will sufficiently indicate their general character: 'Encounter between Diego Garcia de Paredes and a number of Frenchmen on the bridge of boats over the Garigliano;' 'Revenge,' (given to the church of San Fidele); 'The Ghost of Argalia;' 'Bradamante fighting the magician Atlante, to deliver Ruggero from the enchanted Castle;' 'Funeral of Duke Amadeo VI. of Savoy;' 'Ippolita, the messenger of Bradamante to Ruggero;' 'Defence of Nice against Barbarossa and the French' (commissioned by King Carlo Alberto); 'The Battle of Turin;' 'The Battle of Col d'Assietta;' 'Giacomuzzo Attendolo Sforza throwing his axe at a tree, to decide whether or not to turn soldier.'

But now commenced a new and most important phase in his career, and one of no small influence in the recent history of Italy. While at Rome, as now at Milan, he had not only resolutely avoided "dissipation and idleness, the curse of the young Italian gentry," but as resolutely held himself aloof from the *Giovine Italia* and secret societies generally, then rife throughout the country, yet as earnestly as the most enthusiastic he longed for the advent of a United Italy, while he believed that it was only by the cultivation of the national character, and thus forming a national mind, that Italy could be made one nation. In the hope of thus "acting on the public spirit by means of a national literature," he devised the plan of a novel 'Ettore Fieramosca,' but wrote only a small portion of it. At Milan he formed a close friendship with Manzoni, and married his daughter. The connexion stimulated his patriotic feelings. He finished his novel and submitted it to Manzoni and Grossi, who gave their hearty approval; the book was printed; by a little dexterous management secured the licence of the Austrian censor (who however was dismissed from his office for his want of perception); published (1833), and quickly ran all over Italy—"it passed from the masculine to the feminine half of society; found its way to the studios and the stage; became the *vade-mecum* of every prima-donna and tenor, and the hidden treat of the school-girl; and even penetrated between the pillow and the mattress of college boys, and of the military cadet." The purpose of the book, to rouse Italians against the foreigner, was clear, and its acceptance determined Azeglio to follow up the impression by another historical novel, 'Niccolò de' Lappi,' on which however he devoted a great deal more attention and study with a view to historical accuracy. Thus written amid the intervals of his professional labours its progress was necessarily slow, but it was at length finished, passed safely the ordeal of the censorship, and was published in April, 1841, with as prosperous an issue as its predecessor.

Azeglio's residence at Turin and professional career were brought to an unexpected close. He had made a journey to Rome at the instance of a friend, and whilst staying there he had become intimate with several of the leading Roman liberals. One of these told Azeglio one day that it was indispensable he should have a serious conversation with him. At their meeting he explained to Azeglio that the Romagna was in an excited state, and that in case of the anticipated death of Pope Gregory an outbreak was inevitable, that affairs amongst the nationalists themselves, owing to the measures of the Mazzinists, &c., were complicated and every movement hazardous, and that, in order to be prepared against evils that would inevitably arise, many of the most influential patriots considered it to be advisable to have a new man, one who had not been mixed up in the proceedings of the societies, and could inspire confidence, to assume the direction of the liberal party, and that they had decided that Azeglio was that man, and now called upon him to accept the dangerous responsibility. After brief consideration he undertook the charge on the understanding that he should be free to advise the relinquishing of secret societies, the abandonment of any premature outbreak, and the acceptance of Charles Albert as the head of the union. With this understanding he made a tour of propagandism, under the guise of an artistic journey,

through a great part of Italy, town by town, and with few exceptions secured the assent of the leading patriots to his views. Having thus satisfied himself of the general good-will, he proceeded to Turin and was admitted to an audience with Charles Albert, to whom he related the whole of his proceedings, and asked whether he approved of them or not. The king heard his statement in silence, and then replied—"Tell those gentlemen to remain quiet and avoid a rising, as nothing can be done at present; but let them be certain that when the time comes, my life, the lives of my sons, my sword, my exchequer, my army, shall all be expended for the Italian cause." It was the definite moment that led to the liberation of Italy, though not immediately. Azeglio could not quite shake off the distrust which the previous conduct of the king had implanted. The more impetuous entirely disbelieved the man and rejected his advice. But the king was true to his promise, and though he perilled his all on the cast and lost, the freedom of Italy was assured.

Azeglio, though successful in deferring a general rising, could not prevent a partial and necessarily disastrous outbreak. But he had now resolved on a policy of what he termed conspiracy in broad daylight: to make no attempt at revolution, but to prepare for the battle on the field of opinion and publicity. Balbo, with whom he was now in the closest connection, agreed with him that for this it was first of all necessary to write a book. The affair at Rimini afforded a topic, and in a month Azeglio had ready his 'Gli ultimi Casi di Romagna.' Permission to publish it was refused at Turin, but he was successful at Leghorn; and in a few days after its appearance in the beginning of 1846, it had been conveyed by hand from one end of Italy to the other. Its effect was decisive. It stimulated the Italian people, but it brought them to understand that the true policy was to wait the course of events. Azeglio was banished from Tuscany and forbidden to enter the Austrian dominions in Italy.

The election of Pope Pius IX. followed by his promulgation of a general amnesty, the adoption of liberal measures, and the expression of warm sympathy with the Italian cause, roused throughout the peninsula a wild passionate enthusiasm for the new pontiff, and Azeglio shared in the general illusion. He repaired to Rome and supported by his voice and influence the popular excitement, his belief, like that of Gioberti and Balbo, being that the Pope was the true leader of the Italian people, and that the right course for liberated Italy would be to assume the shape of "a confederation of free states with its centre at Rome, and the Pope for its president:" a fearful mistake, as he lived to feel, and, being adopted by Napoleon III., the source of endless complication and trouble. Azeglio's views were set forth in a series of pamphlets called the 'Programma per le Formazione di un' Opinione nazionale.'

Azeglio was now at Rome watching the course of events. He saw that the eruption was at hand, and as a call to readiness he published 'I Lutti di Lombardia,' a passionate narration of the Austrian tyranny in Lombardy and Venice, and one of the most effective of his writings. The Parisian outbreak of February, 1848, was immediately followed by the rising of Milan against the Austrians, and by the march of Charles Albert into Lombardy at the head of his army. Azeglio called on the people of Rome to join their countrymen; a small but enthusiastic army was, with the Pope's active support, quickly organised, and Azeglio accompanied it into Venetia as staff-adjutant to the commander, General Durando. Attacked by Radetski with an overwhelming force, the pontifical army was defeated (June, 1848) after a desperate resistance, and Azeglio fell dangerously wounded in the thickest of the fight. The armistice which Charles Albert was driven to conclude with the Austrians, closed for a time the prospect of Italian freedom. But Azeglio did not despair. He removed to Piedmont, and busied himself in counteracting the machinations of the extreme republican party.

Victor Emanuel, on his accession to the throne of Sardinia, turned at once to Azeglio to guide him in relieving the country from the state of depression and anarchy into which it had sunk. As minister, Azeglio imperilled not merely his popularity in Sardinia, but his influence with the Italian people, by entering into negotiations for a peace with the Austrian government, and notwithstanding the most violent clamour and reproaches, he persisted till he brought it to an honourable conclusion. Twice he dissolved the parliament on the question of its acceptance, but the same deputies were returned; when he issued a royal proclamation, signed by the king and countersigned by himself, setting forth the absolute necessity for peace in order to save the monarchy and the country. The proclamation of Moncalieri

produced its effect, and, as before, time was gained for Italy to repair her losses and watch for her opportunity. As Sardinian minister Azeglio directed his attention in the first instance to the financial and administrative reorganisation of the kingdom, amounting in many departments to a complete reconstruction, and with the most beneficial results. Another important measure was the abolition of ecclesiastical jurisdiction in civil matters, which led to collision with the papal government, though he still clung to his trust in Pius personally. He introduced Cavour into his ministry, but the men were too differently constituted to work well together, and the younger and stronger man prevailed. Azeglio resigned in May, 1852, but was induced by the king to resume office, Cavour being excluded from the new administration. But the difficulty of the position was not removed, and in October of the same year he resigned definitively. When, however, Cavour, by proffering the adhesion of Sardinia to the alliance against Russia, and proposing to send a contingent to the Crimea, placed Piedmont alongside the great European powers, Azeglio saw its immense value to Italy and announced his warm support of his rival's policy. On the conclusion of the Crimean war, Azeglio along with Cavour accompanied Victor Emanuel to Paris and London; and he drew up, at Cavour's request, the memorandum of Italian grievances which was laid before the Congress of 1856. In 1859 he heartily supported Cavour in every step that led to the war with Austria, and though in feeble health proceeded as envoy to Rome and to London, and, after the war had broken out, to Bologna. At the close of the campaign he became governor of Milan, but resigned the post on Cavour's avowal of complicity with Garibaldi's expedition into Sicily—a measure that revolted Azeglio's more fastidious sense of honesty and fair dealing.

He now withdrew wholly into private life. He had accepted the appointment of Director of the Royal Picture Gallery, Turin, and the time not required for the discharge of its duties, he spent mostly in the country. Still suffering from the effects of his wound, he was precluded from active physical exertion, but he painted, wrote, or received the visits of friends. In the hope of strengthening the Emperor Napoleon in the policy of non-intervention, D'Azeglio wrote in French and published 'La Politique et le Droit chrétien au point de vue de la question Italienne.' Somewhat later he published his 'Questioni Urgenti,' in which he again and with much earnestness urged the advantages of confederation as the solution of the Italian question, and implored his countrymen to abandon their passionate cry for Rome as the Italian capital. He also during these last years wrote the valuable and very interesting *Recollections of his life*, which were published the year after his death by his only daughter the Marchioness Ricci, and translated into English by Count Maffei (2 vols. 8vo); and which have supplied most of the materials for this memoir. But, though he continued writing till attacked by his fatal illness, he only lived to bring the work down to the publication of 'I Casi di Romagna.' The struggle, the defeat, and the ultimate triumph, were left for other pens to record. In December, 1865, while at his favourite villa on the Lago Maggiore, he was attacked by fever; the acute malady was overcome, but the chronic affection of the lungs under which he had long suffered assumed dangerous proportions, and he died on the evening of the 15th of January, 1866. Massimo d'Azeglio, taken altogether, was one of the most remarkable men that Italy has of late years produced. Not the greatest perhaps, but amongst the noblest and worthiest; one who has done most to make Italy what she is; one whose memory all true-hearted Italians will cherish; and one whose example her youth would do well before all to set before them as their model.

AZO, also named AZZO or AZOLINUS, one of the greatest jurists of the middle ages, was born at Bologna about the middle of the 13th century. His name is sometimes found, but in no good authority, with the prefix of Dominicus; sometimes with the surname of Ramenghis, or with that of Porcius or Porcius, which has several old testimonies in its favour; at other times, according to the custom of the age, it is coupled with that of his father Soldanus. He professed jurisprudence in the University of Bologna, and in no other; although it is sometimes wrongly stated that he taught at Modena or Montpellier. AZO was a pupil of Johannes Bassianus, but he far surpassed his master's fame and success; and in his time the University of Bologna numbered 10,000 students. He was frequently employed in state affairs by the city of Bologna; and his character was remarkable for a certain independence, which was apt to assume the form of harshness towards his adversaries. He is

too critically said to have known little of the liberal arts and of the canon law; and is even asserted by some authors to have become a canonist in his latter years, and to have entered holy orders. This last statement, however, results from confounding him with two later canonists, Azo Lambertaccius and Azo de Ramenghis. The year and manner of his death are alike uncertain. As to the first, authorities range between A.D. 1200 and 1230; and they who favour the latter date, appear to be the better informed. A frequent version of the manner of his death is, that having in a fit of passion killed one of his colleagues, he was publicly beheaded. But the idea of an ignominious death is scarcely reconcilable with the honours which were paid to his memory. Yet the mistake is probably founded on some real event, such as that of the execution of his son, in 1243; or perhaps that of another jurist, Azo Porchus, in 1247. Odofredus, the nearest of all authorities in point of time, mentions that Azo's devotion to his duties was so unremitting that he never felt ill except in vacation time, and actually died in the Autumn vacation; and that as a mark of respect to his memory, the beginning of the scholastic year, which had till then opened on St. Luke's Day, was deferred to that of All Saints. Azo had five sons, and his posterity can be traced at Bologna down to the close of the 14th century; but they never attained to eminence.

The works of Azo are six. (1.) His 'Glosses,' manuscript, remarkable as being the earliest which have often sufficient sequence to form a continuous commentary. (2.) His 'Readings on the Code,' known under the title of 'Azonis ad Singulas L.L. xii. libr. Cod. Just. Commentarius et magnus Apparatus.' The last three books of the Code, which Savigny reckons as the most valuable of all the works of the Glossators, as best exhibiting their method of teaching, were not by Azo, but by Hugolinus. The whole were collected by one of Azo's scholars, Alexander à S. Egidio, otherwise unknown, and were twice published, the first time by Contius, Paris, 1577, and again, with new title-pages, in 1581 and 1611; the second time at Lyon, 4to. 1596. (3.) The 'Summa Codicis,' and (4.) 'Summa Institutionum,' the ground-works of his fame. These Sums of Azo, which, it should be remembered, had been preceded by the less esteemed Sums of Rogerius, Placentinus, and Johannes Bassianus, received subsequent additions from Hugolinus and Odofredus; and there gradually arose a collection of Sums, or Commentaries, on the whole Corpus Juris, usually included in one volume, and comprising those of the Code and Institutes by Azo; that of the three Digests, attributed to Johannes, but in reality by Hugolinus; that of the Tres Libri, begun by Placentinus, continued by Pillius and never completed; and lastly, that of the Novels, by Pillius. The whole collection was frequently attributed to Azo, and hence the inextricable confusion in which Diplovataccio and other later authors have involved their accounts of the lives and writings of Azo, Johannes, Placentinus, and Pillius. The editions of the Sums are thirty in number, from that of Spire, fol. 1482, to that of Venice, fol. 1610, which may be distributed as follows, according to the places of publication: one at Spire, one at Milan, one at Geneva, two at Pavia, two at Basel, six at Venice, and no less than seventeen at Lyon, all either in fol. or 4to. (5.) The 'Brocarda,' consisting of short maxims of law, for which authorities are quoted, and to which a jurist of the name of Cacciavillano made some additions. The 'Brocarda' were published with the Sums in the editions of 1566 and 1581, Venice, fol.; Lyon, fol. 1593; and Venice, fol. 1610; and also separately at Basel, 8vo. 1567. (6.) The last extant work of Azo is the 'Questiones Sabbathine,' in manuscript. His 'Definitiones' and 'Distinctiones' are lost. Various other works have been attributed to Azo; some by a confusion of name between him and Azo Lambertaccius and Azo de Ramenghis. The reputation which Azo's Sums acquired and long retained was almost unbounded. Gravina speaks of the work as indispensable to every jurist. Azo was called the "fountain of law," the "trump of truth" (*veritatis tuba*), and even in his epitaph "the god of jurists" (*jureconsultorum numini*.)

AZPILCUETA, MARTIN, a famous doctor of the canon law, born in 1491 or 1493, at Varasoyñ, a town near Panpelpuna, in the then independent state of Navarre, from which circumstance he is often called "the Navarrese." He became, when young, a canon regular of Roncesvalles, and commenced his studies at the University of Alcalá. In 1512, when Jean d'Albret, the King of Navarre, retired to France from the invasion of Ferdinand the Catholic, King of Aragon, he was followed by Francisco Navarra, one of the principal Church dignitaries, and it is supposed that Martin, who was patronised by Francisco, and who went to France about the same time, went in his company, and

from the same motives. Azpilcueta remained 14 years in France, and taught canon law at Toulouse and Cahors; after which he returned to Spain, and taught at the University of Salamanca. He lectured first on the Decretals, and then on canon law in general; the study of which he revived with such effect as to achieve a reputation throughout Europe. He taught at Salamanca for 14 years, at the end of which time he accepted, by permission of the Emperor Charles V., the brilliant proposals made to him by John III. of Portugal, to teach in the University of Coimbra. Here he continued for 16 years; and then, retiring on a pension, repaired to the Court of Spain, where for 12 years he acted as confessor to some of the princesses of the royal family. In his 80th year he was called upon by the affection which he bore to his friend Bartholomé de Carranza, Archbishop of Toledo, to support the latter against the charge of heresy, first before the tribunal of the Inquisition at Valladolid, and then within the Pope's own jurisdiction at Rome. The investigation lasted some years, during which nothing could be proved against Carranza, who was finally ordered to dissolve all suspicion of heresy by a public abjuration of obnoxious doctrines, soon after which he died at Rome, in the monastery of Santa Maria sopra Minerva, on the 2nd of May, 1576. His advocate was treated with such distinguished honour, that he appears to have lost all wish to return home. Pius V. named him assessor to Cardinal Francesco Alciati, the vice-penitentiary; and Gregory XIII., the successor of Pius, manifested an extraordinary regard for him. Throughout Rome his name became so famous, that every one who excelled in an art or profession was called its "Navarro." His disposition was liberal and beneficent; and it is related that the mule on which he rode through Rome always stopped, when he came to a beggar, and did not move on till his master had bestowed the customary donation. He had practised charity from an early age; when a professor at Toulouse and Salamanca he was frequently seen in the morning delivering his lectures on the law, and in the afternoon acting as a servant in the hospital. Though of a weak constitution, he never, at the most advanced age, omitted the prescribed fasts, and he was always ready to give gratuitous legal advice to all who applied, till within five days of his death, which took place on the 21st of June, 1586. He was at this time, according to the date of his birth favoured by Nicéron, 95 years of age, 93 according to Antonio; and according to an erroneous statement in his funeral oration by Correa, upwards of a century.

There are, according to Clement, four editions of Azpilcueta's works:—(1.) 'Opera Omnia,' Rome, 1590, 3 vols. folio; (2.) Lyon, 1595—97, 3 vols. folio, the title of which, according to the Bodleian Catalogue, is 'Pleraque Opera'; (3.) At Venice, 1602, 6 vols. 4to, the first four of which contain all, and more than all, that is given in the two preceding editions, while the last two are occupied by 'Consilia et Responsa'; (4.) At Cologne, 1616, 2 vols. folio. An abridgment of the whole of his works was published by Castellanus, in 1 vol. 4to, at Venice, in 1598. The separate works, and the editions of them, are so numerous, that for a list of the whole we must refer to the second volume of Nicolas Antonio, or the fifth of Nicéron. The most remarkable are:—(1.) 'Manuale sive Enchiridion Confessoriorum et Penitentium,' a manual for confessors and penitents, into which, as Azpilcueta told Roscius Hortinus, one of his biographers, he had introduced all he knew; (2.) 'De rebus Ecclesiasticis,' a treatise on benefices, translated by Azpilcueta himself from a Spanish treatise of his own, 'Tratado de las rentas de los beneficios eclesiasticos para saber en que se han de gastar,' Valladolid, 1566. In this treatise Azpilcueta maintains that the holders of ecclesiastical benefices are bound to expend on their own wants no more than is strictly necessary, and to distribute all the remainder to the poor—a doctrine which met with some opposition. His remaining works are:—'On the Canonical Hours'; 'On Silence during Divine Service'; 'On the Year of Jubilee, and on Indulgences in general'; 'On the Ends of Human Actions,' &c. To the last is appended an 'Apologetic Letter to the Duke of Albuquerque,' in which, whilst refuting a report which was prevalent at Rome, that he had fallen into disgrace with Philip II., who with his ministers had been against Bartholomé de Carranza, Azpilcueta is led to give some particulars of his own life, from which subsequent biographers have drawn most of their information. There is also a biography of him by Simon Magnus Ramlotæus, prefixed to his edition of the 'Manuale,' at Rome, in 1575, and consequently published during Azpilcueta's lifetime—a proceeding at which he openly testified his displeasure. (*Biog. Dict. of U. K. Soc.*)

B

BAAN, JAN DE, an eminent Dutch portrait painter, was born at Haarlem, February 20, 1633; learnt the rudiments of art from an uncle named Piemans, and was then placed under J. de Bakker of Amsterdam, but formed his style on an attentive study of the works of Vandyck. He settled at the Hague, but came to England by invitation of Charles II., and painted the king and queen and several of the nobility, but he was dissatisfied with his treatment here and returned to the Hague. In 1672 he was invited to visit France in order to paint the portrait of Louis XIV., but he refused to paint a monarch who was at war with his country, and his answer was not resented. Besides princes and nobles, De Baan painted many of the more remarkable men of his time and country. Among them were the unfortunate Count Horn, and the still more unfortunate De Witts. When the populace had murdered the brothers, they insisted on De Baan giving up the portraits he had painted of them, but he had previously taken the precaution to remove them from his house. At Dordrecht, however, the crowd tore down and destroyed the portrait of J. De Witt, which was hung in the Town Hall,—a very elaborate composition, and held to be De Baan's masterpiece. Houbraken and others relate some remarkable escapes from the violence of those who envied his success, but some of the stories have rather a legendary character. He died at the Hague in 1702. His son, **JAKOBUS DE BAAN**, born in 1673, studied under his father; at the age of 18 was regarded as a good portrait painter; came to England, was patronized by William III., and painted a portrait of the Duke of Gloucester, which was much praised; went to Florence, where he was honoured with the notice of the Grand Duke, then proceeded to Rome in order to study the works of the great masters there; and on his return died at Vienna, in 1700, at the early age of 27. Some conversation pieces by him are much admired.

BABBARD, RALPH, an English mechanician, or mechanical inventor, who lived in the latter half of the 16th century, but nothing is known of his personal history. Mr. Halliwell, in his *Rara Mathematica*, has drawn attention to a manuscript in the Lansdowne Collection (MSS. Lansd. No. 125), containing "a speciall breife remembrance of some pleassante serviceable and rare inventions as I have by longe studie and chargeable practice found out," addressed by Babbard to Queen Elizabeth. One of the inventions was "the rarest Engyne that ever was invented for sea service;" and it is described as being "a vessell in manner of a Tally or Talliote [probably galley or galliot] to passe upon the seas and ryvers without oars or sayle against wynde and tyde, swifter than any that ever hath bynne seene, of wonderful effect bothe for intelligence, and many other Exployles almost beyonde the expectation of man." Some persons have imagined that this was a foreshadowing of the steamboat; but probably Babbard, like the Marquis of Worcester in his *Century of Inventions*, formed crude schemes which he never tested even by a model, or delineated in a diagram.

* **BABINET, JACQUES**, a French physicist, was born at Lusignan, March 5, 1794. He was destined for the bar; but a course of studies in the Lycée Napoléon at Paris, and the Ecole d'Application at Metz, gave him a strong love for science. He was for some time attached to the 5th Regiment of Artillery, which he quitted to become professor of physics at the College of St. Louis. Between 1825 and 1828 he gave courses of lectures on meteorology at the Athénée; in 1838 succeeded Savary at the College of France; and in 1840 succeeded Dulong in the section of general physics at the Académie des Sciences. In 1854 he became assistant astronomer at the Paris Observatory for Meteorology. He frequently lectured at the public meetings of the Institute, and before the Société Philotechnique. Babinet has written largely on scientific subjects. Among his works are the following:—*Resumé complet de la physique des corps impondérables, contenant, outre l'acoustique, un essai sur leur nature, la théorie de leurs vibrations, leurs applications à tous les phénomènes de l'électricité et du magnétisme, de la lumière et de la chaleur*, Paris, 1825, 32mo; and a companion work, in the same year, on *ponderable bodies*. *Expériences pour vérifier celles de M. Trevelyan sur la vibration des métaux chauffés*, Paris, 1835. Papers in the *Mémoires de la Société Philomathiques* on the measure of chemical forces; on the mass of the planet Mercury;

on the determination of terrestrial magnetism; on the retardation of light in refractive media, &c. Besides numerous memoirs in the *Comptes Rendus* and in the *Annales de Physique*, M. Babinet has written papers in the *Revue des Deux Mondes*, on the plurality of worlds; on precious stones; on the condition of the earth before geological epochs; and on earthquakes. *Études et Lectures sur les Sciences d'Observation, et sur leurs applications pratiques*, 1855—63, 7 vols. 16mo. *Calculs appliqués aux Sciences d'Observation* (in conjunction with M. Housel), 1857, 8vo. *Notice sur l'Eclipse de Soleil de 15 Mars*, 1858, 8vo. *Sur la Sécheresse, les irrigations, et les reboisements*, 1858, 4to. *Nouvelle Cours de Géographie physique et politique*, 1859, 12mo. *De la Télégraphie Électrique*, 1861, 8vo. *Notes sur quelques actualités scientifiques*, 1861, 4to. *La Période Glacière*, 1867, 8vo. He also wrote introductions to Nadar's work on aërostation, and to Liail's *Espece Celeste et la Nature tropicale*. Babinet contrived an aërostatic machine, which he called a *helix*, and introduced a new projection for maps known as the *homolographique* projection.

* **BABINGTON, CHARLES CARDALE**, was born in 1806 at Ludlow, in Shropshire; and received his early education in and near Bath, with which place he was closely connected for many years. His later education was carried on at St. John's College, Cambridge, where he took his B.A. degree in 1830, and his M.A. degree in 1833. He has written many papers (more than one hundred in number), chiefly relating to the entomology and botany of the British Isles. His first original work was the *Flora of Bath*; but he is best known by his *Manual of British Botany*, which has passed through several editions. This Manual manifests a quality which is prominent in many other of Professor Babington's writings, viz., a strong analytical tendency. He is remarkably quick in detecting the differential points of plants, and the result is that he recognises a far larger number of species in a group than do most of his contemporaries. This is well shown in his treatment of the genus *Rubus*, or Brambles. He succeeded Henslow as professor of botany in the university of Cambridge in 1861. He is a Fellow of the Royal and other learned Societies; and an editor of the *Annals of Natural History*.

BABINGTON, GERVASE, an English scholar and prelate, was born about 1550, according to Fuller (*Abel Redivivus*), in the county of Nottingham, but according to Prince (*Worthies of Devon*), in Devonshire; in either case being a member of the same ancient Nottinghamshire family as Anthony Babington, the conspirator. He was educated at Trinity College, Cambridge, at a time when Dr. Whitgift was the master, and became a fellow of that society. In 1578 he was admitted M.A. of the University of Oxford by incorporation. Having devoted himself to the study of divinity, he presently became celebrated as a preacher in the university. Upon taking his doctor's degree, he was appointed chaplain to Henry, Earl of Pembroke, who married "Sidney's sister," through whose favour he obtained in 1588 the prebend of Wellington in the cathedral church of Hereford, a stall which he held until his promotion to Worcester in 1597. He was collated to the office of treasurer of the diocese of Llandaff, January 28, 1590, to the episcopal oversight of which he was consecrated at Croydon, on the 29th of August, 1591. In 1595 he was translated "for his singular piety and learning" to the see of Exeter, and was enthroned there on the 22nd of March. He is charged with having inflicted irreparable injury on the revenues of this diocese, by alienating from it the rich manor of Crediton. In 1597 he was translated to Worcester, the temporalities of which were restored to him on the 15th of October. He was incumbent of the diocese of Worcester for about 13 years, and was one of the Queen's Council for the Marches of Wales. He died May 17, 1610, of a hectic fever, and was buried in his cathedral with great sorrow and solemnity. Fuller says of Babington that "in the midst of all his preferments he was neither tainted with idleness, nor pride, nor covetousness, but was not only diligent in preaching, but in writing books, for the understanding of God's word." Most of the books thus alluded to were published separately—some of them in more than one edition—between the years 1583 and 1604; and in 1615 they appeared collectively under the editorial care of Thomas

Chard, and with a dedication to the Earls of Pembroke and Montgomerie, in a large folio volume, entitled 'The Workes of the Right Reverend Father in God, Gervase Babington, late Bishop of Worcester. Containing comfortable notes upon the five Books of Moses, viz., Genesis, Exodus, Leviticus, Numbers, and Deuteronomie (the last two not before published); and also an Exposition upon the Creed (not before published), the Commandments, the Lord's Prayer, with a Conference betwixt Man's Frailtie and Faith; and Three Sermons. With Alphabetically Tables of the principall matters to each severall Worke.'

BACCIARELLI, MARCELLINO, Italian painter, born at Rome, February 16, 1731, was a pupil of Benefial. In 1753 he was taken to Dresden by Augustus III., Elector of Saxony and King of Poland, to make drawings for the engravings from the Dresden Gallery, and in 1756 he accompanied the King to Warsaw, where, with the exception of a visit to Vienna in 1761, to paint the portraits of the imperial family of Austria, he remained the rest of his life. Bacciarelli retained the favour of Augustus III. till the death of that monarch in 1763, and he was equally fortunate with his successor, Stanislaus-Augustus, who employed him in decorating the royal palaces, and made him director of the fine arts and of the crown buildings, his studio being converted into a sort of academy. On the foundation of the Warsaw University he was nominated dean of the faculty of the fine arts. He was held in the highest respect, and if the affairs of Poland had been in a less miserable condition, he would probably have founded a national school of painting. As it was, his labours died with him. He was a facile painter, with more elegance than vigour of style, and from the absence of healthy rivalry his manner deteriorated. His chief works were the series of six large paintings of events in Polish history, and portraits of the Kings of Poland from Bólaslas to Stanislaus-Augustus, for the palace at Warsaw. He painted numerous other large historical pieces for the royal family and nobility of Poland, and several scriptural subjects for the churches of Warsaw and other towns, besides a large number of portraits of the chief personages of the country. He died at Warsaw on the 5th of January, 1818, and was interred in the cathedral, where a handsome monument was erected to his memory. Bacciarelli was a member of the Academy of St. Luke at Rome, and of the academies of Bologna, Venice, Berlin, Dresden, &c.

BACCIO DA MONTE LUPO, whose real name was **BARTOLOMEO LUPI**, a distinguished Florentine architect and sculptor, was born about 1445. After a youth spent in idleness, he applied himself diligently to study, and executed an escutcheon of Pope Leo X. for the garden of the Pucci family at Florence, which was greatly admired, and brought him numerous commissions. The finest productions of his chisel were a statue of Hercules, executed for Francesco de' Medici, and a bronze statue of St. John the Evangelist for the Guild of Porta Santa Maria, which still occupies its original site at the corner of San Michele in Orto. He also executed a large number of crucifixes, the figures life size, of which Vasari enumerates several, and others, he says, may be found in various parts of Italy. As an architect, Baccio's most famous work was the finely proportioned church of San Paolino at Lucca, erected by him in 1522. It consists of a nave, choir, and transepts, being in the form of a Latin cross, and has columns of the Doric order. Baccio died at Lucca about 1534, and was interred with due honour in his church of San Paolino. He left several children, one of whom, **RAFFAELLE DA MONTE LUPO**, who died in 1588, attained to considerable reputation as a sculptor. According to his contemporary Vasari, Raffaele far surpassed his father Baccio, but this opinion was doubtless arrived at owing to his imitating the manner of Michelangelo, whom Vasari worshipped. He carved a Prophet and a Sibyl on the tomb of Julius II. from the models of Michelangelo; the angel on the Castle of St. Angelo; and the statue of Leo X. on his tomb in the church of the Minerva, as well as several other works in Rome, and a great many in other towns. In his later years he held the post of inspector and architect of the cathedral of Santa Maria in Orvieto.

BACHAUMONT, LOUIS PETIT DE, French memoir writer, was born about the close of the 17th century at Paris, where he died on the 28th of April, 1771. Bachaumont wrote 'Lettres Critiques sur le Louvre, l'Opéra, la Place Louis XV., et les Salles des Spectacle,' 8vo., 1752; an 'Essai sur la Peinture, la Sculpture, et l'Architecture,' 8vo., 1752, and some other things; but he is only remembered now for his 'Mémoires Secrets,' which were published after his death in 6 volumes, 8vo., 1777, and afterwards augmented by a series of 30 additional volumes, collected by Pidansat de Mairobert, and

BIOG. DIV.—SUP.

others. Bachaumont's memoirs, which extend from the 1st of January, 1767, to his death, relate to current events, social doings, gossip and scandal, and contain a sufficient store of piquant anecdotes respecting the notable people of the time, picked up for the most part, as was reported, in the salon of Madame Doublet, but some say, writes Dom Chaudon, "that his valet de chambre supplied him with many of them: so it is that historical collections are compiled." Several abridgments of the 'Mémoires' have been published: but the student of the manners and history of the 18th century should consult the original; and it should be added that Bachaumont's 'Mémoires' are of far greater value than the continuation.

BACHE, ALEXANDER DALLAS, an eminent geodetist and nautical surveyor, who for many years occupied a conspicuous place amongst American scientific men. Born July 19, 1806, in Philadelphia, he was educated at the Military Academy at West Point, where he graduated in 1825, and immediately afterwards was appointed assistant-professor of engineering in the Academy, a post which he held for some months. In 1827 he accepted the professorship of natural philosophy and chemistry in the University of Pennsylvania.

In 1836 he was made president of the Girard College, and as such he made elaborate inquiries into the state and method of education in Europe, the result of which inquiry was issued in an instructive octavo volume. In 1843 he succeeded Professor Hassler as Superintendent of the United States Survey, and retained the situation till his death, February the 17th, 1867. In conducting the survey, which is probably the most gigantic that has ever been achieved under the direction of any one individual, he displayed remarkable foresight, practical wisdom, and administrative talent. The survey reports, which were published annually, were either written or supervised by him, and won for him a European reputation, and one of the medals of the Royal Geographical Society of London. These reports are ranked by the best authorities amongst the most accurate and exhaustive works in the whole range of geodetical literature. Bache was an active member of the American Association for the Advancement of Science, to which body he contributed several valuable memoirs. He also contributed papers to the 'American Journal of Science and Art,' and other scientific publications. A list of his writings for periodicals is given in the 'Royal Society's Catalogue of Scientific Papers,' and comprises 75 items. He was elected the first President of the National Academy of Science on its establishment in 1863, his tenure of which was to have been for six years.

(*American Journal of Science*, Second Series, vol. xlv. p. 282.)

BACONTHORP, BACONTHORPE, BACONDORP, or simply **BACON, JOHN**, was born in the latter part of the 13th century, at Baconthorp, a village in Norfolk. He was "bred a Carmelite in the convent of Blakeney," and afterwards studied successively at Oxford and Paris. Here he acquired great reputation for learning, and was esteemed the head of the followers of Averroes, the "Interpreter" or "Commentator" of Aristotle. Fuller says that Baconthorp was remarkable especially for three things:—(1) For the dwarfishness of his stature; (2) for his high spirits in his low body; (3) for his high title, 'Resolute Doctor.' This high title was conferred upon him on account of the facility and soundness of his answers to the questions proposed to him. Upon his return to England, he was chosen the twelfth provincial of the English Carmelites, in a general assembly of that order, held in London in 1320. The disciples of Averroes, equally with their master, would have much difficulty in making their philosophical opinions harmonize with any system of theology that was considered orthodox by the average Jew, Mohammedan, or Christian; and it has been said of Baconthorp that "he grasped after more light than he saw, saw more than he durst speak of, spoke of more than he was thanked for by those of his superstitious order, amongst whom (saith Bale) neither before, nor after, arose the like for learning and religion." The year of Baconthorp's death is ascertained to have been 1346, but accounts differ as to his place of burial, which is variously said to have been Blakeney, Norwich, and London. Leland, Bale, and Pitts have given a catalogue of Baconthorp's writings, of which the principal ones that have been published are 'Commentaria seu Quaestiones par quatuor Libros Sententiarum,' Milan, 1510, and five other editions; and 'Compendium Legis Christi, et quodlibeta,' Venice, 1527.

BADCOCK, SAMUEL, a critic and theologian, was born at South Molton, in Devonshire, in the year 1747, and was educated for the dissenting ministry, the functions of which he exercised successively at Bere Regis, Dorsetshire, at Barnstaple, and at his

native town of South Molton. In 1778 he commenced his career as a man of letters; and in 1781 produced a poem called 'The Hermitage.' He was, however, chiefly distinguished as a critic and reviewer; and in this capacity gained great credit for his review of Martin Madan's 'Thelyphthora, or a Treatise on Female Ruin, in its Causes, Effects, Consequences, Prevention, and Remedy, considered on the basis of the Divine Law,' 3 vols. 1780-81. In this work the author, whose perception of the evils he wished to combat was quickened by his official employment as chaplain of the Lock Hospital, Westminster, justified polygamy, on the notion that the first cohabitation with a woman is a virtual marriage. His purpose was to remove the causes of seduction, but his opinions were overruled. Badcock's review of Madan's work was an elaborate vindication of our present marriage economy.

Early in his career Badcock had been a friend and admirer of Dr. Priestley, with whose opinions he manifested considerable sympathy. But a deeper study of ecclesiastical history convinced him that Unitarianism was not of the early origin which Priestley claimed for it; and he attacked, in a manner which Priestley himself felt to be formidable, the latter's 'History of Early Opinions concerning Jesus Christ; compiled from original Writers, proving that the Christian Church was at first Unitarian,' 4 vols. 8vo, 1786. Dr. Priestley wrote an immediate Defence, after which both History and Defence were attacked by Badcock. In 1784 Dr. Joseph White, Laudian Professor of Arabic, and afterwards Regius Professor of Divinity, delivered his celebrated Bampton Lectures at Oxford, in which he was so much assisted by Badcock that the latter is accounted by many the real author of the volume. Dr. John Johnstone, the biographer of Dr. Parr, remarks that "whether the plan of the Bampton Lectures was solely White's may be doubted. Much of the execution lay between him and Badcock; but the whole was superintended and revised by Parr." Soon after, Badcock conformed; and in 1787, having about twelve months previously, September, 1786, resigned his function as a dissenting minister, was ordained to the curacy of Broad Clyst, by John Ross, Bishop of Exeter, who is said to have admitted him, without examination, to deacon's and priest's orders on two consecutive Sundays. Badcock did not live to give proof of his ministry in the established church, but died on the 19th of May, 1788, in London, at the early age of 41.

BADIUS, JODOCUS, or JOSSE, a celebrated scholar and printer, was born in 1462 at Asche, or Aasche, a town in the province of Brabant, six miles north-east of Brussels, from which circumstance he is sometimes surnamed Ascensius. He studied successively at Ghent in Flanders, and at Ferrara in Italy. He afterwards settled at Lyon as a professor of the Greek and Latin languages, and became corrector of the press to John Trechsel, a printer of Lyon, whose daughter Thelif he married in or before the year 1499. It was to Badius that Robert Gaguin, the 20th General of the Order of the Trinitarians, entrusted the production of his work 'De Origine et Gestis Francorum,' fol. 1497; and the result of this commission was that Badius repaired in 1499 to Paris, where he established himself as a teacher of Greek, and as a restorer of the art of printing. His press acquired great reputation under the name of Præsum Ascensianum, and from it he issued, with his own notes and commentaries, editions of many of the classics, especially of Horace, Virgil, Lucan, Juvenal, Sallust, Quintilian, Valerius Maximus, &c. He bestowed the same pains on some modern authors, as Petrarch, Politian, Laurentius Valla, and Baptista Mantuanus. Badius had a numerous family, and the care of their maintenance pressed him into voluminous authorship, so that he was at once famous as "the father of many children, and the writer of many books," and it was pleasantly said of him in an epitaph composed upon him by his grandson, but which does not seem ever to have adorned his tomb, that "his books were more numerous than his children, because he commenced author very early, father very late." He died in 1535, at the age of 73, and was buried in the Collegiate Church of St. Benedict at Paris.

In the list of the works of which Badius was the author occur his 'Psalterium Beatæ Mariæ Virginis,' 'Epigrammata,' 'De Grammatica,' 'De Conscribendis Epistolis,' 'Vita Thomæ à Kempis,' and 'Navicula Stultarum Mulierum,' a satire on the follies of women, in which he imitated the style of Sebastian Brandt, of whose work, 'The Ship of Fools,' he had written a Latin Paraphrase, with annotations, under the title of 'Navis Stultifera à Domino Sebastianò Brant primum edificata, et lepidissimis Teutonicæ Linguae Rithmis decorata, deinde ab Jacobo Lochero Philomuso Latinitate donata, et demum ab Jodoco Badio

Ascensio vario Carminum Genere, non sine eorundem familiari explanatione illustrata.'

* BAEHR, JOHANN CHRISTIAN FELIX, an eminent German scholar, was born at Darmstadt on the 13th of June, 1798. He became a student of the University of Heidelberg, in which, in the year 1826, he attained the position of professor of classical literature. In 1833 he was appointed chief librarian of the library of Heidelberg, which owes important additions and improvements to his activity and intelligence. He became director of the Lyceum in 1839, and in 1845 director of the philological seminary. The Grand Duke of Baden made him a member of his privy council, and conferred upon him the order of the Lion of Zahringen.

Baehr is the editor of annotated editions of several of the 'Lives' of Plutarch, as for instance of the 'Life of Alcibiades,' 1822, and the 'Lives of Philopemen, Flaminius, and Pyrrhus,' 1826; and in the last-named year he produced Fragments of Ctesias, selected and annotated. In 1828 appeared the first edition of his celebrated 'History of Roman Literature,' 'Geschichte der Römischen Literatur,' 8vo, Carlsruhe, of which the second edition was issued in 1832, and the third, in two volumes, in 1844-5. An Abridgment of this work, 'Abriss der,' &c., was published at Heidelberg in 1833, and was translated into French by Roulez (Louvain, 1838). To the 'Geschichte der Römischen Literatur' three supplementary volumes were added between the years 1836 and 1840, all of which were published at Carlsruhe. They were—(1) 'Die Christlichen Dichter und Geschichtsschreiber Roms,' 1836; (2) 'Die Christlich-Römische Theologie,' 1837; 'Geschichte der Römischen Literatur im Karolingischen Zeitalter,' 1840. A fourth Supplement is expected to treat of the History of the Roman Literature from the Carolingian epoch to the 13th century. The most laborious and profound of all Baehr's editorial engagements is his valuable edition of Herodotus in 4 volumes, with notes, maps, and illustrations; and he has in addition contributed other works in archaeology and philology, besides articles to various encyclopædias, and to the 'Annals of Heidelberg,' of which since 1847 he has been the sole editor.

* BAER, KARL ERNST VON, an eminent biologist, was born Feb. 28, 1792 (new style), on the family estate of Piep in Esthonia. He spent his infancy at the house of an uncle situated in another part of the same Russian government, but returned to his native place in 1799 in order to attend the school there. In his autobiography he mentions several events of his early childhood which indicate the tendency of his thoughts to natural history subjects. This tendency was fostered by his uncle. In his fifteenth year he had already acquired a considerable acquaintance with the plants of his native district, as is evidenced by the following circumstance:—In 1807 his father was visited by Baron von Ungern-Sternberg, a botanist, to whom young Baer was able to show several indigenous plants which had not previously been seen by the baron. In the same year he was transferred to the cathedral school of Revel, where he pursued his studies for three years. The following four years were spent at the University of Dorpat, and in 1814 he acquired the degree of doctor of medicine. His knowledge of medicine, however, was slight, and for the purpose of better qualifying himself he visited the principal German universities. First he proceeded to Vienna, and passed through a medical course under the instructions of Professors Hildenbrandt, Kern, and Boer. In 1815 he went to Würzburg in order to study comparative anatomy under Professor Döllinger. He introduced himself to the professor by delivering him a small package of mosses which Dr. Martius had given him for the purpose, knowing how much Döllinger would prize them. Baer explained the purport of his visit, but was rather taken aback on being curtly informed that no lectures on comparative anatomy were to be given in the session about to commence. When Döllinger had opened his parcel and examined its contents, he gazed at Baer for a time, and then told him "to bring some animal and dissect it here; and then another one." The next morning Baer appeared at the professor's house with a leech, which he dissected under superintendence. This was Baer's first step in a long and honourable anatomical career. In 1815 Döllinger was desirous of investigating the development of chickens, but not feeling disposed to undertake it himself, he determined to engage some one who could not only dissect but also draw and engrave on copper-plates. These latter requirements prevented Baer's acceptance of the post, which was occupied first by Pander, and subsequently by d'Alton. This research led to the discovery of many important facts connected with the structure and developmental changes of the egg. Baer was fully cognisant of all the steps

of the inquiry, which had a great influence on his own subsequent career. In September, 1816, he left Würzburg for Berlin, where he stayed for a few months. In 1817 he took a position as prosecutor at Königsburg. While holding this post he seized every opportunity of acquainting himself with the structure of animals. The museum belonging to the college supplied him with a species of *Holothuria* from India, portions of the skeleton of the Aurochs, a specimen of *Delphinus phocaena*, &c. The results of his investigation were communicated to a meeting of anatomists at Königsburg in a paper entitled "Bemerkungen aus meinem zootomischen Tagebuche." Shortly after his comparison of the skulls of the aurochs and common ox was incorporated in Professor Hagen's memoir on *Bos urus*. This led to his drawing up a report on the individuals of *Bos urus* still existing in the forests of Lithuania. His first production was the thesis on the diseases endemic among the Esthonians, written prior to his receiving his doctor's degree. In 1819 he married Auguste von Medem, and in the same year he was appointed an extraordinary professor of zoology at Königsburg. In 1834 he became librarian to the Academy of Science at St. Petersburg; and in 1864 the fiftieth year of his doctorate was celebrated by the Esthonian nobility, at whose expense a splendidly printed and bound volume was issued containing Baer's autobiography.

The writings of Baer are very numerous, a full list of his books, pamphlets, articles, and short notices comprising upwards of 300 items. His most important work is that entitled 'Ueber Entwicklungsgeschichte der Thiere,' of which the first volume was published in 1828 and the second in 1837. His researches into the embryology of animals, a branch of science of which he was the founder, led him to his greatest scientific achievement, namely, the discovery that all animals arise from eggs, and that all eggs are at first morphologically identical. Another grand principle which he established is that the development of animals proceeds upon four distinct plans, which was an important advance upon Cuvier's discovery that all animals are formed upon one or other of four general plans or types of structure, as indicated in his classification of the animal world into Radiates, Mollusks, Articulates, and Vertebrates. Baer had himself arrived by independent research at the same classificatory result, and his proposed method of classification appeared in the same year as Cuvier's. His groups were essentially the same as those adopted by Cuvier, but he employed different names. In his later years Baer has spent much time in travelling over most parts of Europe, but especially northern Russia, and has given much attention to craniology and anthropology.

The reader who wishes for full information respecting Baer's life and writings is referred to his autobiography above mentioned. It is entitled, 'Nachrichten über Lebens und Schriften des Herrn Geheimrathes Dr. Karl Ernst von Baer, mitgetheilt von ihm selbst, 1865.' It is a large quarto volume of 674 pages, and was printed for private circulation only.

BAGNACAVALLLO [RAMENGHI, BARTOLOMEO, E. C. vol. v. col. 21].

BAHRDT, KARL FRIEDRICH, was born on the 25th of August, 1741, at Bischofswerda, a town of Saxony, about 20 miles N.E. from Dresden, where his father, Johann Friedrich Bahrdt, who subsequently became professor of theology and superintendent at Leipzig, was at that time placed as a deacon. He was educated successively at the Nicholaschule, the Schulpforte, and the University, Leipzig. In 1762 he became a catechist, and soon afterwards was appointed as Adjunct to his father, and professor extraordinary of sacred philology. In 1763 he made his first essay in literature by the publication of a work on the 'True Christian in Solitude.' Bahrdt was a man of much talent and critical judgment, but infirm of purpose, bitter in controversy, and unstable in morals; so that in 1768 he was obliged to vacate the appointments he held at Leipzig. He migrated to Erfurt, where he was made professor of philosophy and biblical antiquities, but where his academical and doctrinal irregularities acquired for him the odium of his colleagues. He married in 1770, and in the same year published a system of moral theology, 'System der Moraltheologie,' founded on an earlier work by his father. He next undertook an edition of the Old Testament on the plan of Dr. Kennicott, employing those manuscripts which had been neglected by former editors; and further proposed to organise a society of theologians, who, taking his own published System, should write their several judgments upon it, and these remarks were to be printed in a collected form. This plan produced the Letters on Systematic Theology. 'Briefe über die Systematische Theologie,' 2 vols. Eisenach, 1770-1772. In 1771, at the re-

commendation of his friend Semler, Bahrdt left Erfurt, and became preacher and professor at Giessen. Here his pen was unusually productive, and, it may be added, unusually severe; so that by his numerous discussions in controversial matters he made many enemies, and brought upon himself the rebuke of the ecclesiastical authorities. Hereupon he tendered his resignation, which, somewhat to his chagrin, was accepted. From Giessen he proceeded, in 1775, to undertake the directorship of the educational institution of Von Salis, called the Philanthropin, at Marschlins, in Graubünden, or the Grisons, where his impracticability clave to him so closely that he anticipated a probably imminent dismissal by accepting, with a feigned reluctance, the post of minister of Dürkheim on the Hardt, and superintendent-general. Here for a time he showed so much moderation, and a conduct so opposite to his former course of life, that he became an especial favourite both with the people and his patron, the Count of Leiningen-Dachsburg. His genius for quarrelling, however, did not long slumber; and he found it expedient to take a journey to Holland and England in search of pupils for a school which he had founded at Heidesheim, on the model of the Philanthropin. He returned in 1779 with 13 pupils to find that in his absence an imperial decree had been obtained against him, by which he was suspended from all ecclesiastical functions, until he should publicly retract his errors. He preferred to retire to Halle, in Prussia, where he opened a school, the doctrines of which were subversive of nearly all existing belief. Here he supported himself by his writings and his lectures, until he was guilty of the indecency of opening a tavern at the gate of the city, over which a female servant presided who unwarrantably assumed all the honours of a wife. This tavern, which he kept for ten years, was thronged with students and others, who were attracted by the easy doctrines of Bahrdt and the faithful reproduction of them in the practice of his life. Having ridiculed some ordinances of the King of Prussia in a comedy called the 'Religious Edict,' 'Das Religions-edict,' and having become suspected of initiating and advocating a secret and dangerous society called 'Die Deutsche Union,' he was condemned to two years' imprisonment—a sentence which was commuted by the King to one year's imprisonment in the fortress of Magdeburg. This time he employed in writing 'Morality for the Citizens, and a History of his own Life, 'Geschichte seines Lebens, seiner Meinungen und seiner Schicksale,' 4 vols. Berlin, 1790, in which he deals as recklessly with the good name of others as with his own. After his enlargement he formally separated from his wife, and pursued the same indecent course of life as before. He died at Halle, after a severe and lingering illness, on the 23rd of April, 1792. A list of the numerous works of Bahrdt is given in Wilhelm Heinssius's 'Allgemeines Bücher-Lexikon.' The three which are at once the most learned and of the greatest present interest and importance are—'Hexaplorum Origenis quæ supersunt,' 2 vols. 8vo, Lubeck, 1769-70; 'Observationes Criticæ, circa Lectionem Codicum MSS. Hebraicorum,' Lipsiæ, 8vo, 1770; and 'Apparatus Criticus ad formandum Interpretem Veteris Testamenti congestus,' Lipsiæ, 8vo, 1775.

BAÏF, JEAN ANTOINE DE, a French poet, a natural son of the Abbé de Grenetiere, was born in 1532, at Venice, where his father was residing as French Ambassador. He studied under Daurat, and had for a fellow-pupil the youthful Ronsard, with whom he formed a friendship which influenced his subsequent writings. At the age of 25 De Baïf published a volume of poems, addressed to two beauties (real or imaginary) whom he called Méline and Francine. From that time he became a poet by profession, celebrating events and persons of divers kinds in verse. He was generally poor, for his poems brought him more fame than wealth. By French critics he is considered to have impaired rather than enriched the French language, by his bizarre mode of writing. He indulged in a stilted kind of measure, intended to imitate the Latin and Greek poets, which he called after his own name *Baïfus*. He printed his verse with an alphabet consisting of 10 vowels, 19 consonants, 11 diphthongs, and 3 triphthongs of his own contrivance, by which he hoped to express by the spelling the exact sound of the words: some idea of it may be gained from the titles of the books given below, but the novel diphthongs are not in modern printers' founts. In 1570 he obtained a patent from Charles IX. empowering him to establish an academy of poetry and music; but this enterprise, the first of the kind in France, had little success. He died in comparative poverty at Paris, September 19, 1589. The published works of De Baïf are numerous, the following being the most important:—'Œuvres

de J. Ant. de Baif, Secrétaire de la Chambre du roi, contenant 9 livres de poèmes, 7 livres des Amours, 5 livres de Jeux, 5 livres de passe-temps, Paris, 1571—73, 2 vols. 8vo; 'Etrénes de poésie Françoisse an vers meürés: au roç, &c. Les bezones é jörs d'Eziodé, les Vers dorés de Pitagoras, ansénemans de Faulkilides: ansénemans de Naumage aux files a marier; par Jean Antöéne de Baif, Segretaire de le Çambre du Roç, Paris, 1574, 4to. Some of the copies were printed on vellum. Brunet describes a copy, the vellum binding of which bears the arms of De Thou, as containing an additional sheet with an ode, whose title is worth quoting as a sample of Baif's phonetic spelling—'A tres Eureus Prinse Hanri de France roç de Pélone sur son voçiaje é son antrée en son roçiaime; 'Les Mimes, Enseignemens et Proverbes; en 2 livres, Paris, 1576, 12mo; 1597, 8vo; 1619, 8vo; 'Tombeau de la royne de Navarre Marguerite, ou Traduction de cent distiques Latins des trois sœurs, Anne, Marguerite, and Jeanne de Seymour, sur la trépas de la royne de Navarre, par Baif, du Bellay, et Denisot, Paris, 8vo, 1551; 'Antigone, Tragédie en vers de cinq piéds, traduit du Grec de Sophocle, Paris, 1573, 8vo; 'Le Brave, ou le Taille-Bras, a comedy in 5 acts, imitated from Plautus, in four-feet verse, Paris, 1567. Besides these and other poems, De Baif published some musical works, viz., 'Instruction pour toute Musique des huit divers tons, en tablature de luth; 'Instruction pour Apprendre la tablature de guiterne; 'Douze chansons spirituelles, paroles et musique; 'Premier et deuxième livres de chansons à quatre parties.'

BAILLET, ADRIEN, a learned bibliographer, was born at Neuville near Beauvais, June 13, 1649. He studied at the convent of the Cordeliers, and afterwards at the college of Beauvais; took orders, and became vicar of Lardières in 1676, and minister of Beaumont church in 1679. He next occupied the post of librarian to M. Lamoignon, and for 26 years lived almost entirely among books, never going out more than one day in the week. He compiled and wrote out a most elaborate catalogue of the library, in 35 folio volumes; it was a catalogue of subject-matters, indicating not merely the authors of distinct works, but also those who had given slight or passing notices. His habits were eccentric; he slept only five hours a day, often sleeping in his clothes; took only one meal a day; drank no wine, and seldom had a fire. He thought only of books, the close attention to which weakened his naturally feeble health. He died January 21, 1706. Baillet's writings are very numerous, comprising a Life of Descartes; a History of Holland; an Essay on the Worship of the Virgin; Lives of the Saints (4 vols. folio; 10 vols. 4to; 17 vols. 8vo); the Maxims of St. Etienne de Grammont, &c. But the works which brought him into note were:—(1) 'Jugemens des Savans sur les principaux ouvrages des Auteurs,' 1685—86, 9 vols. 8vo; the commencement of a vast work which he never finished, and the pungent criticisms in which brought him into many controversies. (2) 'Des Enfants devenus célèbres par leurs études et par leurs écrits,' 12mo. 1688. (3) 'Des Satires personnelles, traité historique et critique de celles qui portent le titre d'Anti,' 2 vols. 12mo, 1689—a sharp satire on satirists, and especially Ménage, who had criticised Baillet's 'Jugemens.' (4) 'Auteurs déguisés sous des noms étrangers, empruntés, supposés, faits à plaisir, chiffrés, renversés, retournés, ou changés d'une langue en une autre,' 12mo. 1690. This was the commencement of a large work, which he abandoned on finding that it would give offence to his contemporaries.

BAILY, EDWARD HODGES, R.A. [E. C. vol. i. col. 486]. Even before his acceptance of the position of Honorary Retired Academician in 1862, Mr. Baily had withdrawn from actual professional practice, and as his physical infirmities increased, he was more and more confined to his dwelling. He died May the 22nd, 1867, aged 78.

* BAIN, ALEXANDER, Professor of Logic in the University of Aberdeen, was born in that city in 1818. He matriculated at Marischal College, in 1836, and took his M.A. degree in 1840; and in the same year commenced his literary activity by contributing an article to the 'Westminster Review,' to which he has since furnished several others at various times. From 1841 to 1844 he acted as deputy-professor of Moral Philosophy in Marischal College; in 1844-5 he was deputy of the Professor of Natural Philosophy; and in 1845 was appointed to the Professorship of Natural Philosophy in the Andersonian University, Glasgow. In 1847 he was named assistant secretary to the Metropolitan Sanitary Commissioners; and in the following year was appointed assistant secretary to the General Board of Health, but resigned his office in 1850. During the years 1847 and 1848, he wrote various text-books in Natural Science for

Messrs. Chambers's school series, and contributed the articles on Language, Logic, the Human Mind, and Rhetoric, to their 'Information for the People.' In 1852 Mr. Bain published 'The Moral Philosophy of Paley; with additional dissertations and notes.' 'The Senses and the Intellect' appeared in 1855, and a second and third edition respectively in 1864 and 1868; and the work was followed, in order to complete a systematic exposition of the human mind, by 'The Emotions and the Will,' in 1859, which attained a second edition in 1865. From 1857 to 1862 he acted as examiner in logic and moral philosophy in the University of London; and was re-elected to this office, 1864—68. Mr. Bain has been a frequent examiner in moral science at the examination for the Indian Civil Service; and in 1860 he was appointed by the crown to the chair of logic at Aberdeen. Since that time his principal works have been, 'On the Study of Character, including an Estimate of Phrenology,' 1861; 'An English Grammar,' 1863; 'Manual of English Composition and Rhetoric,' 1866; and 'Mental and Moral Science: A Compendium of Psychology and Ethics,' 1868, which reached a second edition the same year.

BAINES, RIGHT HON. MATTHEW TALBOT [E. C. vol. vi. col. 969]. The correct date of Mr. Baines' birth was the 17th of February, 1799. He resigned office with the other members of Lord Palmerston's ministry in February, 1858. His health permitted him to take little part in public matters subsequently, and he died at his residence, Queen's-square, Westminster, on the 22nd of February, 1860.

* BAKER, SIR SAMUEL WHITE, one of the successful recent explorers of Central Africa, was born at Thorngrove in Worcestershire, in June, 1801. His education included a considerable range of civil engineering; but his love of adventure gave another bent to his life. A residence of several years in Ceylon gave origin to two of his books, 'The Rifle and the Hound in Ceylon,' 8vo, London, 1854 (2nd ed. 1857); and 'Eight Years' Wandering in Ceylon,' 8vo, London, 1855. As an engineer, he planned and carried out the railway in Bulgaria, across the Dobrudscha from Rassova to Kustendje: an important work for travellers to the Black Sea, avoiding the tedious navigation of the lower part of the Danube. In 1861 he commenced his researches as an African traveller. Accompanied by his wife (a Hungarian lady, to whom he had been married in the preceding year), he started from Cairo for the Upper Nile. While tracing the course of the Atbara and the Blue Nile, two of the chief affluents of the great river, he was fortunate enough to see the commencement of the annual inundation; in a few hours a nearly dried-up stream was converted into a rapid river twenty feet deep, by the pouring down of water from the Abyssinian mountains. Mr. and Mrs. Baker reached Khartoum in June, 1862; compared the Blue Nile with the White Nile at and near the point of junction; brought together a large number of men, beasts of burden, and boats; and proceeded up the Nile to Gondokoro, a trading centre for many of the African tribes. Here they met Captains Grant and Speke, who had reached the same spot from the south, had discovered Lake Victoria Nyanza, and had heard of another large lake which they believed to be a very remote source of the Nile. Mr. and Mrs. Baker, amid almost innumerable difficulties and privations, succeeded in discovering this lake, on the 14th of March, 1864, and Mr. Baker named it the Albert Nyanza. [E. C. S., GEOG. DIV. col. 1038—41.] These discoveries gained for him the patron's medal of the Geographical Society, and the honour of knighthood. In 1866 he published 'The Albert N'Yanza, Great Basin of the Nile, and Explorations of the Nile Sources,' 2 vols. 8vo; and in 1867 'The Nile Tributaries of Abyssinia, and the Sword Hunters of the Hamram Arabs,' 8vo,—works which give a lively description of the country through which he and his wife struggled. When attending the Prince and Princess of Wales in their visit to Egypt at the end of 1868 and the early part of 1869, Sir S. Baker was consulted by the Khedive or Viceroy of that country concerning the possibility of suppressing the slave trade, and encouraging agriculture and legitimate commerce, near the upper waters of the Nile, far into the interior of Africa. An expedition was organised on a large scale, comprising troops, Nile boats, and stores in vast quantity, with various appliances for scientific exploration and industrial development. Sir Samuel Baker was placed in command of the whole, and invested with great powers. Sir Samuel, having first received from the Viceroy the order of the Medjidie, left Cairo with his party on the 2nd of December, 1869, Lady Baker, as in his former journeys, accompanying him. On the 8th of January, 1870, Sir Samuel Baker wrote from Khartoum that so far all had proceeded well, and that he expected to pro-

ceed within a week, with 1,000 soldiers. A later letter announces his having left Khartoum, and his expectation of reaching Gondokoro before the setting in of the rainy season in April.

* **BALARD, ANTOINE JÉRÔME**, was born at Montpellier, September 30, 1802. He was educated as a pharmaceutical chemist, and held several appointments in connection therewith, in his native town. In 1826 he was so fortunate as to discover in the mother-liquor of the salt marshes of Montpellier, and afterwards in the mother-liquor of sea-water, after the less soluble salts had been removed by crystallisation, the non-metallic element bromine. France, who never forgets to reward her scientific men in ways most gratifying to their intellect, promoted him to the chair of chemistry, left vacant by the death of Thénard; gave him in 1844 a place in the Academy; made him officer of the Legion of Honour; and in 1851 raised him to the chair of chemistry in the College of France, previously occupied by Pérouze. He has written numerous papers bearing on industrial chemistry, among which may be mentioned the method of extracting sodic sulphate directly from sea-water.

BALDERIC, or **BAUDRY**, an early French chronicler, was born at Meun-sur-Loire about the middle of the 11th century; studied at Angers, and, adopting the monastic life, became Abbot of Bourgueil in 1079. His fondness for poetry and light literature led to a neglect of his abbey, and a relaxing of discipline and morals. He secured the good will of Queen Bertrade, and disbursed much money in bribes to obtain the bishopric of Orleans in 1097, but unsuccessfully. He however obtained the bishopric of Dol in 1107. He became more severe and religious in his habits of life, and often visited the better conducted monasteries of England and Normandy. He spent the later years of his life in instructing the peasantry, and died at an advanced age in 1129 or 1130. During his career he assisted at many councils held at Rome. His chief writings were (1) '*Historiæ Hierosolymitanæ libri quatuor*.' This was a history of the first crusade, extending from 1093 to 1099, based on the earlier history by Theudebode; it is printed in Duchesne's '*Historiens de France*,' with a learned preface by Besly; (2) '*Gesta Pontificum Dolensium*,' now known only by extracts printed in Lebaud's '*Histoire de Bretagne*'; (3) '*Vita beati Roberti de Arbrissello*, first printed in 1641, in Latin and in 1647 in French, being translated by the Jesuit P. Chevalier. There have also been attributed to Balderic—'*Acta S. Valeriani*,' printed in du Bouquet's '*Histoire Ecclesiastique de France*'; '*Vita S. Hugonis Rotomagensis*,' printed in Moustier's '*Neustria pia*'; a poem, '*De Conquistu Angliæ*,' a fragment existing in MS. in the Imperial Library; a '*Lettre Curieuse aux moines de Fécamp*, sur les mœurs des Bas-Bretons, et sur l'état des monastères d'Angleterre et de Normandie,' (the French title given to it in du Bouquet's '*Historiens de France*'); and an historical poem on the chief events in the reign of Philippe I.

BALDERIC LE ROUGE, sometimes confounded with the above, was, like him, a chronicler of the 11th century. He was bishop of Noyon and Tournay, and died in 1097. He wrote a chronicle of Cambrai and Arras, extending from the time of Clovis to 1090; it was published in Latin in 1615 and 1834, and in French in 1836. There is also attributed to him a chronicle of Morinie, of which nothing is now known.

BALDI, LAZZARO, an eminent painter of the Tuscan school, was born at Pistoia, on the 19th of April, 1623 (though some authorities say 1624). He was the scholar of Pietro da Cortona, and after his death was regarded as the chief of the school. The greater part of his life was spent at Rome, where he died in 1703. His first patron was Cardinal Rospigliosi, afterwards Clement IX. A great number of his pictures, both in oil and fresco, may still be seen in the churches in and around Rome, and show him to have been a man of considerable fertility of invention, a good colourist, and a skilful painter, but too prone to imitate the manner of his master. His oil paintings are considered to be superior to his frescoes. Among his chief works are a '*David and Goliath*,' in the Quirinal, painted for Pope Alexander VII.; '*The Martyrdom of San Lazzaro*,' in the Academy of St. Luke; '*The Virgin Mary and St. Catherine*,' at Santa Maria della Pace, Rome; '*St. Peter receiving the Pontifical Power*,' at St. Camerino; a '*Repose in Egypt*,' in the church of the Madonna della Umiltà, at Pistoia; and '*St. Peter of Alcantara and St. Theresa*,' in the church of the Ognissanti at Florence.

BALDINUCCI, FILIPPO, Italian writer on art, was born at Florence about 1624. His studies having made him conversant with art and artists, he conceived the design of writing a complete biographical history of painting in Italy, from Cimabue

downwards, and the liberality of Cardinal Leopold de' Medici and the Grand Duke Cosmo III., who took great interest in his project, enabled him to devote himself to the undertaking. In 1681 he published the first volume under the title '*Notizie de' Professori del Disegno, da Cimabue in quà* (dal 1260 sino al 1670),' 4to. Florence, bringing the lives down to 1300. A second volume, continuing the series down to 1400, appeared in 1686, and he had prepared a third volume, to 1540, but it was not published till after his death, which occurred on the 1st of January, 1696. The remainder of the work, compiled by his son from the notes of Filippo, was published in 3 volumes, 1702–28. The original edition is now seldom met with in a complete form, but it has been many times reprinted, and sometimes with notes and additions: perhaps the most convenient edition is that of Florence, edited by F. Ranalli, 5 volumes, 8vo. 1845–47. Baldinucci's work would, by itself, give at the present day but an imperfect view of the lives of the Italian painters or the condition of art in Italy during the period to which it relates, but it is invaluable to the student of the art-history of the period. He understood what he was writing about; knew the men and their methods of procedure; was painstaking and conscientious, and had access to sources of information closed to later compilers; and he wrote in a pleasing and unaffected style. Another valuable work from his pen is a companion account of Italian engraving and engravers—'*Cominciamento e progresso dell' arte di Intagliare in Rame, con le Vite de' molti piu eccellenti maestri della stessa professione*,' 4to. Florence, 1686; reprinted at Florence, 4to. 1767, with notes by Manni. Baldinucci also published a dictionary of the arts of design, '*Vocabolario toscano dell' Arte del Disegno*,' 4to. Florence, 1681; and a lecture delivered at the Della Crusca Academy, of which he was an active member, '*Lezione detta nel Accademia della Crusca*,' 4to. Florence, 1692. Two posthumous works from his pen have appeared separately, '*Vita di Filippo di ser Brunellesco*,' edited by Moreri, 8vo. Florence, 1812; and '*Lettera intorno al modo di dar proporzione alle figure in pittura, scultura, &c.*,' edited by Poggiali, 8vo. Leghorn, 1802. The entire works of Baldinucci were published in 14 volumes, Milan, 1808–12, as a part of the '*Classici Italiani*.'

BALDOCK, or **BAUDAKE**, RALPH DE, bishop of London and Lord Chancellor in the early part of the 14th century, is currently said to have been educated at Merton College, Oxford. But as that college was founded by Walter de Merton, bishop of Rochester, in 1273, scarcely three years before Baldock was made archdeacon of Middlesex, Mr. Foss ('*Judges of England*') conjectures that the place of his education was rather the convent of Merton, in Surrey. He became a prebendary of St. Paul's, and held the stalls of Holborn, Isledon or Islington, and Newington. In 1276 he was collated to the archdeaconry of Middlesex; from which office he was promoted on the 18th of October, 1294, to be dean of St. Paul's, and was summoned by this title to the parliament which met on the 13th of October, 1300. On the death of Richard de Gravesend, bishop of London, December 9, 1303, Baldock was chosen, February 24, 1304, by the unanimous voice of the chapter, to the vacant see; an election which obtained the royal assent on the 22nd of March, and the archbishop's confirmation on the 10th of May. The temporalities were restored on the 1st of June. The election, however, was controverted by three canons, who, having been lately deprived of their prebends by the archbishop, were excluded from the election, and who now, in an appeal to the Pope, called its validity into question. Baldock found it expedient, therefore, to repair to Rome, where his mission was so successful, that, by command of Pope Clement V., he at length, January 30, 1306, received consecration at Lyon, at the hands of Petrus Hispanus, cardinal of Alba. On his return to England, he made profession of canonical obedience to the archbishop in Canterbury Cathedral, March 29, 1306; and on the 17th of July following, was enthroned in St. Paul's. In the same year he was appointed by the Pope to be one of the commissioners for examining the articles alleged against the Knights Templars. As bishop of London he gained great fame by the splendid repair of St. Paul's Cathedral at his cost, and it was on this occasion that the large collection of ox skulls was dug up, which was considered to fortify the tradition that here had stood a great temple to Diana. On the 21st of April, 1307, the day after the death of William de Hamilton, the Lord Chancellor, then in attendance on the king near the Scottish border, the Great Seal was conferred upon Ralph de Baldock, and its formal delivery to him took place on the vigil of the Ascension next following. The new chancellor did not repair to the king, but devoted himself to his official

duties, till the news of Edward's death reached London. This event took place at Burgh-on-the-Sands, on the 7th of July, 1307; and there is a curious entry on the Fine Roll, showing that Ralph de Baldock, being then in London and ignorant of the demise of the king, continued to send writs of course till the 25th of July. On the following Saturday he received the commands of Edward II. to send him the Great Seal, which was accordingly delivered to him at Carlisle on the 2nd of August. Being freed from the cares of office, Baldock spent the remainder of his days in the pursuit of literature, and the services of religion; only varying these by acting as one of the ordinaries for the management of the affairs of government and the king's household. He died at Stepney, July 24, 1313; and was buried under a flat marble in the Lady Chapel, on the east-side of his cathedral, to which both in his life and at his death, he was a munificent benefactor.

Baldock was an amiable and accomplished man, and reputed a master of all the learning of his time. He wrote in Latin a 'History or Chronicle of British Affairs' down to his own time, which, although now lost, was much valued by the author's contemporaries, and was known in the days of Leland, who saw it in London; he also compiled a 'Collection of the Statutes and Constitutions of the Church of St. Paul,' which was extant in the library of that church in 1559.

BALDUCCI, FRANCESCO, a celebrated Italian poet, was born at Palermo towards the end of the 16th century. An irregularly spent youth having brought him into pecuniary straits, he enlisted in the army sent by Pope Clement VIII. into Germany; and on his return, finding dependence on the great unsatisfactory and precarious, he took ecclesiastical orders, and was appointed chaplain of the hospital of San Sisto. Having acquired celebrity by his verses, he was invited to take up his residence in the house of Prince Gallicano. Here he was attacked by a fever, and at his own request was carried to the hospital of San Giovanni Laterano, where, after lingering about three weeks, he died in a state of delirium, 1642. Balducci's most celebrated poems are his 'Rime Siciliane,' 12mo. Rome, 1645 and 1647; reprinted at Venice, 12mo. 1663. The 'Rime' are praised by critics acquainted with the Sicilian dialect, for their purity of language, simplicity, and truth. His light anacreontic poems are also greatly admired for their airiness of manner, which ranks them among the best Italian verse of their class. Crescimbeni accords to Balducci the credit of having invented *cantatas*, or sacred poems for music, comprising recitativo and aria.

BALDUCCI, GIOVANNI, a distinguished early Italian sculptor and architect, was a native of Pisa, and flourished during the second quarter of the 14th century. His great patrons were Castuccio, lord of Lucca, and Azzone Visconti, duke of Milan. His masterpiece as a sculptor was the much-admired monument of San Pietro Martire in the church of S. Eustorgio, one of the best works of the period. As an architect his fame rests on the façade of the church of Bera, also in Milan, erected by him in 1347, as is inscribed over the entrance.

BALDUCCI, GIOVANNI, called COSCI, an eminent Italian painter of the latter part of the 16th century, was a native of Florence, where he was brought up by an uncle named Cosci, whence his designation. He was a pupil, and for some years an assistant, to Battista Naldini, whose mannerism he was charged with imitating, though himself an artist of more imagination and ability than his master. For some time he painted at Florence, then went to Rome with his patron, Cardinal Alessandro de' Medici (afterwards Pope Leo XI.), and spent his last years at Naples, where he died in or about 1600. Balducci's most celebrated works at Florence are the 'Last Supper' in the cathedral; a series of subjects from the New Testament, and another from the legend of St. Antonino, Bishop of Florence, in the cloister of Santa Maria Novella; and the entire decoration of the church of Gesù pellegrino, including frescoes of the Twelve Apostles, the 'Calling of the Sons of Zebedee,' and a Christ in Majesty. The cathedral of Volterra he ornamented with three subjects from the New Testament, and several figures of saints. At Sta. Prassede, Rome, he painted 'Christ Praying in the Garden,' and eight figures of angels, with the 'Resurrection of Lazarus,' in the Cloisters. At Naples his best work is a 'Holy Family' in the church of San Giovannello.

BALES, PETER, famed as a caligraphist, was born in 1547. His skill in writing in excessively small characters was accounted little short of marvellous. Holinshed describes his masterpiece, "a rare piece of work, and almost incredible" as containing "within the compass of a penny, in Latin, the Lord's

Prayer, the Creed, the Ten Commandments, a prayer to God, a prayer for the Queen, his poesy, his name, the day of the month, the year of Our Lord, and the reign of the Queen." He finished it on the 5th of August, 1575, and a week later presented it to Queen Elizabeth, at Hampton Court, "set in the head of a ring of gold covered with crystal." With it he presented "an excellent spectacle (lens) by him devised for the easier reading thereof, wherewith her majesty read all that was written therein with great admiration, and commended the same to the Lords of the Council and the ambassadors; and did wear the same many times upon her finger." But Bales is also memorable for a book on his art entitled 'The Writing Schoolmaster,' 4to, London, 1590. He divides his work into three parts—1, "Brachygraphie, that is, to write as fast as a man speaketh, treatably, writing but one letter for a word;" 2, Orthography; and 3, Caligraphy. On the strength of this book Bales is often spoken of as the first to introduce short-hand writing into England; but he was anticipated by two years by Dr. Timothy Bright, who in 1588 published a system of stenography, with a dedication to the Queen, under the title of 'Characterie, or the Art of Short, Swift, and Secret Writing.' Both systems consist of arbitrary characters, each standing for a word, instead of a combination of elementary signs as in the systems now in use. Bales' caligraphic and brachygraphic powers are said to have been called into requisition by Walsingham for diplomatic purposes. He died in 1610.

BALLANCHE, PIERRE SIMON, a philosopher and man of letters, was born at Lyon, in 1776. He is known for his efforts after the reconstruction of society, and for his enthusiastic anticipations of the same. He held and proclaimed that his epoch was one of transition to a new order of things; and generalising from the idea developed by Charles Bonnet, the "Brahmin of Natural History," of the palingenesis of the individual man, Ballanche conceived a palingenesis of the human race, and of all its relations, national, social, and political. Thus he was for a time one of the oracles of the professional reconstructors of society. His first work, "fait au sortir de l'enfance," was one which was never published, and which no longer exists even in manuscript. In it, he tells us in the "Preface Générale" to his 'Œuvres,' 4 vols. 8vo, Paris and Geneva, 1830, he sought to reproduce in a kind of epic narrative the terrors of the Revolution, in the midst of which he had passed his youth, and especially all the disastrous circumstances which attended or followed the Lyonnaise insurrection of 1793. He imagined a traveller from the continent of America, himself by that time the representative of a decaying civilisation, visiting about the year 3300, the ruins, and deserts, and sheep-walks which will then stand for the busiest centres of the life of to-day. The first published work of Ballanche was one entitled 'Du Sentiment considéré dans la littérature et dans les arts,' 1801. After having constructed in the feigned future the history of the present age, he proceeded to reconstruct the past in his 'Antigone,' a prose poem in six books, of which the last was finished at Rome in 1813, the entire work being ready for publication in 1814. The 'Antigone' was the result of many years of leisurely composition; and it reached a second edition in 1819, in which year appeared a small volume consisting of nine 'Fragments.' In 1818 Ballanche published his 'Essai sur les Institutions Sociales dans leur Rapport avec les Idées Nouvelles,' intended primarily as the Preface to the "épopée cyclique" which, composed chiefly of the 'Orphée,' 'Ville des Expiations,' and 'Elegie,' was to be known under the collective title of 'Palingénésie Sociale.' Of this work all that have been brought before the world in the 'Œuvres' of Ballanche are the 'Prolégomènes' in three parts, and the 'Orphée,' which refers to the state of prehistoric man, and is divided into nine books named after the Muses. It was intended to publish nine volumes of the 'Œuvres,' but the plan has not been prosecuted beyond the fourth. An edition, covering the same ground, was published in 6 vols. 18mo, in 1833. In 1819 appeared the first edition of 'Le Vieillard et le Jeune Homme,' a series of seven conversations, in which the ideas of the 'Institutions Sociales' are further elaborated. An edition of a hundred copies of 'L'Homme sans nom' was produced in 1820, and a second edition in 1828. 'L'Homme sans nom' is a regicide who is stricken by remorse, and who makes a life-long expiation, the end of which is soothed and elevated by religious consolation. The latest of the works of M. Ballanche is his 'Vision d'Hébal, chef d'un clan écossais,' the hero of which takes advantage of his gift of second sight to review the entire fortunes of the human race. The 'Vision d'Hébal' is at once a panorama of universal history, and a kind

of summary of the social philosophy of the author. It is tinged with a mystic colour through which its meaning is frequently hard to be defined, but Chateaubriand, a friend of M. Ballanche, regarded it as the most sublime and profound of his productions. Ballanche closed his life in repose and retirement on the 12th of June, 1847.

BALSAMON, THEODOROS, a Greek prelate, renowned as the ablest canonist of the Eastern Church, was born about the middle of the 12th century, at Constantinople, where he became chancellor and librarian of the cathedral church of St. Sophia. In 1186 he was nominated to the patriarchate of Antioch. He was flattered by the Emperor Isaac Comnenus with the hope of being made patriarch of Constantinople, but he never obtained that jurisdiction. His learning, which was rather technical than profound, exhibited itself in works that relate chiefly to canonical matters, and that are full of animosity against the Latin communion. He died in the year 1204. His commentary on the Canons of the Apostles and the Seven Ecumenical Councils, '*Commentarius in Canones SS. Apostolorum Conciliorum Patrium Epistolas Canonicas*,' was published in Greek and Latin, at Paris, in 1620; but the best edition is that of William Beveridge, afterwards Bishop of St. Asaph, in his *Pandects of Canons*, '*Συνοδικον, sive Pandectas Canonum*,' &c., folio, Oxford, 1672. The other works of Balsamon are '*Commentarius in Photii Nomocanonem*,' 4to., Paris, 1615; '*Collectio Ecclesiasticarum Constitutionum*,' printed in Justelli '*Bibliotheca Juris Canon.*' Vol. ii. Lat. cum notis Leunclavii, Franc. 8vo, 1593; '*Responsa ad varias Questiones Jus Canonicum Spectantes*'; and other tracts which have been published in different collections.

BALSHAM, HUGH DE, or DE BEDESALE, or BELESALE, was most probably born at Balsham, a village in Cambridgeshire, about the beginning of the 13th century. He was bred a monk; and became sub-prior of the Benedictine monastery at Ely. When the bishopric of Ely was left vacant by the decease of William de Kilkenny, who died, September 21, 1256, whilst absent on an embassy in Spain, King Henry III. issued a mandate to the prior and convent of Ely that they should elect Henry de Wingham, chancellor of England, to the vacant office. Notwithstanding the king's recommendation, they made choice, in a chapter held on the 13th of November following, of their sub-prior, Hugh de Balsham. The king had wished to entrust to a man skilled in public affairs, and not to one whose administration had been limited to a monastery, a place so politically important; and, incensed at the thwarting of his desires, he commissioned John Waleran, the keeper of the temporals of the see, to cut down the woods, to spoil the fish-ponds, to lay waste the manors, and to "make havoc of all things." The king had the case brought before Boniface, Archbishop of Canterbury, who, though he could discover no valid objection against Balsham, yet in order to gratify the king, declared the election of Balsham void, May 10, 1257. The latter now undertook a journey to Rome for the sake of making a personal appeal to the Pope; whilst the archbishop, in order to frustrate his suit, wrote letters to the Papal court, recommending Adam de Marisco, a celebrated theologian of the time, to the disputed see. Adam de Marisco was a man of great learning, but advanced in years, and incapable, on account of his vows as a Minorite friar, of accepting such preferment. He was content, however, to evade his vows, for the purpose of gratifying his ambition. Henry de Wingham wished to retire from a contest into which his name had been imported without his knowledge through the partiality of the king, confessing that either of the other candidates was better qualified than himself. At length, October 6, 1257, the Pope gave a decision in favour of Balsham, who was consecrated at Rome on the 14th of the same month. The king was induced to restore the temporalities to him on the 15th of January, 1258; and avenged himself by promoting in 1259 his nominee Wingham to the diocese of London. Being fully established in his see, Balsham set himself to accomplish those charitable purposes which he had initiated before his elevation, and especially his plan for the foundation of St. Peter's College, or Peterhouse, Cambridge, which he completed in 1284, for the maintenance of one master, fourteen fellows, two bible clerks, and eight poor scholars, whose number was to be increased according to the improvement of their revenue. Balsham died at Doddington on the 16th of June, 1286, and was buried on the 24th of the same month before the high altar of his cathedral church of Ely.

BALTARD, LOUIS PIERRE, French architect and architectural engraver, was born at Paris on the 9th of July, 1765. He began his career as a landscape painter, but during an

artistic tour through Italy, the study of the remains of ancient Rome diverted his thoughts to architecture, and encouraged and guided by Peyre, the architect of the Odéon, he became an architect by profession. Diligent, energetic, with a good deal of taste and a fair knowledge of construction, he found clients, and became a tolerably prosperous man, though he has no title to rank in the first line of the profession. He was appointed architect of the Panthéon, and of the prisons of Paris, in which latter capacity he erected the chapels of the Houses of Detention at St. Lazare and at Ste. Pélagie. In 1818 he was nominated professor in the École des Beaux-arts, and subsequently member of the council of civil buildings, and of that of public works. His principal building was the Palais de Justice, Lyon, a large and stately edifice. Though seemingly amply employed in his strictly professional labours, M. Baltard, who drew with exceeding taste and picturesque skill, found time to make a vast number of architectural drawings and engravings. Of these the following series were published: '*Paris et ses Monuments, avec des notes hist. et crit. par Amaury-Duval*,' large folio, Paris, An. XII. (1803, &c.). This is a finely executed work, but was never completed. The portion published consists of 100 plates, which include the Louvre, and complete the first volume; and the chateaux of St. Cloud, Écouen, and Fontainebleau, forming as much as was issued of the second volume: the descriptions were written by the Abbé Halma. '*Voyage Pittoresque dans les Alpes suivi d'un recueil de Vues des Monuments antiques de Rome*,' Paris, 1806, oblong 4to, with 48 plates in aqua-tinta, preceded by descriptive letters addressed to Percier. '*La Colonne de la Place Vendôme, contenant les détails des bas-reliefs qui décorent cette colonne*,' largest folio, with 145 plates engraved by Baltard, and printed at the '*Calographie du Musée*,' 1810. This splendid work had a curious fate. At first it was issued from the Musée to only a favoured few. On the Restoration, when it was the policy of the authorities to keep the deeds of the grande armée as much as possible in the shade, Baltard's book was strictly sequestered. But after 1830, the entire edition was found, with the plates, safely packed away in the Musée, and it was published by the government of Louis Philippe as vol. lxvi. of the '*Calographie*.' '*Athenæum*,' art-journal, edited and plates engraved by M. Baltard. '*Essai Méthodique sur la Décoration des Édifices et des Monuments, ou collection et choix des plus beaux morceaux de sculpture et peinture ancienne et moderne, en 120 planches ou dessins lithographiés, suivis d'un Discours*,' folio, Paris, 1817. '*Architectonographie des Prisons, ou parallèle des divers systèmes de distribution dont les prisons sont susceptibles, selon le nombre et la nature de leur population, l'étendue et la forme des terrains*,' with 40 plates, folio, Par. 1830. M. Baltard also engraved the plates to M. Denon's '*Egypt*,' folio, 1802; Cailliard's '*Voyage à l'Oasis de Thebes*,' folio, 1822; Cte. de La Borde's '*Voyage en Espagne*,' 2 vols. folio; Gau's '*Antiquités de la Nubie*,' folio, 1821—27; and continued alone the series entitled '*Grand Prix d'Architecture: projets couronnés par l'Académie*,' which was commenced by Vaudoyer and Baltard conjointly, and which since his death has been continued by his son, the subject of the following article. Besides all this, M. Baltard engraved some historical subjects, after Poussin and Le Brun, and portraits of Napoleon I., Poussin, and others. He died on the 22nd of January, 1846.

* **BALTARD, VICTOR**, an eminent French architect, son of L. P. Baltard, the subject of the preceding article, was born at Paris in 1805, and educated as an architect in the establishment of his father. Having won the grand prize of architecture in 1833 by a design for a military school, he went to Italy, where he devoted himself to close study of the ancient remains. The fruit of his researches was seen in a restoration of the Theatre of Pompeii, sent home in 1837. On his return to France he was nominated architect to the government and to the city of Paris, and in his official character he has executed several very important works. The most colossal is the vast Halles Centrales, Victor Calliat being in the first instance appointed joint architect. Other important works are the completion of the Hôtel du Timbre, begun by M. P. Lelong, and the elaborate and costly restorations of the churches of Saint Germain-des-Prés, Saint Séverin, and Saint-Eustache. Like his father, M. Victor Baltard has devoted a good deal of time to high-class book illustrations, though we believe he has not himself engraved any plates. As mentioned above, he has continued the publication of the '*Grand Prix d'Architecture*,' initiated by his father. He has also edited the text and designed the plates of a superb monograph on the '*Villa Médicis*,' fol. 1847—48; and

he made the numerous designs from nature of the costly 'Recherches sur les Monuments de l'Histoire des Normands' of M. Huillard-Bréholles, published at the expense of the Duc de Luynes. Among the works a little outside his usual course may be mentioned the cradle of the Prince Imperial, which he designed as architect to the city of Paris. M. Victor Baltard was elected a member of the Académie des Beaux-arts (section d'architecture) in 1863. M. PROSPER BALTARD, elder brother of Victor (b. 1796), has also pursued a prosperous though quiet career as an architect: he has for some time held the post of inspector of the buildings of the Louvre. A younger brother, M. JULES BALTARD (b. 1807), holds a high position as a portrait painter.

BALUZE, ETIENNE, a distinguished French scholar of the 17th century, was born on the 24th of December, 1630, at Tulle, in the province of Guienne, where he received his early education. At the age of 16 he was removed to the College of St. Martial at Toulouse, and afterwards attended the law schools; but his taste for ecclesiastical history, and a critique which he published in 1652 on the 'Gallia Purpurata' of Frizon, procured him the friendship first of Charles de Montchal, Archbishop of Toulouse, and then of his successor de Marca, who in 1656 conducted Baluze to Paris, lodged him in his palace, and at his death, June 29, 1662, bequeathed to him all his manuscripts. This mark of confidence exposed Baluze to attack and controversy. Through successive situations of honour and responsibility, Baluze became, in 1667, librarian to Colbert; and after the death of that minister, was appointed by Louis XIV., in 1670, to the professorship of canon law in the Collège Royal, a post which was created expressly for him. In 1707 he succeeded the Abbé Gallois in the directorship of the college, and was also admitted to a pension, both of which advantages he forfeited in the year following through a political inadvertence in his History of the House of Auvergne, 'Histoire Généalogique de la Maison d'Auvergne, justifiées par des Chartes, Titres, Histoires Anciennes, et autres preuves authentiques,' 2 vols. fol. Paris, 1708. This work brought upon its author the wrath of the king; and he was exiled successively to Rouen, Blois, Tours, and Orleans. He obtained his recall upon the peace of Utrecht, in 1713; but he was never re-instated in his pension or his appointments. He retired, therefore, to a small house near Paris, where he devoted himself to the prosecution of his favourite studies, and died on the 28th of July, 1718. He was buried in the church of St. Sulpice.

Baluze was a man of great learning, and had immense power of patient and intelligent research, especially in ecclesiastical and profane history, and ancient and modern canon law. The publications of which he was either author or editor, amount to no less than forty-five, many of which consist of several volumes. His principal works are 'Regum Francorum Capitularia,' 2 vols. fol. Paris, 1677; 'Epistolæ Innocentii Papæ III.' 2 vols. fol. Utrecht, 1682; 'Conciliorum Nova Collectio; cum Notis,' folio, Utrecht, 1683; a work intended as a supplement to the 'Sacrosancta Concilia' of Labbeus, but of which only one volume, out of a contemplated series, was published; 'Vies des Papes d'Avignon,' 2 vols. 4to, 1693; 'Historia Tutelensis Libri tres,' 2 vols. 4to; and 'Miscellanea; hoc est, Collectio veterum Monumentorum, quæ hactenus latuerant, in variis Codicibus ac Bibliothecis,' 7 vols. 8vo, Paris. Of this curious and valuable work the different volumes appeared severally in the years 1678, 1679, 1680, 1683, 1700, 1713, and 1715; and a new and larger edition in 7 vols. folio, was published by Father Mansi, at Lucca, in 1761.

BANCHIERI, ADRIEN, Italian poet and musical composer, was born at Bologna in 1567. After studying under Guami, organist of Lucca Cathedral, he was appointed organist at Imola and afterwards at Bologna, and became a monk of the order of the Mount of Olives. He continued to play the organ and to compose various kinds of musical pieces, almost to the time of his death, which took place in 1634. Walther ('Musikalisches Lexicon'), and Mazzuchelli ('Gli Scrittori d'Italia') give the names of a large number of his compositions. Among them are pieces for the organ, madrigals for three and five voices, part songs for eight voices, canzonets for four voices, masses and psalms, motetts and anthems, church sinfonias, pieces for four voices with an organ accompaniment, and compositions for two voices with string accompaniments. Besides these he published 'La Pazzia Senile,' Venice, 1598, 4to., a kind of musical comedy for three singers, in madrigal style; 'L'Organo Suonarino,' Venice, 1605, folio; containing among other things directions for a continued base in organ-playing; 'La Prudenza Giovinale,' 1607, a counterpart to 'La Pazzia Senile'; 'Cartella Musicale,' Venice, 1610, 4to., consisting of essays and

compositions to illustrate the theory of harmony, plain chant and counterpoint, a comparison of ancient and modern forms in music, duets in canon to illustrate solfeggio, and a suggested addition to Guido d'Arezzo's syllables in solmisation; 'Direttorio Monastico,' for the music of the Monastic church to which he belonged; Bologna, 4to., 1614; 'La Fida Fanciulla,' a musical comedy in prose; Bologna, 8vo., 1628. Banchieri also published many poetical pieces under his academical name of Camillo Scaligeri della Fratta.

BANDARRA, GONÇALO ANNES, a poet and thaumaturgist, known as the "Portuguese Nostradamus" was born about the beginning of the 16th century, at Villa de Trancoso, where he fulfilled the humble vocation of a cobbler. Although so entirely without education that he could neither write nor read, he achieved a wonderful reputation as a popular poet and prophet; and his 'Trovas Redondilhas' were in full possession of the lips and hearts of the vulgar. As a patriot, Bandarra took a gloomy view of the affairs of Portugal upon the disappearance of Don Sebastião, whose return, and the future prosperity of whose kingdom, however, he glowingly anticipated. But this, and other aspirations of the cobbler, made him obnoxious, about 1540, to the Inquisition, which was the more insolent from the circumstance of its having just been restored to power after a suspension of its functions. It has sometimes been said that Bandarra was charged before the Holy office with the crime of being a Jew; but his real accusation was that of being a false prophet. He suffered imprisonment, and took part as one of the penitents, in the auto-da-fé which was celebrated on the 23rd of October, 1541, in the Place de la Ribeira, at Lisbon. After his enlargement he returned to his poetry and his trade in his native village. He is said by Barbosa to have received the honour of burial in the church of Trancosa, where a monument was erected to him, by D. Alvaro de Abranches. His death took place about 1556. Many years after his death Bandarra began to be called *O Sapateiro Santo*, the holy cobbler. His works circulated for a long time in manuscript, but in 1581 they were prohibited, possibly upon the occasion of the printing of a small edition. An edition of Bandarra more certainly appeared in 1603, 'Paraphras e concordancia de algunas prophcias de Bandarra, sapateiro de Trancoso.' The prosecution of the living bard by the Inquisition, did not prevent the posthumous respect of the Jesuits, by one of whom was published, in 1659, a folio volume entitled 'Esperança de Portugal, quinto imperio do mundo, primeira e segunda vida del rey D. João IV., escriptas por Gonçalez Bandarra, e dada a luz pelo padre Antonio Vieyra, da Companhia de Jesus.' The works of Bandarra have been edited more than once within the present century.

*BANDEL, JOSEPH ERNST VON, a celebrated German sculptor, was born at Ansbach, on the 17th of May, 1800; studied first at Nürnberg, and then at the Kunstakademie, Munich. His earliest work, a 'Mars Reposing,' 1820, gave promise of original power. After brief visits to Nürnberg and Rome, he settled in Munich till 1834, when he removed to Berlin; of late he has resided chiefly at Hanover. Whilst at Munich he executed several busts that were greatly admired, alike for their originality of style and characteristic expression: among the most noted were those of the King, Maximilian Joseph, and the artists Hess, Gärtner, Stieler, and Quaglio. But his principal work was a statue of Charity, on which he spent several years, and which has been classed among the finest productions of modern German sculpture. At Berlin, his most celebrated works were the colossal statue of Arminius (Hermann), in copper, and a life-sized statue of Christ. Among the works executed for Hanover are the statues of Shakspeare and Goldoni, for the theatre, and a large rilievo for the Military Hospital. Besides these, he has executed a statue of King William IV., for Göttingen; several classical figures, and numerous portrait busts.

*BANDELLONI, LUIGI, an Italian poet and musical composer, was born at Rome in the early part of the present century. After studying counterpoint under a monk, named Padre Teofilo, and taking Zingarelli as his model in composition, he set to music some of the sonnets of Petrarch, the octaves of Tasso, and short pieces from Dante, with accompaniments for the pianoforte and other instruments. Among his other compositions are—a 'Preghiera a Dio,' for three voices; a 'Tantum Ergo'; a hymn to St. Agnes; masses and motetts; and psalms harmonized for a choir and orchestra. He composed many cantatas, under the collective name of 'Azioni Teatrali,' for several voices, chorus, and orchestral accompaniment. Among them were cantatas on the subjects of Alceste, Pyramus and

Thisbe, Cupid and Psyche, Clytemnestra and Ægisthus, Cassandra and Agamemnon. He also wrote a satirical poem on the Roman composers of the day—'Sulla Musica Odierna.'

BANIER, L'ABBÉ ANTOINE, a learned French writer, was born at Pont-du-Château, a little village in Auvergne, on the 2nd of November, 1673. Having completed his studies at the College of Clermont, he went to Paris, where he found employment as tutor of the sons of M. Nicolai, president of the Chamber of Accounts. The rest of his life was absorbed in literary labour. He was admitted associate of the Académie des Inscriptions et Belles-lettres in 1716, and pensionary in 1728. He died at Paris on the 19th of November, 1741, at the age of 68. His chief works are:—(1) 'L'Explication Historique des Fables,' 2 vols. 12mo, 1711; a work which was well received, and of which an enlarged edition was published a few years later. But the Abbé Banier became dissatisfied with it as it stood, and he developed his views in a much more voluminous work under the title of (2) 'La Mythologie et les Fables expliquées par l'Histoire,' 3 vols. 4to and 8 vols. 12mo, Paris, 1738; a work displaying great learning, research, and ingenuity, but the author's explanations are more hazardous and ingenious than sound, and the book is now pretty generally regarded as obsolete. (3) 'Traduction des Métamorphoses d'Ovide,' 3 vols. 12mo and folio, with the designs of Picart, 1732: to this translation Banier added a great body of learned notes, and indulged largely in his propensity for elucidating the fables: a second and more splendid edition appeared in 1767 in 4 vols. 4to. (4) A new edition of the 'Mélanges d'Histoire et de Littérature' of Dom B. Dargonne (better known as the 'Mélanges' of Vigneul-Marville), which he augmented by a third volume containing anecdotes, criticisms, and a great deal of out-of-the-way reading. (5) 'L'Histoire Générale des Cérémonies et Coutumes religieuses de tous les Peuples du Monde,' 7 vols. folio, 1741. This was a new edition of the great Dutch work of J. F. Bernard, 1735—7, undertaken conjointly with the Abbé Mascrier, with the object of purging the book from the statements and opinions of the original edition, which were held to be adverse to the Roman Catholic Church. Banier contributed to it a large amount of curious learning, but the taint of tampering with the text adhered to the book; and although in many respects superior, it has never been as much valued as the original edition. The Abbé Banier also wrote many dissertations in the Transactions of the Académie des Inscriptions; and edited the Voyages of C. Lebrun, 1725, and of Paul Lucas, to both of which he added numerous learned notes.

BANIM, JOHN, a vivid delineator of Irish life and character, was born near Kilkenny, in 1800. He was a poet and painter by nature; but after writing poetry when a mere boy, and commencing to study as a painter, he took to literature as a means of support. At the early age of seventeen he became Editor of the 'Leinster Journal.' In the next following year he wrote (in conjunction with Richard Lalor Sheil) a five act drama on the subject of 'Damon and Pythias,' which had a temporary success at Drury Lane Theatre. In 1820 he married and settled in London, where for a time he edited the 'Literary Register.' In 1821 he published 'The Celt's Paradise.' His 'Tales of the O'Hara Family,' of which the first series was published in 1825, and the second in 1826, brought him prominently forward. Almost disregarding the light and joyous elements of the Irish character, he treated the more tragic, criminal, passionate, and revengeful features, in which he excelled all his predecessors. The true Irish peasant may be best understood by combining the brighter pictures painted by Crofton Croker and Miss Edgeworth with the deeper shades by Banim. There afterwards proceeded from his pen 'The Anglo-Irish of the Nineteenth Century,' 1828; 'The Croppy, a tale of 1798,' same year; 'The Denounced,' 1830; 'The Smuggler, a tale,' 1831; 'The Ghost Hunter and his Family,' 1833; and several smaller sketches. Many of the O'Hara Tales have been frequently republished separately; and some of them have been translated into German by Lindau. Mr. Banim's health began to give way about 1832; he went to Boulogne, fell into poverty, and obtained monetary aid to enable him to return to Kilkenny, in 1835. Incapacitated from further literary labour, the Government granted him a pension of £150 per annum in 1837, with £40 additional for the education of his daughter. But continued illness kept him always impoverished, until his death, which occurred at Windgap Cottage, near Kilkenny, August 1st, 1842.

BANISTER, JOHN, though distinguished as a botanist, (his name being applied to one of the genera of the order MAL-PIGHIACEÆ), honourably mentioned by Ray, and contributor of

BIOG. DIV.—SUP.

four papers to the Transactions of the Royal Society of London, yet scarcely anything is known respecting him. In a manuscript note attached to a short notice of him in Sir Joseph Banks's copy of 'Pulteney's Historical and Biographical Sketches of Botany' (in the Library of the British Museum), 1790, vol. ii. p. 55, it is stated that he was a Missionary of the Church of England, and was some time in the East Indies. After some years he proceeded to Virginia, where he carefully examined the plants, described them, and drew figures of rare species. He also described the insects, and contemplated writing a natural history of Virginia. In 1680 he sent a catalogue of the plants of Virginia to Ray, and several letters and memoirs to Lister and Petiver, and also to the Royal Society. He met with an untimely end, 1689, in attempting to climb a rock in order to secure possession of a plant. In memory of this event we have the genus *Banisteria*: and Linnæus, in order still further to honour him, applied to one of the species the word *scandens*, or 'climbing,' because it loves to climb rocks. His herbal passed into the collection of Sir Hans Sloane. He was not a Fellow of the Royal Society, but three of his papers are in No. 198, and the fourth is in No. 247 of the Transactions.

BARAGUAY D'HILLIERS, MARSHAL. [D'HILLIERS, BARAGUAY, MARSHAL, E. C. vol. ii. col. 579.]

BARANTE, AMABLE-GUILLAUME-PROSPER, BARON DE BRUGIÈRE, E. C. vol. i. col. 521. The 'Vie Politique de M. Royer Collard, ses Discours et ses Écrits,' 2 vols. 8vo, 1861, 2nd ed. 2 vols. 18mo, 1863, was the last work M. de Barante lived to write. He died at his country seat, the Château de Barante, in Auvergne, on the 22nd of November, 1866, in the 85th year of his age.

BARATYNSKI, JEWGENIJ ABRAMOVITCH, an eminent Russian poet, was born in 1792. Of a wealthy Smolensk family, he was educated in the royal school at St. Petersburg. Having entered the army, he was promoted and sent with a command to Finland. Here he wiled away his enforced solitude by the composition of a poem entitled 'Eva,' in which the local colouring of the country and its inhabitants is preserved with great fidelity and elegance. The climate and occupation, however, ill suited him, and through the friendly intervention of Jookowski the Emperor Nicolas at length granted him permission to return. He removed to the neighbourhood of Moscow, and devoted all his leisure to poetry. The result was the production of his 'Tsigrani' (The Gipsies), a poem similar in title to Pushkin's, but wholly dissimilar in character, and by many native critics considered to be superior: by some, indeed, it is regarded as the most beautiful poem of its class in the language. Baratynski contributed a few pieces subsequently to periodicals, but wrote no long poem. Indeed, during his latter years, his health was too much shattered to permit him to undertake any serious labour. With great difficulty he obtained permission to try a milder climate, and he repaired to Italy, where he died in 1844. Baratynski's collected 'Poems' were published in two volumes, 1835.

BARBADILLO, ALFONSO HIERONIMO DE SALIS, an eminent Spanish author, was born at Madrid, about 1580. Though attached to the court, and an indefatigable writer, he was always poor, but he lived on terms of intimacy with men whose acquaintance was honourable. With Cervantes he formed a close friendship, and though both wrote novelets, there was no literary jealousy between them. Barbadillo's novelets have been placed on a level with those of Cervantes, and in mere grace and finish of style they may sustain the comparison; but they are feebler, and more superficial; whilst Barbadillo has nothing that can be in any way compared with Cervantes' great romance. Besides his tales, Barbadillo wrote poems, verselets, and comedies, which are light, sparkling, and cheerful. One of the most popular of his stories was 'El Caballero puntual,' Madrid, 1614, of which a second part was published in 1619; another was 'Da Ingeniosa Helena, Hija de Celestina,' 1612, which was several times reprinted. His 'Don Diego,' 1623, the story of a Spanish cavalier, divided into nine nights, is sprightly and amusing. Barbadillo's poems include 'Rimas Castellanas,' 12mo, Madrid, 1618, mostly sonnets, epigrams, and occasional pieces; 'Los Triunfos de la beata soror Juana de la Cruz,' 1621, a poem in heroic verse; and 'Coronas del Parnaso y Platos de las Musas,' 1635, an allegorical poem, with which are printed the comedies of 'Victoria de España Francia,' and 'El Galán Tramposo y Pobre.' The 'Fortunate Fool' of Barbadillo was translated into English by Philip Ayres, in 1670. Barbadillo died in 1630.

BARBIER, ANTOINE ALEXANDRE, a distinguished

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French bibliographer, was born at Coulommiers (Seine-et-Marne), on the 11th January, 1765. On leaving the college of Meaux in 1782, he was made successively vicar of Arcy and of Dammartin. In 1791 he received the appointment of curé of Ferté-sous-Jouarre. He now began collecting materials for completing certain works by other hands, already published; viz., the 'Bibliothèque d'un Homme de Goût,' the 'Dictionnaire Historique' of Ladvocat, and also that by Chaudon. He renounced the priesthood in 1793, married, and gave himself wholly to letters. In 1794 he was appointed member of the temporary Commission of Arts, to whom was entrusted the duty of selecting the valuable books and MSS. from the suppressed monasteries and other establishments, and depositing them in the national libraries. Having formed a library for the Executive Directory, he was appointed librarian of it in 1798. While filling the office of Librarian to the Council of State (to which body the library of the Directory was transferred in the time of the Consulate), he published a 'Catalogue de la Bibliothèque du Conseil d'État,' 2 vols. folio, which brought him into repute among literary men. He became Librarian to the First Consul, which post he continued to hold when Bonaparte assumed the title of Emperor Napoleon. In 1806 appeared the first two volumes of the 'Dictionnaire des Ouvrages Anonymes et Pseudonymes,' which was completed by two more volumes, 8vo, 1808. The first edition of this work contained 12,403 articles; the second edition, published in 1822-27, was augmented to 23,647 articles. It is a work of great research, and generally compiled with judgment. It is now being re-issued, incorporated with Quérard's 'Supercheries Littéraires Dévoilées' (which title is given to the combined work), 6 vols. 8vo, 1869-70; but the revision appears to have been imperfectly performed, and the new matter is often inaccurate. The 'Nouvelle Bibliothèque d'un Homme de Goût' appeared in 1808-10, in 5 volumes, 8vo. Barbier retained the good graces of the Emperor, who constantly consulted him on matters relating to books and history. He founded for Napoleon the Imperial Libraries at the Louvre, Fontainebleau, Compiègne, and St. Cloud, and prepared good catalogues of the books. In 1812 he published 'Dissertation sur soixante traductions françaises de l'Imitation de Jésus-Christ, suivie de Considérations sur l'auteurs de l'Imitation,' 12mo. When the 'Biographie Universelle' was commenced, about the same time, a proposal was made that Barbier should join in the management; but the arrangement was not fulfilled. In 1820 appeared his 'Examen Critique et Complément des Dictionnaires historiques les plus répandus, depuis le Dictionnaire de Moreri jusqu'à la Biographie Universelle inclusivement,' 8vo. This work was not continued after the letter J. Some strictures on the Biographie Universelle brought him into controversy with the editors. Barbier was continued in the office of administrator of the royal libraries, until 1822. He died at Paris on the 5th December, 1825.

BARBOSA MACHADO, DIOGO, a celebrated Portuguese biographer and historian, was born at Lisbon on the 21st of March, 1682; and received his education at the University of Coimbra. He was admitted into holy orders, and became Abade of Santo Adrião de Sever, a modest preferment which he enjoyed for many years. His career was long, and undistinguished by any events of importance, apart from the publication of the results of his literary and historical labours. He died in 1770. Barbosa is the author of a great historical work upon the reign of Dom Sebastian, which is not frequently consulted, and which bears as a title, 'Memorias para a historia de Portugal, que comprehendem o governo del rey D. Sebastião, unico em o nome, e decimo sexto entre os monarchas Portuguezes. Dedicadas a el Rey D. João V., nosso Senhor: approvadas pela Academia real da Historia Portugueza: escritas pelo Academico Diogo Barbosa Machado, Ulyssipponense Abade da Igreja de Santo Adrião de Sever, do Bispado do Porto,' 4 vols. large 4to. Lisboa Occidental; 1736, 1737, 1747, and 1751. But the most important of the productions of Barbosa is a work in which for the first time there was an attempt to introduce exact bibliographic researches and precise dates into the sphere of Portuguese literature. The work was entitled, 'Bibliotheca Lusitana, Historica, Critica, e Cronologica. Na qual se comprehende a Noticia dos Autores Portuguezes, e das obras, que compuserão desde o tempo da promulgação da Ley da Graça até o tempo presente. Offercida à Augusta Magestade de D. João V. nosso Senhor, por Diogo Barbosa Machado, Ulyssipponense, Abade da Parochial Igreja de Santo Adrião de Sever, e Academico do numero da Academia Real,' 4 vols. fol., Lisboa Occidental, 1741, 1747, 1752, and 1759. This work is remark-

able for its diligence and breadth and patience of research, with which, however, the good judgment of the author did not keep pace. Materials for Portuguese history and biography are given without being subjected to the influence of a sufficiently-informed faculty of criticism. The names of foreign books are frequently outraged; and there are some considerable omissions. Yet it remains that this work, with all its imperfections, is the most valuable contribution to Portuguese biography that has ever appeared. It was to a great extent modelled upon the 'Bibliotheca Hispania Nova,' of Nicolas Antonio, which was published in 1672. Nearly seventy years before the publication of the first edition of the work last-mentioned, Dr. J. Soarez de Brito, of the University of Coimbra, had completed a dictionary of less extent, but with the same general purpose as that of Barbosa. This was in Latin, and bore as its title, 'Theatrum Lusitaniae literarium, autore Joanne Suarez de Brito,' &c. Owing to some cause or other, at present unknown, the 'Theatrum' was never published; and the original manuscript is deposited in the Bibliothèque Impériale of Paris. Barbosa confesses his obligations to this production for many useful hints, which served as a guide to that indefatigable collector, who had undertaken an enterprise from which the members of the Academy of History, in 1735, shrank in alarm at its magnitude. For the purpose of rendering the 'Bibliotheca Lusitana' as complete as possible, Barbosa exercised the liberty of access which he enjoyed to the royal, public, and ecclesiastical libraries of Lisbon, to which the earthquake of 1755 was so disastrous in its operations. The earthquake, however, in spite of the fatality it seemed to carry to the archives of the capital, did not arrest the labours of Barbosa, who, four years after, in 1759, published the fourth volume of his work, containing the supplements and necessary corrections, and a useful index of names. Barbosa likewise translated a work from the Italian of Mucio Dandini; and collected his fugitive contributions to the Academy under the title of 'Contas de seus estudos Academicos.'

BARDON, MICHEL-FRANÇOIS-D'ANDRÉ, French painter, and writer on art, was born at Aix, in Provence, on the 22nd of May, 1700. He was brought up to the law, was admitted avocat at Paris, and returned to practise in Provence, but growing disgusted with the profession he abandoned it, and took lessons in painting from Vanloo and De Troy. He commenced the practice of painting in his native place, but after a while went to Paris, where he painted historical, religious, and mythical subjects, and met with much success. He was elected to succeed Lépicié as professor of painting in the École de Peinture. Later he was appointed director of the Academy of Marseille. He devoted himself with great zeal to the instruction of the pupils, gradually abandoning the practice of his art in order to develop more thoroughly what he conceived to be its true principles. The views thus taught in the first instance from the chair, he afterwards published in a long series of works. Of these the principal are, 'Conferences sur l'utilité que les Artistes peuvent retirer d'un Cours d'Histoire universelle,' 1751; 'Livres des Principes à dessiner,' 4to, 1754, reprinted 1764; 'Traité de Peinture, suivi d'un Essai sur la Sculpture, et d'un Catalogue raisonné des plus fameux peintres, sculpteurs et graveurs de l'École Française, pour servir d'introduction à l'histoire universelle relative à ces beaux-arts,' 2 vols. 12mo, Paris, 1765; 'Histoire Universelle, traiter relativement aux arts de peindre et de sculpter,' 3 vols. 12mo, 1760. M. Bardon also wrote 'Vie de Carle Vanloo,' 12mo, Par. 1765; 'Anecdotes sur la Mort de Bouchardon,' 1764; 'Monument de la Ville de Rheims,' 12mo, 1765, and several poems, the titles of which it is not necessary to give. For M. Cochin's series of 360 plates of 'Costumes des Anciens Peuples,' 4to, Paris, 1760, 2nd ed. 1772; 3rd, 4 vols. large folio, 1784, M. Bardon wrote the historical descriptions. Some of Bardon's paintings have been engraved by Balechou, and Heineken mentions several of his own engraving. M. Bardon died at Marseille on the 14th of April, 1783.

BARÈRE DE VIEUZAC, BERTRAND, whose surname is frequently, but erroneously, spelled BARRERE, was one of the few prominent actors in the great French Revolution who survived to old age. He was born September 10th, 1755, at Tarbes, where his father was a small landed proprietor. After practising with distinction as an advocate at Toulouse, and filling a judicial function at Tarbes, Barère was elected to the States General as representative of Bigorre in 1789. From that time he became deeply engaged in all the agitating scenes of the Revolution. He first joined the Orleans party, and edited a moderate journal called 'Le Point du Jour;' but soon took a more democratic

line, pronouncing against the king and the clergy, and such of the provincial parliaments as showed royalist leanings. Early in 1790 he carried a motion for placing all the Crown property at the absolute disposal of the National Assembly, with the exception of such palaces and domains as the king might reserve. About the same time he was elected Secretary of the Assembly; and published a pamphlet, 'Les Étrennes au Peuple, ou Déclaration des droits de l'Homme et du Citoyen, précédée d'une Épître aux Nations.' During the remaining period of the existence of the Assembly, Barère took an active part in its proceedings, becoming gradually more and more revolutionary. He either proposed or supported decrees giving the rights of man and of citizenship to persons of colour; forbidding any of the Royal family from leaving France; confiscating the property of *émigrés*; refusing to the King's ministers the right of speaking in the Assembly, except to give explanations when required; and inveighing with increasing severity against the hapless King. He transferred his membership from the moderate Club des Feuillants to that of the Jacobins; and associated himself with Robespierre, Danton, and Collot D'Herbois. This course of action lasted during the continuance of the National Assembly (June, 1789, to September, 1791), and of the Legislative Assembly (October, 1791, to August, 1792). When the National Convention was chosen (September, 1792), Barère was elected representative for the Hautes Pyrénées; and he was soon chosen president. He shared fully in the audacious proceedings of that body: in one of his speeches pronouncing the words which did so much towards inciting a thirst for the blood of the deposed king ("L'arbre de la liberté croit lorsqu'il est arrosé du sang de toute espèce de tyrans"). The Jacobins gradually overpowered the Girondists in the Convention; Robespierre was the leading spirit of the Jacobins; and Barère's conduct was much influenced by fear of that terrible man. As a member of the Committee of Public Safety, he drew up most of the decrees of accusation against "the enemies of the republic;" and obtained the sobriquet of the "Anacréon of the Guillotine." He was one of the principal originators of the Reign of Terror, and was the deputy who spoke of Queen Marie Antoinette as "cette femme scélérate." After having joined Robespierre and Danton to crush the Girondists, and Robespierre to crush the Dantonists and Hébertists, he turned against Robespierre himself, when the hour of the latter was come. Under the Directory (which succeeded the Convention in 1795) Barère lived much in concealment, and wrote voluminously. One of his works was 'De la pensée du Gouvernement;' another, 'Montesquieu peint par ses Ouvrages;' and a third, 'La liberté des Mers, ou le Gouvernement anglais dévoilé.' When Napoleon assumed power as First Consul and then as Emperor, Barère was constantly employed in drawing up decrees and reports; but without being really trusted or respected. On the restoration of the Bourbons Barère was banished from France as a regicide. He took refuge in Belgium, where he augmented his moderate income by literary labours, producing several works, but none of permanent value. After the Revolution he was permitted to return to France, and he was elected to the Chamber of Deputies as representative for the Hautes Pyrénées. In 1834 he published his 'Mémoires,' with a preface by M. Carnot fils, 2 vols. 8vo, a work of questionable authority. Barère—one of the least sincere and most selfish of the Revolutionists—died January 15, 1841, at the age of 85. He published nearly 30 pamphlets and volumes, besides those above named, mostly on theoretical politics.

* **BARFOD, PAUL FREDERIK**, a Danish historian and poet, was born in 1811, in the neighbourhood of Grenoe, in Jutland. He early gained a reputation by his talent for verse, and by the merits of his historical writings. After the death of Frederik VI., whose friendly regards he enjoyed, and by whose favourable notice his aspirations had been kept in check, Barfod developed a political system of an extremely liberal and democratic kind, in which the "Scandinavian Idea" of unity and independence was a prominent object. This idea has regard to the fusion of Sweden, Norway, and Denmark into one single people and a single state; and in order to popularize it Barfod established in 1839 a quarterly review, entitled 'Brage-og-Idun,' the practical achievements of which have not up to this time been considerable. Barfod's principal historical works are a History of Denmark and Norway under the rule of Frederik III.; a Biography of the Rantzau family; and a Dissertation on the state of the Jews in Denmark.

* **BARGÈS, JEAN JOSEPH LEANDRE**, an eminent French Oriental scholar, was born at Auriol, Bouches-du-Rhône, on the 27th of February, 1810, and pursued his classical studies at

Marseille. Whilst scarcely 15 years of age, it happened that a commentary on the Scriptures, in which occurred many Hebrew quotations, fell into his hands—a circumstance which determined him to a study of that language. After finishing his course of theology, which he completed before the canonical age for admission to holy orders, he devoted himself enthusiastically to the study of Hebrew and Arabic. Early in the year 1834 he was admitted to the priesthood, and placed as curate in one of the parishes of Marseille; but quitted parochial duty, after about six months' experience, in order to pursue with greater liberty his Oriental studies. In 1837 he became acting professor of Arabic at Marseille; and in 1842 was summoned to Paris, to take the place of the Abbé Glaire as professor of the Oriental languages in the faculty of theology. In 1850 Bargès was appointed by the Archbishop of Paris an honorary canon of Notre Dame, and he has also received the decoration of the Legion of Honour. He has twice visited Algeria; once in 1839, and the second time in 1846, when he particularly investigated the history of the western province and the ancient city of Tlemcen, to the archaeology of which he had been for a long time devoting himself. From each of these excursions he returned with rare and valuable manuscripts; and their literary results will be recognised in the titles of works written or edited by M. Bargès, whose principal productions, apart from a considerable number of memoirs and notices inserted in the 'Journal Asiatique' and the 'Revue de l'Orient,' are as follow:—'Rabbi Yapheth ben Heli, Bassorensis Karaïtæ, in librum Psalmorum Commentarii Arabici e duplici codice manuscripto Bibliothecæ regiæ Parisiensis, edidit Specimen et in Latinum convertit L. Bargès, Professor linguæ Hebrææ et Chaldaicæ,' &c., 8vo, Paris, 1846; 'Aperçu Historique sur l'Église d'Afrique en général et en particulier sur l'Église Épiscopale de Tlemcen,' 8vo, Paris, 1848; 'Temple de Baal à Marseille, ou grande Inscription phénicienne découverte dans cette ville dans le courant de l'année 1845, expliquée et accompagnée d'observations critiques et historiques,' 8vo, Paris, 1848; 'Mémoire sur deux Inscriptions puniques découvertes dans l'île du Port-Cothan à Carthage,' 4to, Paris, 1849; 'Histoire des Beni-Zeïyan, rois de Tlemcen, par l'Imam Cidi-Abou-Abd' Allah Mohammed ibn Abd'el-Dielyl et Tenassy, ouvrage traduit de l'Arabe,' 8vo, Paris, 1852; 'Mémoire sur trente-neuf nouvelles inscriptions puniques expliquées et commentées,' 4to, Paris, 1852; 'Le Livre de Ruth, expliqué par deux traductions françaises,' 8vo, 1854; 'Les Samaritains de Naplouse. Épisode d'un pèlerinage dans les lieux saints,' 8vo, Paris, 1855; 'Mémoire sur le Sarcophage et l'Inscription funéraire d'Eschmounazar, roi de Sidon,' 4to, Paris, 1856; 'Nouvelle Interprétation de l'Inscription phénicienne découverte par M. Mariette dans le Séraphéum de Memphis. Examen critique de l'Interprétation donnée par M. le Duc de Luynes,' 8vo, Paris, 1856; 'Inscription phénicienne de Marseille: Nouvelle Interprétation,' 4to, 1858, of which only a hundred copies were printed; 'Notice sur un Autel chrétien antique; avec deux planches,' 4to, Paris, 1861; and 'Papyrus Egypto-Araméen appartenant au Musée Égyptien du Louvre expliqué et analysé pour la première fois,' 4to, Paris, 1862.

BARKHAM, or BARCHAM, JOHN, a divine and antiquary, the second son of Laurence Barkham, a member of a reputable Dorset family, was born about 1572, in the parish of St. Mary the More, Exeter. At the age of fifteen he was entered a sojourner of Exeter College, Oxford, in Michaelmas Term, 1587; was admitted a scholar of Corpus Christi College, in the same University, on the 24th of August, 1588; and elected a probationary-fellow on the 21st of June, 1596, at which time he was M.A., and in holy orders. In 1603 he took his B.D. degree, and proceeded D.D. in due course. He was appointed chaplain to Archbishop Bancroft, and was continued in the same capacity by Dr. George Abbot, who succeeded Bancroft in the primacy, March 4th, 1611. He became rector of Finchley, Paglesham, and Lackingdon; and on the 31st of October, 1610, was preferred to the prebend of Brownswood, in the cathedral church of St. Paul. Finally, in 1616, he became rector and dean of Bocking, when he appears to have resigned his other parochial preferments. He died at Bocking on the 25th March, 1642, and was buried in the chancel of the church of that parish. Dr. Barkham enjoys the reputation of a good linguist, critic, antiquary, and numismatologist; an exact historian, an able and sound divine, and an accomplished herald. His personal character was in all respects estimable. He was a man of considerable literary distinction; but there is nothing extant of which the professed authorship belongs to him. He contributed to Speed's 'Chronicle' the 'History or Life of John, King of England,' which is reckoned the most judicious of all the lives in

that history; and was chiefly, if not exclusively, concerned in the production, for the same work, of the 'History or Life of Henry II., King of England,' which was conceived and executed with the idea of modifying the tendency to an extravagant exaltation of Thomas à Becket. Barkham was a great lover of coins, and he once possessed the finest private collection in Great Britain. This collection he presented to Archbishop Laud, who much desired it; and from whose hands it found its way, as a gift, to the Bodleian Library at Oxford. Barkham wrote a 'Book concerning Coins,' which never attained a stage beyond that of manuscript, and the whereabouts of which has been for a long time unknown. The authorship of 'A Display of Heraldry,' folio, London, 1610, is also claimed, it would seem without challenge, for Dr. Barkham, although the work is currently known as the production of John Guillim, Rouge-Croix, Pursuivant at Arms. The only difference of opinion as to the authorship of the volume on Heraldry, refers to the proportion in which it may be considered a joint production of Barkham with Guillim, or of Barkham exclusively. Wood ('*Athenæ Oxonienses*') thus states the case:—"This book, being mostly composed in Barkham's younger years, he deemed it too light a subject for him to own, being then (when published) a grave divine, chaplain to an archbishop, and not unlikely a dean. Therefore, being well acquainted with John Guillim, an officer of arms, he gave him the copy, who adding some trivial things to it, published it, with leave of the author, under his own name, and it goeth to this day under the name of *Guillim's Heraldry*." The 'Display of Heraldry' has gone through many editions. To the fifth, which was published in 1679, was added a 'Treatise of Honour, Military and Civil, according to the Laws and Customs of England,' by Captain John Logan. Another edition, enlarged in several respects, was published in 1724. Guillim, it may be said, was born about 1565; was educated at Oxford and became Rouge Croix, Pursuivant at Arms. Barkham is known further, as the editor of Dr. Richard Crakanthorpe's '*Defensio Ecclesiæ Anglicanæ contra M. Antonii de Dominis, Archiepiscopi Spalatensis Injurias*,' 4to, London, 1625.

BARLOW, PETER [E.C. vol i. col. 537.] Mr. Barlow died at the age of 86, on the first of March, 1862.

* BARLOW, PETER WILLIAM, civil engineer, and son of Mr. Peter Barlow, mathematical professor at Woolwich, was born in the year 1800. After the usual school education, he was placed with Mr. Henry C. Palmer, under whom he studied engineering. Mr. Barlow has been largely engaged in railway construction, during a period extending over thirty years. As resident engineer, with Sir William Cubitt as principal, he executed the greater part of the London and Dover Railway, since called the South Eastern; principally between the years 1836 and 1840, including the remarkable blasting operations connected with the removal of Round-down Cliff. As principal engineer, he planned and executed the Tonbridge and Hastings railway, and the Reading and Reigate, between the years 1841 and 1846. His next works were the North Kent and the Ashford and Hastings lines, both belonging to the same company as the former, between the years 1847 and 1850. Mr. Barlow designed and executed the Lambeth Suspension Bridge, from Horseferry Road to Lambeth Church. This bridge (finished in 1862) was planned on a system of economy, to give it a fair chance of being remunerative. It is in three spans of about 280 feet each, having two piers to support the cable. It was the first suspension bridge constructed in England with wire cables of charcoal-iron instead of chain cables, rigid lattice diagonal bars in lieu of small vertical rods to suspend the platform, and a platform made of wrought-iron boiler plate, strengthened longitudinally and transversely by wrought-iron beams. Mr. Barlow went to America, to study the Niagara suspension bridge, as a preliminary to the formation of his plan for the Lambeth bridge. His latest work is the Tower Subway, planned by himself, but carried out by his son, Mr. P. W. Barlow, junior. This tunnel (opened in February, 1870) is by far the most inexpensive work of the kind ever executed in this country, and is worked upon a plan calculated to pay a fair dividend even with a small amount of traffic. The tunnel is lined with iron, and contains a narrow-gauge railway for one large carriage, which is propelled by stationary power. Mr. Barlow was elected Associate of the Institution of Civil Engineers in 1826, member in 1845, and F.R.S. in 1845. * WILLIAM HENRY BARLOW, also eminent as a civil engineer, is another son of the late Mr. Peter Barlow. He was born in 1812, and, like his brother, Mr. P. W. Barlow, had a professional training as an engineer. He was joint engineer with Mr. Hawkshaw in the

completion of the Clifton Suspension Bridge, near Bristol. Many years ago a bridge was planned to span the Avon below the city, with a stretch of nearly 900 feet, and a great elevation above the water; but after an expenditure of £40,000, chiefly in the construction of massive abutments and towers, the failure of funds led to an abandonment of the undertaking. More recently, a new company took the matter in hand; and a suspension bridge was finished and opened in 1865, to connect the ordinary road traffic between Gloucester and Somerset. Mr. Barlow's engineering works, however, have chiefly borne relation to the Midland Railway, with which he has been associated from 1842 to 1870. He has constructed numerous branches and extensions of the Midland System, including the Buxton and Manchester, and most of the lines in Derbyshire and Warwickshire. But his greatest work has been the Midland Extension, from Bedford to London, including at St. Pancras a terminal station in some respects the finest in England. Ten acres of ground were cleared, by the removal of several whole streets, to form a site. Underneath the site a curved tunnel railway has been constructed, to connect the main line near Camden Square with the Metropolitan line at King's Cross. On or about the level of the natural surface of the ground has been set up a forest of iron columns, several hundred in number. On the tops of these columns is the main floor of the station, formed of plates of buckled wrought-iron, fixed between longitudinal and transverse wrought-iron girders. Above this floor rises the largest roof in the world unsupported by pillars: it being 700 feet long, 240 feet span, and 105 feet high from the level of the rails to the apex of the roof. The form is peculiar, the arch being struck on radii of four centres. The timber scaffolding used in constructing the roof, travelling on from end to end as the work advanced, was the largest and finest ever employed. Underneath the floor of the station, the spaces between the iron columns afford a vast area of warehouse room. Mr. Scott's architectural work, combined with the structural work planned and executed by Mr. Barlow, impart many remarkable characteristics to this magnificent station. Mr. Barlow is a Fellow of the Royal Society; also a member of the Institution of Civil Engineers, and a member of its Council. In another walk of life, he is Colonel of the Railway and Engineers Volunteer Staff Corps.

BARLOW, THOMAS, an eminent divine and prelate of the 17th century, the son of Richard Barlow, a member of an ancient Lancashire family, was born in 1607 at Lang-hill, in the parish of Orton, in Westmoreland. He received his early education at the free school of Appleby, which he left in 1624, to enter of Queen's College, Oxford, where he was, says Wood, "successively a poor serving child, tabarder, then M. of A., and fellow an. 1633." Two years later he was appointed reader in metaphysics, and the lectures he delivered in that capacity were published in 1637, and a second edition in 1658, with the title, '*Exercitationes aliquot Metaphysicæ de Deo: quod sit objectum Metaphysicæ, quod sit naturaliter cognoscibilis, quousque et quibus mediis. Quod sit æternus, et immensus (contra Vorstium) et quomodo,*' etc., 4to, Oxford. Barlow contrived to keep his fellowship during the parliamentary visitation of the University in 1648; and in 1652 was elected head keeper of the Bodleian Library, and, about the same time, lecturer of Church-hill, near Burford, in Oxfordshire. On the 15th of February, 1657, he was chosen provost of his college, in succession to Dr. Langbaine, who had died five days before. After the Restoration of Charles II., Barlow procured himself to be appointed one of the commissioners for restoring the members of the University who had been ejected in 1648; and was not only created D.D. among the royalists in August, 1660, but on the 1st of September, in the same year, was elected Lady Margaret Professor of Divinity, being the very day on which he was installed in the sixth stall of the cathedral church of Worcester. On the 13th of June, 1664, he was preferred to be archdeacon of Oxford. His final preferment was tardily attained. When nearly seventy years of age, he was promoted to the see of Lincoln, and was consecrated on the 27th of June, 1675, having kissed hands for his appointment to the same on the 22nd of April previous, the very day of the death of his predecessor, Dr. Fuller. Wood ('*Athenæ Oxonienses*') avers that "all the while he was a Bishop, he never was at Lincoln, or visited any part of his diocese in his own person;" but he manifested sufficient interest in it to subscribe 50*l.* to the cathedral, 50*l.* to the city, and an additional 20*l.* towards the expense of renewing the city charter. Through all changes of government Barlow contrived to prosper, accommodating himself to all, until his death

at his manor of Buckden, in Huntingdonshire, on the 8th of October, 1691, when he was 85 years of age. He was buried in the chancel of the parish church of Buckden.

Barlow's published writings are numerous. They are chiefly in theology, and are especially conversant about controversy, or casuistry, in which latter department he had the credit of considerable excellence and experience. A list of his works may be found in Wood's 'Athenæ Oxonienses,' and in the 'Biographia Britannica.'

BARNAVE, ANTOINE PIERRE JOSEPH MARIE, one of the most prominent actors in the early scenes of the great French Revolution, was born at Grenoble, October 22, 1761. His family was Protestant; his father an advocate, and his mother a lady of high connections. Like many others of the revolutionists, Barnave was a lawyer. At the age of 21 he became an advocate in his native town. A pamphlet against the feudal laws and customs, 'L'Esprit des Édits enregistrés,' brought him into notoriety as a reformer; and he was elected as a deputy to the Tiers État for the province of Dauphiny, in 1789. He at once bid for the leadership of the popular party by the boldness of his speeches and the wide sweep of his suggestions; and when it became known that he was distasteful to the Court, his power with the people increased. He supported almost every attack on the monarchy; proposed many others in his own name; laid down a declaration of the Rights of Man, to be used as a sort of National Catechism; denounced all the claims of the clergy to Church property; declared such property to belong absolutely to the nation; and moved for the suppression of the provincial parliaments, for disobedience to the National Assembly. He went far beyond Mirabeau, with whom he had many struggles for power. He demanded the suppression of all religious orders. In colonial matters he claimed freedom for the coloured races. Barnave proposed that the power of declaring peace and war should rest in the National Assembly, instead of in the King; Mirabeau proposed a middle course; the Assembly adopted the proposition of Barnave, and he at once superseded Mirabeau in the popular esteem. When raised to the Presidency of the Assembly, he moved that all emigrés or refugees who did not return to France should forfeit their estates; and that no member of the Royal family should quit the kingdom at all. Early in 1791 he began to see that the Revolution was proceeding more wildly than he intended or wished; and he proposed measures somewhat cautious in character, thereby setting Robespierre, Siéyès, and Pétion against him. When, in June, the hapless Royal family failed in their scheme of escape from France, Barnave was one of the three commissioners sent to bring them back to Paris; and he was so touched by the sorrows of the queen, princesses, and dauphin, that he more than ever deplored the course which events had taken. In the Assembly he pronounced strongly for the personal inviolability of the king, and against the power of the Assembly to remove the king's ministers. Barnave had now all the more daring members of the Assembly against him, and his popularity out of doors soon ceased. On the dissolution of the National Assembly, towards the close of 1791, he returned to Grenoble, of which town he was made maire. In the spring of 1792 Gaudet brought a charge of treason against him, in reference to the affairs of St. Domingo; this he was able to refute; but in August a correspondence was discovered which he had kept up with the Royal family. This discovery led to a 15 months' imprisonment, first at Grenoble, then in l'Abbaye at Paris, then in the Conciergerie. At length he was tried before the Revolutionary Tribunal, found guilty, condemned to death, and guillotined on the 29th of November, 1793, having barely completed his 32nd year. Next to Mirabeau, Barnave was the greatest orator in the Assembly. His 'Introduction à la Revolution' and 'Reflexions Politiques' exhibit many of the qualities of a powerful thinker and brilliant writer, but, like his speeches, are deficient in sobriety and breadth of view. His literary productions were collected by M. Berenger (de la Drôme), in 4 vols. 8vo, 1834; and his life has been written by M. Salvandy.

* **BARNES, WILLIAM**, a poet and philologist, was born about 1810, at Rushhay, Bagbere, a hamlet of Sturminster Newton, in the vale of Blackmore, in Dorsetshire; and became a member of St. John's College, Cambridge, where he took his degree of Bachelor in Divinity. For some years he kept a school at Dorchester; and in 1847 was admitted to deacon's orders, and appointed to the curacy of Whitcombe, in Dorsetshire. He became a priest in 1848; and in 1862 was instituted to the rectory of Winterbourne-Came with Winterbourne-Farrington, in the diocese of Salisbury.

Mr. Barnes has published 'An Arithmetical and Commercial Dictionary,' 18mo, London and Dorchester, 1840; 'An Investigation of the Laws of Case in Language, exhibited in a system of natural cases, with some observations on prepositions, tense and voice, &c.,' 12mo, London and Dorchester, 1840; 'The Elements of Linear Perspective and the Projection of Shadows,' 12mo, London and Dorchester, 1842; 'The Elements of English Grammar, with a set of Questions and Exercises,' 18mo, London and Dorchester, 1842; 'Se Gefylsta (the Helper): an Anglo-Saxon Delectus, serving as a first class-book of the Language,' 12mo, London, 1849; 'A Philological Grammar, grounded upon English, and formed from a comparison of more than sixty languages. Being an Introduction to the Science of Grammar, and a help to the Grammars of all Languages, especially English, Latin, and Greek,' 8vo, London, 1854; 'Notes on Ancient Britain and the Britons,' 8vo, London and Greenwich, 1858; 'The Song of Solomon, in the Dorset Dialect,' 16mo, 1859; 'Views of Labour and Gold,' 8vo, London and Greenwich, 1859; 'Tiw; or a View of the Roots and Stems of the English as a Teutonic Tongue,' 8vo, London, 1862; 'Early England and the Saxon English, with some notes on the Father-stock of the Saxon English, the Frisians,' 8vo, London, 1869. The most distinctive and characteristic of Mr. Barnes's productions, however, are his 'Poems of Rural Life in the Dorset Dialect, with a Dissertation and Glossary,' 12mo, London, 1844 and 1848, and 8vo, 1862; 'Hwomely Rhymes; a Second Collection of Poems in the Dorset Dialect,' 12mo, London, 1859, and 8vo, 1863; 'Poems of Rural Life in the Dorset Dialect; Third Collection,' 8vo, London, 1862; and 'Poems of Rural Life in Common English,' 8vo, London, 1868.

BARO, PETER (BARON, PIERRE), a distinguished Protestant theologian of the 16th century, was born about 1534 at Étampes, in France, from which circumstance it is probable he derived his frequent surname of *Stampanus*. For several years he was a student of the civil law, and proceeded bachelor in that faculty at Bourges on the 9th of April, 1556. On the following day he was made licentiate of laws; and in 1557 was sworn an advocate in the court of parliament of Paris. But his inclination led him to the study of theology, and he repaired, in December, 1560, to Geneva, where he gave himself up to theological pursuits, and was at length ordained at the hands of Calvin himself. After his return to his native country, Baro married, at Gien, Guillemette, daughter of Stephen Bourgain. In 1572 or 1573, in consequence of the religious troubles in France, he repaired to England, where he was kindly received into the family of Lord Treasurer Burghley; and after a time he settled at Cambridge, becoming a member of Trinity College. In 1574, upon the recommendation of Lord Burghley, Chancellor of the University, and with the assistance of Dr. Andrew Perne, master of Peterhouse, he was chosen Lady Margaret Professor of Divinity. On the 3rd of February, 1576, he was incorporated at Cambridge in the degrees of bachelor and licentiate of the civil law, which he had taken at Bourges; and about the same time was created D.D. at Cambridge, in which degree he was incorporated at Oxford on the 11th of July following.

In 1581, Dr. Whitaker, regius professor of divinity, who had become master of St. John's College in 1580, and the majority of the heads of houses, and the older members of the university, who held with the greatest rigidity the doctrine of absolute predestination and all the most characteristic tenets of Calvinism, took offence at certain doctrines upheld and preached by Dr. Baro. Hereupon a controversy ensued, which came to an end without practical result. Some years afterwards a second controversy arose between Dr. Baro and Dr. Some respecting the indefectibility of faith; but this dispute was after a short time composed. Dr. Baro was thus able to maintain his ground till the 12th of January, 1596, when, in a sermon which he preached "ad clerum," at St. Mary's, he failed to convince his hearers of the simplicity and heartiness of his adherence to the famous "Lambeth Articles," and a dispute was commenced, which, though it had no legal result—notwithstanding the opposition of Archbishop Whitgift to Baro—in depriving the professor of his chair, was the occasion of calling forth so much ill-will, and of causing so much discomfort and annoyance, that in 1596 he resigned the professorship, in which he was succeeded by Thomas Playfere. Hereupon Dr. Baro repaired to London, where he lived and died in a house near St. Olave's church, in which he was buried in the ground under the communion table, on the 17th of April, 1599.

The principal works of Dr. Baro are 'Four Sermons on Psalm CXXIII., &c.,' 8vo, London, 1560; 'In Jonam Prophetam Prælectiones XXXIX; Theses publicæ in Scholis peroratæ et

disputatæ; Conciones tres ad Clerum Cantabrigiensem, habitæ in templo B. Mariæ; Precationes quibus usus est Author in suis Prælectionibus inchoandis et finiendis,' folio, London, 1579; and 'De Fide, ejusque ortu et natura, plana ac dilucida Explicatio. Adjecta sunt alia quædam ejusdem Authoris de eodem Argumento,' 16mo, London, 1580, printed by Richard Day.

* BARRAL, JEAN AUGUSTIN, was born at Metz (Moselle) in 1819, and at the age of 18 entered the Polytechnic School. After two years he became attached to the scientific staff of the Royal Tobacco Factory. In 1842, and again in 1845, he published in the *Comptes Rendus* of the Academy of Sciences the results of some researches on tobacco and its active principle nicotine. He became professor of physics at the College of St. Barbe in 1841, and also Demonstrator at the Polytechnic School. In 1850, in conjunction with M. Bixio, he made some balloon ascents in the interests of meteorology, the results of which are given in the *Comptes Rendus* (vol. xxxi.) He is perhaps best known as the editor of Arago's works, in 16 vols. 8vo. He was selected for that honourable task by Arago himself, some time before his death.

BARRE, JEAN JACQUES, eminent French medallist, was born at Paris, August 3, 1793. At the age of 17 he entered the atelier of M. Tiolier, engraver of the government medals, where he made marked progress. He was, in 1842, appointed chief engraver to the mint, a post he retained till his death, which occurred on the 16th of June, 1855. Besides coins, M. Barre engraved the dies for a large number of medals struck on public and ceremonial occasions, and others having more or less of an historical character, and generally their execution is of a very refined and superior order. Among the more important are those celebrating the 'Victories and Conquests of the French from 1792 to 1815'; 'The Coronation of Charles X.'; 'The Inauguration of the statues of Louis XIV. at Montpellier, and of Louis XVI. at Bordeaux'; 'The bringing back to France of the remains of Napoleon I.'; 'The Medaille des Chemins de Fer' (1840), one of the largest yet struck; 'The Statue of the Duc d'Orléans'; and portrait medals of Leopold, King of the Belgians, the Prince President, &c. He also engraved the notes of the Bank of France; and so much improved the processes of the Mint as to render it extremely difficult, if not impossible, to counterfeit the coins issued from it. M. Barre is the author of an elaborate and valuable paper, 'Sur les procédés anciens du Monnayage en France,' read, in 1851, before the 'Comité des Arts et Monuments historiques,' of which he was a member. He was succeeded in his post of chief engraver to the *Hôtel des Monnaies* by his youngest son, DÉSIRÉ-ALBERT BARRE (born May 6, 1818), who studied design under Paul Delaroche, and medal engraving under his father, and whose coins and medals are much admired. JEAN AUGUSTE BARRE, eldest son of Jean-Jacques (born September 25, 1811), studied under Cortot, and has attained considerable reputation as a sculptor. Among his more noteworthy imaginative works are 'David about to sling the stone at Goliath,' and 'Ulysses recognised by his Dog.' An ivory statue of Rachel (1851), was greatly praised, as was also a marble bust of Alexander Duval. His bust of Napoleon III. was chosen as the model for the coins of the empire. (*Nouv. Biog. Générale*; Vapereau, *Dict. Univ. des Contemporains*.)

BARRY, SIR CHARLES, R.A. [E. C. vol. i. col. 555]. The publication of 'The Life of Sir Charles Barry' by his son, Dr. Alfred Barry (8vo, 1867) enables us to add more precise dates and some facts to the memoir published before his death in the E. C. He was the son of a stationer in Bridge-street, Westminster, where he was born on the 23rd of May, 1795, "in a house which (until 1866) lay under the shadow of the Clock Tower of the New Palace of Westminster." His education was carried on at the ordinary private schools, and was very imperfect, but sedulously improved by himself in after years. On leaving school, at the age of 15, he was articled to Messrs. Middleton and Bailey, architects and surveyors, of Paradise Row, Lambeth; but whose business was mainly that of surveying, and in whose office he received all the regular professional training which he ever enjoyed. But though he was probably taught little of the theory or artistic principles of architecture, he learnt surveying; obtained a thorough knowledge of materials and processes, although not a very profound or scientific view of construction; gained facility in architectural drawing, and, what was of perhaps even greater advantage to him in after life, he acquired good business habits and the practice of regular steady application. That he paid much attention to architectural drawing, and was learning to look at buildings with

the eye of an artist, we know from the fact of his having, during the last three years of his apprenticeship, contributed to the exhibitions of the Royal Academy, his first contribution, in 1813, being a drawing of the 'Interior of Westminster Hall;' the others were designs for a church; a 'Museum and Library,' and a 'Nobleman's Mansion.'

His pupilage ceased in 1816. His father's death had placed a small sum of money at his disposal, and he determined to expend the greater part of it on a professional tour of wider range than was at all customary with English architects. The years 1817-20 were accordingly occupied in travelling through France and Italy, Greece and Constantinople, Egypt to Thebes, and homeward by Cairo, Palestine, Sicily, and Italy, everywhere making sketches, measuring architectural remains, and working out those principles which were to guide him in his future career. Soon after his return in August, 1820, he commenced his professional life in a small house in Ely Place, Holborn. His progress was at first slow, and for a while he felt so much in doubt as to his future prospects as to have seriously meditated emigrating. But business came in; he found himself in a position to marry with a due regard to prudence (December, 1822), and a few years later (1827) to remove to a better house at the West End (No. 27, Foley Place, Cavendish Square); and henceforward his life was that of a busy and prosperous man.

The memoir to which this is supplementary will supply as much further information as is required, and generally sufficient details respecting his buildings; but it may be convenient, following Dr. Barry, to give a catalogue of his principal works, arranged under churches and secular Gothic buildings, Italian buildings, and alterations in existing edifices, leaving the New Palace of Westminster to stand as the culminant result of his genius in a class by itself. His first works of any consequence were churches; and therefore, though he never acquired fame as a church-builder, his churches have at least a chronological claim to the first place. Prestwich and Campfield churches, Manchester, designed in 1822; St. Martin's, Outwich; Ringley chapel; and Oldham church, 1823; St. Peter's, Brighton, the largest and, on the whole, best of his churches, 1824-26; three churches in Islington parish, 1826: St. John's, Holloway, erected at a cost of 11,890*l.*, Cloudesley-square, and Ball's Pond; a new spire, and restoration of Petworth church, Sussex, 1827; Brunswick chapel, Brighton, 1828; Manchester Unitarian chapel, 1836; and Hurstpierpoint church, Sussex, a pleasing First Pointed edifice, 1843. The Birmingham Grammar-school, Tudor collegiate in style, 1835; and a new wing to University College, Oxford (facing the High-street), 1843, were the most important secular Gothic buildings erected by him prior to the Houses of Parliament; and both were for the time eminently successful.

His real power and individuality as an architect, refinement of taste, and sound judgment were, however, first fully shown in his astylar palatial Italian edifices. Of these the earliest, and of all perhaps the most elegant, was the Travellers' Club, Pall Mall, completed in 1831. Alongside of this he erected in 1837 and following years the larger and more magnificent Reform Club, the principal front of which was modelled upon that of the Farnese Palace, Rome. About the same time he built a simpler, but not less pleasing structure, the Athenæum, Manchester. More ornate in character was the last of his great Italian buildings in London, Bridgewater House, commenced in 1847, for the Earl of Ellesmere. The Town Hall, Halifax, the last Italian building designed by him, was still more enriched in character; he having in this altogether abandoned his old principle of severe symmetry in plan and elevation, and aimed at producing the utmost possible picturesqueness of effect by placing a massive tower and florid spire at one angle of the building, introducing a double order of attached columns with broken entablatures, and enriching the entire surface with sculptural ornamentation of a decidedly Renaissance character. The foundations alone, however, were completed before Barry's death, and some architectural changes, including tall Mansard roofs, were introduced by his son, Mr. E. M. Barry, to whom its completion was entrusted by the corporation.

Another class of designs, that of alterations of existing buildings, requires brief notice, as it includes some of his most elaborate and finished works. One of the first of these was the College of Surgeons, Lincoln's Inn Fields (1833, &c.), a work of severe simplicity, the leading features of the exterior (originally a couple of plain brick houses) being a massive cornice and a hexastyle Ionic portico. Walton House, on the Thames by

Walton Bridge, 1837, was his next important work in this class, and in it he altered an irregular straggling brick house into a stately Italian villa, with a degree of success that entirely turned the current of taste as regards the style of country residences. The same year he commenced the conversion, for the Earl of Carnarvon, on a far grander scale, of Highclere House, Hampshire, from a bare semi-classic into a richly decorated Anglo-Italian mansion. In 1844 he remodelled Soame's sombre edifice, the Board of Trade, Whitehall, into the now familiar Treasury. Trentham Hall, Staffordshire, the spacious seat of the Duke of Sutherland, occupied many years in its transformation, the extensive gardens being laid out in lines of ornate Italian terraces, so as to lead up to and combine with the altered building, one large wing of which was entirely new. Duncombe Park, Helmsley, the seat of Lord Feversham; and Harewood House, near Leeds, underwent a similar metamorphosis. On a smaller scale, but no less sweeping, were the changes wrought in Shrubland Park, Suffolk, where Sir Charles was suffered to give full play to his fancy, and where accordingly he looked on his work with more entire satisfaction than almost anywhere else. The rebuilding of Cliefden House, on the Thames above Maidenhead Bridge, for the Duke of Sutherland, after its destruction by fire in 1849, was the last, as it was one of his most important, works in this class that need be referred to. The house was rebuilt (1851—52) on the old foundations, but the new building was far more splendid than its predecessor. Other works carried out whilst these were in progress, as the alterations at Canford Manor, Dorsetshire; Gawthorpe Hall, Lancashire; Dunrobin Castle, Scotland, &c., might be mentioned, but it will have sufficed to notice the principal.

His greatest work of all, the New Palace of Westminster, the most important commission that had fallen to the lot of an English architect since the days of Wren, he lived to see virtually completed, though he was less happy than Wren, who lived not only to lay the last stone on his masterwork, but to contemplate year after year the finished fabric in all its splendour. The duty of superintending the actual completion of the New Palace of Westminster devolved on Sir Charles Barry's son, Mr. E. M. Barry, but along with it the less pleasing task of making material internal alterations. The building was noticed at perhaps sufficient length in the *E. C.*; and we see no reason to modify the commendation there bestowed upon it. It is the greatest architectural work of our time, and as a whole worthily sustains the reputation of the architect and of the age. It has grave shortcomings; but the gravest of all, the insufficient size and accommodation of the House of Commons, and which, according to the official report of the architect's son, will necessitate the construction of a new legislative chamber, was, it should be borne in mind, forced upon the architect, who received from the authorities the precise dimensions to which he was obliged to conform. At the time of Sir Charles Barry's death the expenditure upon the building amounted to within a few pounds of two millions sterling (1,997,246*l.*); it has now of course exceeded that sum. The cost has not unnaturally been considered excessive, but it must be remembered that it is the largest and most richly decorated structure erected in England for centuries. It may be well to add the authentic statement of its dimensions and capacity, as these are often given inaccurately. "The whole building occupies an irregular site of about eight acres. Its longest front (the river front) is 940 feet in length, each wing having a frontage of 120 feet, and the terrace occupying the remaining 700 feet. Its greatest width (exclusive of Westminster Hall) is about 300 feet. It contains above 500 rooms, and includes residences for 18 different officers of the two Houses, of whom the principal are the Speaker of the House of Commons, the Serjeant-at-Arms, the Usher of the Black Rod, and the Librarians of the Houses of Lords and Commons. It thus provides for a resident population of about 200. This large mass of building receives light and air, not only from its external fronts, but from eleven internal quadrangles, many of considerable area." The chamber appropriated to the House of Peers is 90 feet in length, 45 in width, and 45 in height, and is decorated with lavish magnificence. The House of Commons, far less richly ornamented, is 75 feet long, 45 wide, and 41 feet high to the central line of the ceiling; but, as was said, these dimensions are so inadequate that before long it will probably have to give place to one of ampler size.

The publication of *Dr. Barry's Life of Sir Charles Barry* gave occasion to a controversy which it is necessary to refer to in this connection. The son of the late Mr. A. Welby Pugin [*E. C.*

vol. iv. col. 1008] claimed for his father a much larger share in designing the New Palace of Westminster than was allowed him in the work of Dr. Barry; that though nominally only Barry's 'assistant,' he was in fact his prime adviser in regard to the main design of the building, as well as of its ornamentation, and as such ought to be considered as virtually the joint architect. This claim was certainly not made good. In the erection of the Houses of Parliament, Mr. Pugin was from the first Barry's principal assistant, but he had himself expressly stated in a letter addressed to a public journal (*'Builder,'* Sept. 6, 1845) that "his occupation is simply to assist in carrying out practically Mr. Barry's own designs and views in all respects." The exuberant ornament is undoubtedly due to Pugin; there can be little doubt that the details throughout are, in the main, his; and he may have suggested (or proposed modifications in) some of the more important features. But the work in its entirety is Barry's. It is stamped throughout with the impress of his mind, and to him belongs the honour, and on his name alone must rest the responsibility of the merits and the deficiencies of the edifice.

Sir Charles died somewhat suddenly on the night of the 12th of May, 1860. He was interred in Westminster Abbey with great solemnity, and in the presence of a large assembly of distinguished men, including the leading members of his own profession, members of the Houses of Lords and Commons, divines, and representatives of art, science, and literature. A plain memorial brass marks his resting-place in the nave; but a fine marble statue, by Mr. Foley, has been erected by subscription in the Witness Hall of his great building.

Sir Charles Barry left five sons, two of whom have distinguished themselves in the profession of their father. * CHARLES BARRY, the eldest, born in 1823, was trained in his father's office, and commenced his professional practice in partnership with Mr. Banks. The firm of Banks and Barry have executed numerous extensive works, including large ranges of offices and business premises, like the Westminster Chambers, the Westminster Palace Hotel, the City Hotel, Norwich, and the important buildings erected for the Piazza Statuto at Turin; Bilsdale Church, Yorkshire, Holy Trinity Church, Plaistow, and some other churches, as well as several costly mansions; but the merit of the designs cannot, of course, be assigned to either partner alone. Of late, however, Mr. Barry has worked apart, and the singularly beautiful Dulwich Collegiate School, built in 1869, the most ornate structure of the kind yet erected—and especially remarkable for the successful employment of terracotta decoration—is wholly by him; as are also the designs for some unusually graceful railway bridges, on the Dulwich College estate, and the pretty Church of St. Stephen, in the vicinity of the College. A younger brother, * EDWARD MIDDLETON BARRY, R.A., born in 1830, was also brought up in his father's office, but was for a while pupil to Mr. T. H. Wyatt. For some time he acted as his father's chief assistant, but afterwards commenced practice on his own account, and has secured a place in the foremost rank of the profession. Among the more important buildings erected by him may be mentioned—St. Saviour's Church, Haverstock Hill, London, 1856; the Midland Institute, Birmingham, 1857; the Royal Italian Opera House and Floral Hall, Covent Garden, 1858-9; the Leeds Grammar School, 1859; the National Schools, St. Giles's, a very superior building of its class, 1861; Charing Cross Hotel (with the restoration of the old Cross of Charing, in front of it), and the Cannon Street Terminus Hotel, at the City and West-end stations of the South-Eastern Railway; and Crewe Hall, Cheshire, rebuilt in 1868. Mr. E. M. Barry succeeded his father as architect of the New Palace of Westminster, and, as already mentioned, has carried that building to its present state of completeness; is now engaged in various alterations within it, and has made designs for more; and has restored in a superb style the ancient Chapel of St. Stephen. In the competition for a new National Gallery, 1868, the first premium was awarded to the designs of Mr. Barry, and he was appointed architect of the new building, but its erection remains for the present in abeyance. Mr. E. M. Barry was elected associate of the Royal Academy in 1861, and full Academician in June, 1869. Another son, * the Rev. ALFRED BARRY, D.D., born in 1826, has distinguished himself in an entirely different line. Educated at King's College, London, and Trinity College, Cambridge, he graduated first class in mathematics and classics in 1848; was elected fellow of his College, and was ordained in 1850. About 1854 he was elected Head Master of the Leeds Grammar School, which he greatly raised in reputation. In 1862 he was ap-

pointed Principal of Cheltenham College, which, under his management, became one of the most prosperous institutions of its class. On the resignation of Dr. Jelf, in 1868, Dr. Barry was appointed to succeed him as Principal of King's College, London. Besides the Life of his father, spoken of above, Dr. Barry has published an 'Introduction to the Old Testament,' and some other theological works.

BARTH, HEINRICH, a celebrated geographical explorer, was born at Hamburg, on the 16th of February, 1821. He early imbibed a strong desire to investigate the geography of Africa—a desire which was stimulated by his perusal of the works of Mungo Park, Lander, and other African travellers. Soon after he had taken the degree of Doctor in the Berlin University, he started off to examine the African shores of the Mediterranean, which occupied him for about two years, or from 1845 to 1847. In 1850 he commenced his more extensive explorations in North Africa, in conjunction with Messrs. Richardson and Overweg, of which details will be found under *AFRICA*, *GEOG. Div. E. C. vol. i. cols. 115-117*; and *AFRICA*, *GEOG. Div. E. C. S. cols. 14-18*. Dr. Barth's own account is embodied in his 'Travels in North and Central Africa,' published in 5 volumes, in 1857. For this work he was awarded the Patron's Medal of the Royal Geographical Society of London. After his return from Africa, Dr. Barth became one of the most active members and president of the Geographical Society of Berlin, for which body he drew up accounts of everything that was being done by travellers in Africa. In 1863 he was appointed professor of geography in the University of Berlin. He died in that city on the 25th of November, 1865. Besides the work above named, he published a vocabulary of the tribes of Central Africa, 'Sammlung und Verarbeitung Centralafrik. Vocabularien,' Gotha, 1862-64; and 'Reise durch das Innere der europ. Türkei,' Berlin, 1864.

BARTHOLIN, GASPARD, a celebrated Danish writer, born 12th February, 1585, at Malmö, in Scandinavia. He was precocious as a child, could read in his third year, and at thirteen composed Greek and Latin orations, which, after the fashion of the time, he pronounced in public. All this, which would have ruined a weaker head, stimulated Gaspar to fresh exertions. He became a student in the University of Copenhagen, and removed in 1603 to Rostock, and afterwards to Württemberg, where during three years, he devoted himself to the study of philosophy and divinity. He took his Master's degree in 1607, after which he commenced his travels in Germany, France, England and Italy, and became acquainted with most of the learned men of those countries. Some idea of the estimation in which he was held may be gathered from the fact that the Chair of Anatomy was offered to him at Naples, and that of Greek at Sedan in France, both of which he refused. He studied anatomy some time at Padua, and received his Doctor's degree at Basel, in 1610. On returning to Copenhagen he became Professor of Latin in the University, but after six months, preferred the Chair of Medicine, which he occupied during eleven years. During an illness which promised to terminate fatally, he made a vow that if health were granted to him, he would thenceforth study and teach divinity only. He recovered and kept his promise, and was appointed Professor of Divinity, March 12, 1624. The King conferred on him the Canonry of Roskild. He died of cholera on the 13th July, 1629, leaving six sons, five of whom became distinguished. He published 49 works in Latin, on Medicine, Physiology, Physics, Rhetoric, and Theology. His 'Anatomicæ Institutiones,' published in 1611, has often been reprinted, and a translation in French was published at Paris in 1647.

BARTOLINI, LORENZO, a distinguished modern Italian sculptor, was born at Florence, about 1778. Having learned the rudiments of design under Desmarests, a French painter established in Florence, he went to Paris and entered the studio of the sculptor Lemot. Here he made rapid progress, and his career was watched with much interest. He carried off the prize for sculpture at the Academy in 1803, by a bas-relief of Cleobis and Biton, which, when exhibited, attracted much attention, and was declared to possess the antique Greek feeling beyond any of the works by which it was surrounded. Bartolini now found ample patronage. He executed numerous busts, among others those of Mehl and Cherubini, which were greatly admired; and he received commissions for a colossal bust and a statue of the Emperor Napoleon I. The bust is now placed over the doorway of the Museum of the Louvre; but the statue, unfinished at the fall of the Empire, was left on the sculptor's hands, and ultimately went to America. The events of 1815 decided Bartolini to return to his native place. He

established his studio in Florence, and there pursued a steady career of prosperity, the acknowledged head of his profession, the friend of many of the more eminent among his contemporaries, and his studio the favourite resort of the most distinguished tourists. With our countrymen he was an especial favourite, and produced for them endless busts, statues, and monuments, and, it must be confessed, not a few copies of antique and modern works. He died at Florence on the 20th of January, 1850. The Pitti Palace, Florence, possesses a Venus, a fine group entitled 'Charity,' and some other of his favourite works. The monument of Lady Stratford Canning in the Cathedral of Lausanne is one of the finest of his productions in that line. His busts are very numerous, generally very good, and, those at least of his eminent compatriots, will probably do more for the permanence of his reputation than his more ambitious gods and goddesses and other semi-classical nudités.

BARTOLO, or BARTOLI, TADDEO DI, an eminent early Italian painter, was born, about 1363, at Siena, where his father, Bartolo di Fredi, was a painter of reputation. In one of his earliest works, a 'Crucifixion,' painted in 1388, in the Church of S. Agostino, Taddeo was held to have far excelled his father, and he was soon recognized as one of the ablest painters of the time. His pictures, both mural and easel, are distinguished by purity, refinement, and the expression of that deep religious feeling, approaching asceticism, which is indeed characteristic of the ecclesiastical art of the period, but in Bartolo attains more of exaltation without losing simplicity, than is usual with his contemporaries. Rio, and some other writers on Christian Art, dwell especially on the grace and sweetness he imparts to the face and form of the Madonna, and Rio points in illustration to the series of scenes from the 'Life of the Virgin,' which Taddeo painted in 1407, on the walls of the chapel of the Palace of the Signory at Siena, and to an 'Annunciation' in the Academy of the same city. An adjoining hall painted by him, in 1414, with mythological subjects, is pronounced to be very inferior. But whilst he painted in strict conformity with the tradition of the church, Bartolo was able to give play to individual feeling in composition and colour, and his works, with much archaic rigidity, exhibit the dawn of a freer style. Perugino has imitated Bartolo in the expression and disposition of his figures. Besides the pictures executed in Siena and its vicinity, Bartolo painted a 'Coronation of the Virgin' in the Chapel of the Campo Santo, at Pisa; others in the sacristy of S. Antonio, and in the Church of San Francesco at Volterra; at Padua, and elsewhere. The Academy at Perugia still possesses two or three easel pictures by him; the Louvre has a triptich with the Holy Family and two pictures of Saints attributed to Bartolo; but our National Gallery does not possess a specimen of his pencil. Taddeo di Bartolo died at Siena in 1422. His nephew and pupil, **DOMENICO DI BARTOLO** (flourished 1436-45) also attained a high reputation as a painter, but his works are coarser in execution and less refined in thought than those of the uncle. His most celebrated productions are the six frescoes in the great hall of the Hospital della Scala at Siena, illustrating the 'Acts of Mercy.' A large 'Assumption' in the Museum at Berlin is attributed to him by Waagen, who praises "a certain antique grandeur of arrangement in the colossal, solemn form of the Virgin," but adds that "the frequently ordinary and un-ideal character of the heads, and the heavy, fantastic arrangement of the drapery of the numerous angels, are unmistakable evidences of the 15th century." It is, however, by no means certain, that this picture is rightly ascribed to Domenico Bartolo.

BARTOLOCCI (BARTOLOCCIUS) GIULIO, a learned Italian priest, was born at Celano, in Naples, in 1613. He was a member of the order of St. Bernard, at Cîteaux; was appointed professor of Hebrew and Rabbinical learning at the College of the Sapienza at Rome, and died in that city on the 1st of November, 1687. Bartolucci compiled a vast compendium of Rabbinical lore in 4 folio volumes, Rome, 1675-93, to which his pupil, Fra Imbonato, who edited the fourth volume, added a fifth of his own, in 1694. It was entitled, 'D. Julii Bartolucci de Celano, Congregat. Sancti Bernardi Ref. Ord. Cisterciensis, Bibliotheca Magna Rabbinica, de scriptoribus et scriptis Hebraicis, ordine alphabetico Hebraice et Latine digestis,' and is still highly esteemed as a storehouse of Rabbinical learning; but Bartolucci's judgment is inferior to his erudition, and he has little critical skill. Imbonato's supplementary volume is inferior to the others.

* **BARYE, ANTOINE LOUIS**, a celebrated French sculptor, was born at Paris on the 24th of September, 1795. At the age of 13 he was apprenticed to an engraver of matrices for military

ornaments, and the like. Here he worked till called away by the conscription in 1812, when he served a couple of years in the army, still, however, modelling in his spare hours. When free to follow his own inclinations, he entered the atelier of Bosio, and afterwards that of Gros. He tried for the grand prize of the *École des Beaux-Arts* by a relief of 'Milo of Crotona devoured by a Lion,' but obtained only honourable mention; nor, though he gained two or three second prizes, did he ever succeed in carrying off the first. He was now employed for some time in modelling and chasing for Fauconnier, a leading goldsmith of the day; an occupation there can be little doubt that prepared the way for the remarkable success he has attained in what is by most regarded as his specialty—the modelling, casting, and chasing bronze statuettes of animals. However, his first appearance at the Salon was with busts; and in 1831 he received the medal for a life-sized figure of St. Sebastian. But the work that first arrested the public attention was a 'Tiger devouring a Crocodile,' so original in form, so full of energy, and at the same time so true in drawing and so well wrought, as to satisfy alike the connoisseurs and the multitude. It was long, however, before he could satisfy the authorities. His productions could hardly be classed under any recognized style. His works were ill-placed at the Salon, and one year were excluded. From 1836 to 1850 he accordingly refused to send anything, and, shut out from the national exhibition, he was obliged to seek for private purchasers. It was during this time that he produced the immense quantity of small bronzes of animals in action, fighting, in repose; groups of men and animals, equestrian figures, and the like, which have carried his name all over Europe, they having found purchasers not in Paris only, but even more readily in the other great European capitals. And it is on these bronzes, and not on his larger and more ambitious works, that his chance of remembrance depends. In these, alike in design, execution, material, M. Barye is without a rival. In his larger works he is one of many, and not the first. Even his lions, admirably as he models the lion, whether enraged or reposing, in his small bronzes, seem inferior creatures when in the gardens of the Louvre or in those of the Luxembourg. From 1848 to 1851 M. Barye was engaged at the Louvre; he then gave a course on design in natural history, at Versailles, and since 1854 he has given similar courses at the Museum. For the new pavilions of the Louvre he has executed large groups symbolizing Peace, War, Power protecting Labour, Order curbing Disorder, and very characteristically behind each group he has traced various symbolic animals. M. Barye has also, like every French sculptor, executed a large number of classical subjects, graces, gods, and goddesses, which are not likely to be immortal; and various religious designs, which will probably not excite many to devotion. He has likewise been officially commanded to immortalize Napoleon III. in a bas-relief, but is not considered to have succeeded. If in anything he equals his small stags, leopards, and lions, it is in his centaurs and minotaurs: the group of the Centaur and Lapithæ being indeed generally considered his masterpiece.

BASEDOW, JOHANN BERNHARD, more properly JOHANN BEREND BASSEDAU, known also by his frequently used pseudonym of BERNHARD VON NORDALBINGEN, was born on the 11th of September, 1723, at Hamburg, where his father followed the calling of a hairdresser. He became a student at the *Johanneum* of his native city, where he had for his teacher Samuel Reimarus, a distinguished advocate of the religion of nature, and the supposed author of the 'Wolfenbüttel Fragments,' by whom he was much esteemed. Thence he removed to the University of Leipzig, where he studied philosophy and theology. He read all the polemical works of his time; and the result of his reading and thinking was a system of opinion which no party in the Christian church would consider orthodox. At the close of his university career he accepted a tutorship in a Holstein family, and it was there that his natural, undemable talent for instructing first displayed itself in the great success with which he made his teaching comprehensible, and converted the process of learning almost into an amusement. He linked his instruction to nearly everything around him, in the school-room, in the house, in the garden, in the field and in the workshop. His talents soon attracted much notice, and his theory was received with such favour that in 1753 he entered upon a wider sphere as professor of Moral Philosophy and Belles Lettres in the *Ritterakademie* of Sorø, in Denmark. As a public teacher, and as a writer on education, he soon won applause. Laying great stress on a sound understanding, and considering the attainment of a practical philo-

sophy of life one of the most valuable objects of human acquisition, he became a passionate antagonist of the old theology. This hostility, combined with a certain impracticability and haughtiness of disposition, procured, in 1761, his transfer in the same capacity to the Gymnasium of Altona, where he led an active life for some time as a partizan of the new school of critical theology. Here the adjudged heresy of the works which he published on Religion and Reason again made him popularly obnoxious, so that he was forbidden to lecture, was excommunicated, and brought into danger of being stoned. His next step was to enter with all his powers upon the work of reforming the existing system of education, not only in Germany, but throughout the whole of Europe. Up to this time the school had stood under the sceptre of the church. The religious education of youth had been narrowed down to the mere committal of the catechism to memory, and the crowding of the mind with biblical and theological details. There was no real science of education; and what hitherto had been left to nature, to habit, and to traditional prejudices, had to be corrected and raised to the place of an art. Its good elements had to be reduced to law; its bad elements had to be cast away. Man must be regarded as a whole, as truly man; his education must be a gradual development and cultivation of body, mind, and soul. The old doctrine, based on the old theology, insisted on education as a process from without, inward; the new ideas regarded human nature as a germinating seed, in which a good and noble impulse dwells, and requires only fostering care, whilst the educational process goes on from within, outward. Religion was not only to be carried into the soul of the child, but was also to be evolved from the soul, and only so much was to be carried in as was adapted to its immature grasp, and to the necessity of adequate inward stimulus. The old educational system had borrowed much from the Church; to promote the interests of the Church was its great end. A large proportion of all the studies of the Gymnasium and the University looked towards theology and the clerical profession; and hence the value attached to the ancient languages. The modernized scheme of education aimed at equipping men for the world and for practical life. The utility of the ancient languages and of ancient history was, therefore, questioned; and so education was transferred from a narrow ecclesiastical field to broad cosmopolitan ground—from a positive Christian basis, to a so-called philanthropic one. Rousseau gave a great impulse to this movement by the publication of his 'Emile;' stimulated by which, Basedow, who was the author's interpreter and advocate in Germany, published several preliminary works, and at length issued a prospectus for his great work on Elementary Instruction, which was subsidized by the princes and people of Germany to the extent of 15,000 thalers, 'Elementar-Werk,' 3 vols. 4to, Altona, 1774. This production, which had been magnificently announced, was yet fortunate enough to satisfy the public expectation; and it has been many times reprinted. It was a kind of *Orbus Pictus*, made up of a hundred engravings by Chodowiecki, and accompanied by an explanatory text, in German, French, and Latin. Its object was to offer to youth, by way of amusement, the knowledge of a mass of things belonging to the real world of life and objects, in the interests of cosmopolitanism as opposed to nationality. The feature which gave this work its special success was its calculated and carefully maintained indifference with regard to dogmatic religion. In its view, Catholics and Protestants, Jews and Christians, must be treated alike; the mental powers must be awakened, the habit of observation sharpened, and a general system of morality taught which should not interfere formally with any system of positive religious faith. The book met with very wide acceptance; and its author, through the favour of Prince Leopold Friedrich Franz, of Anhalt-Dessau, had an opportunity of establishing at Dessau a normal school, in which to test the practical value of his ideas. Here, accordingly, he opened, in 1774, a school, to which he gave the name of Philanthropin, or Philanthropic Institute; in which it was his prime object to exclude all positive religious instruction, and to build chiefly upon the conception of the dignity of the human soul. Basedow was not long without eager followers; similar institutions sprang up elsewhere, and the principles enunciated by him were grafted upon the domestic training of children. Notwithstanding this success, Basedow, whose impracticable and fitful temper unfitted him for friendly contact with the eminent men whom he had been able to associate with himself in the conduct of his enterprise, was forced to retire from the curatorship of the Dessau Philanthropin in 1778. Yet his zeal for his doctrine did not abate; and he continued to

develope in various works his views on theology and on education. He went the round of the principal cities of Germany, for the purpose of propagating his system; and finally invented a new method of learning to read, which he published at Hamburg in 1785, and opened a school at Magdeburg, where he put it into practice. Basedow died at Magdeburg on the 25th of July, 1790; and his friends and disciples erected a monument to him in the Church of the Holy Spirit. Over and above the works which have been mentioned, Basedow published a considerable number, a list of which may be found in Heinsius' 'Allgemeines Bücher-Lexikon,' Leipzig, 1812; or in Kayser's 'Vollständiges Bücher-Lexikon,' Leipzig, 1834. The moral influence of Basedow has been very considerable, and the primary education of Germany received at his hands a valuable impulse; but his personal career was on the whole unhappy, on account of that turbulence and haughtiness of spirit to which he was indebted for missing the respect otherwise due to his talents and his labours.

BASILÌ or BASILY, FRANCESCO, a prolific composer, chiefly of church music, was born in February, 1766, at Loretto, where his father, Andrea Basili, was maestro di capella. While still young, Francesco filled a musical post at Foligno; and soon afterwards began to compose music for the theatre as well as for the church. About 1800 he became maestro di capella at Macerata, and many years afterwards at Loretto. In 1827 he was appointed Censor of the Imperial Conservatory of Music at Milan; and in 1837 director of the music at the Papal chapel of the Vatican. This last-named post he held till his death, which took place on the 25th of March, 1850. Among the numerous published compositions of Basili are cantatas, operas, musical dramas, pianoforte fugues and sonatas, sinfonias, and solfeggios; also a dramatic oratorio ('Il Sansone,' 1824), a Requiem Mass, an Ave Maria, Kyries, Motetts, Psalms with orchestral accompaniments, Offertories, Misereres, Magnificats, &c. Basili left an immense quantity of unpublished music, mostly of an ecclesiastical character, for monasteries and convents, as well as for churches and cathedrals.

BASIRE, JAMES, an English engraver of some reputation, was born in London on the 6th of October, 1730. Very little is known of his life. He excelled in portraits, but his most interesting plate is one engraved for the Society of Antiquaries, 1774, 'The Field of the Cloth of Gold, or the Interview between Henry VIII. and Francis I.' after the picture now at Hampton Court: this print, 47 inches long by 24 inches high, was the largest that had then been engraved on a single plate. Basire, the elder, also engraved Lord Camden, after Sir Joshua Reynolds; 'Lady Stanhope in the character of the Fair Penitent,' after Wilson, 1772; 'Captain Cook, after Hodges, 1777, and Pylades and Orestes, after Benjamin West. He died September 6, 1802. His son, JAMES BASIRE, born in 1769, learned engraving of his father, and was a good draftsman as well as a skilful engraver. For many years he executed the plates and made a large number of the drawings for the 'Archæologia,' 'Vetusta Monumenta,' and other publications of the Society of Antiquaries; and many for the Royal Society. He died May 13, 1822.

BASTWICK, JOHN, celebrated on account of his connexion with the political and ecclesiastical history of the seventeenth century, was born at Writtle, in Essex, in 1593. He was entered a member of Emanuel College, Cambridge, on the 19th of May, 1614; but leaving the university without a degree, he went abroad for nine years, where he spent his time "between the schools and the camp;" and took the degree of M.D. at Padua, then celebrated as one of the best medical schools in Europe. The ardour of his Protestantism dictated the publication in Holland of a Confutation of Popery, entitled, 'Elenchus Religionis Papisticae, in quo probatur neque Apostolicam neque Catholicam, imo neque Romanam esse,' 24mo, Leyden, 1624; 8vo, London, 1637; and 8vo, Amsterdam, 1638. He afterwards published in England his Scourge for the Pope and Latin Bishops, 'Flagellum Pontificis et Episcoporum Latialium,' 12mo, London, 1635; 8vo, London, 1641, in which he maintained the parity or equality between bishops and presbyters. The English prelates thought their dignity assailed; and Bastwick was summoned before the High Commission Court, whose sentence was that the writer should be fined 1000*l.*, should be excommunicated, and prohibited from the practice of his profession of medicine, that he should pay the costs of the suit, that his books should be burned, and that he should be imprisoned until such time as he should make a recantation. He was accordingly committed to the Gate House, where he lay for two years, during which time he produced his Apology, 'Apolo-

geticus ad Præsules Anglicanos Criminum Ecclesiasticorum in Curia Celsæ Commissionis,' 8vo, London, 1636; and 'The New Litany,' 4to, London, 1637, by which he still more exasperated the prelates of the time. An information was in consequence exhibited against him, together with Henry Burton, B.D., and William Prynn, Barrister-at-Law, in the Star Chamber, "for writing and publishing seditious, schismatical, and libellous books, against the Hierarchy of the Church;" the issue of which was that the accused were censured as scandalous, seditious, and infamous persons, sentenced to a fine of 5000*l.* each, to stand in the pillory in New Palace Yard, and there to lose their ears, and to undergo perpetual imprisonment in three several remote places of the kingdom. Dr. Bastwick was accordingly sent first to Launceston Castle, and afterwards to the castle in St. Mary's, one of the Scilly Islands, where he remained till 1640, when an order for the release of the whole three was made by the House of Commons, and they were brought back to London amidst the acclamations of the populace. The House also voted the proceedings against them unjust, and contrary to the law and the liberty of the subject; reversed their sentence; remitted their fine; and ordered 5000*l.* to be paid to each out of the estates of the Archbishop of Canterbury, the High Commissioners, and those Lords who had voted against them in the Star Chamber. But the confusion of the times prevented the payment of the money. In 1644, Bastwick's wife, however, had an allowance ordered for her own and her husband's maintenance; and on the 24th of October, 1648, there was a debate in the House of Commons, about the ordinances for him to have reparation for the illegal sentence against him in the Star Chamber. The subsequent history of Dr. Bastwick is unknown; although it has been thought very probable that he died in the parish of St. Botolph, Colchester, where he had settled for the practice of medicine, upon his first return from the continent.

The literary activity of Bastwick's later years was directed against a foe the exact opposite to Episcopacy; and he published, *inter alia*, 'Independency not God's ordinance; or a Treatise concerning Church Government, occasioned by the Distractions of these times, wherein is evidently proved, that the Presbyterian Government dependent is God's ordinance, and not the Presbyterian Government independent,' 4to, London, May 21, 1645; which in less than three weeks was followed by 'The Second Part of the Book called Independency not God's ordinance; or the Postscript, discovering the uncharitable dealing of the Independents towards their Christian brethren,' 4to, London, June 10, 1645; 'Defence of himself against Lilburn,' 4to, London, 1645; 'The Utter Routing of the whole Army of all the Independents and Sectaries, with the total overthrow of their Monarchy,' 4to, 1646; and 'The Church of England the True Church,' 4to, London, August 23, 1645.

*BATEMAN, JOHN FREDERICK, civil engineer, was born in 1810, at Wyke in Yorkshire. His father belonged to an old Yorkshire family; and his mother was descended from the La Trobes, who were expelled from France by the revocation of the Edict of Nantes. After receiving a professional training under Mr. Dunn, at Oldham, Mr. Bateman established himself as a civil engineer in 1833, taking up especially the branch of hydraulic engineering. Many of his plans and works have had relation to canal and river navigation. He became engineer of various inland canals, and consulting engineer to the Mersey and Irwell and the Forth and Clyde Canal Companies, and also to the trustees of the Clyde Navigation. Since 1863 he has constructed extensive navigation canals in Spain, and has reclaimed and drained large tracts of marsh land near the mouth of the Ebro and in the island of Majorca.

But it is in the supply of water to cities and towns that Mr. Bateman's engineering works have chiefly consisted. In 1835 he designed the Bann reservoirs, in County Down, Ireland, which he subsequently constructed. In 1836 and following years he laid out the reservoirs at Saddleworth, Glossop, and Kendal. Since 1840 he has constructed water-works at St. Helen's, Macclesfield, Bolton, Manchester, Glasgow, Chester, Gloucester, Halifax, Blackburn, Stockport, Wolverhampton, Newcastle-on-Tyne, Birkenhead, &c. Taken collectively, the water-works which he has either wholly constructed, or remodelled and extended, supply water to upwards of 2,000,000 persons. These works are the result in part of much research into the fall of rain and the flow of water in different districts. Two of the above-named undertakings are the largest of the kind in the kingdom, viz., the water-works of Manchester and of Glasgow. In the Manchester works the reservoirs are of vast size; and the details are so managed that in each affluent, or feeding stream,

the pure water is separated from the turbid: the former being utilized, and the latter allowed to flow into the rivers. The works were commenced in 1848, and have been continued till 1870: enlargements having been necessary from time to time to meet the growing wants of a city and neighbourhood now containing 600,000 inhabitants. The works, with the buying-out of a water company, have cost no less a sum than £1,780,000. The Glasgow water-works are of a still more remarkable character, seeing that the water is brought to the city along a distance of 35 miles from a series of mountain lakes. These are Loch Katrine, Loch Venear, and Loch Drunkie, which together have a water surface of 4,000 acres, and contain, within the limits to which the surface may be raised or lowered, more than 1,500,000,000 cubic feet of water. Masonry and sluice-gates accommodate the outflow to the varying level in summer and winter. The aqueduct from Loch Katrine to Glasgow consists principally of tunnels eight feet in diameter, and cast iron pipes 4 feet in diameter. One of the tunnels is $1\frac{1}{2}$ miles long, and has shafts 500 feet deep. The aqueduct and the reservoirs are adequate to the supply of 50,000,000 gallons of water per day. The works themselves cost £700,000; but a further sum of nearly £1,000,000 has been expended by the Corporation of Glasgow in the buying up of two water companies and other expenses. This extensive system of water-supply was commenced in 1855, and was opened by Queen Victoria in October, 1859. A public banquet was soon afterwards given to Mr. Bateman, by the Lord Provost and Corporation of Glasgow, in celebration of the completion of a work so important to a large and constantly increasing city.

In 1854 Mr. Bateman was appointed one of the Royal Commissioners for enquiring into the outbreak of cholera at Newcastle, Gateshead, and Tynemouth. In 1865 he projected a scheme for supplying the Metropolis with water from the sources of the river Severn, in North Wales; the scheme was one of those which were investigated by a Royal Commission in 1867 and 1868, and discussed at length in a report published among the parliamentary papers in 1869. In 1869, in conjunction with his assistant, Mr. Révy, he devised a scheme for a Channel Railway between England and France, by means of a cast-iron tube to be laid on the sea-bottom, large enough to admit trains worked by atmospheric pressure. In the same year, on the invitation of the Viceroy of Egypt, and on the representation of the Royal Society, he was present at the opening of the Suez Canal, on the subject of which he read a paper before the Royal Society in 1870. Scientific and engineering papers by him have also been read before the Institution of Civil Engineers, the Institution of Mechanical Engineers, the British Association for the Advancement of Science, the Social Science Association, and the Literary and Philosophical Society of Manchester. Mr. Bateman (who, in 1841, married a daughter of Mr., afterwards Sir William Fairbairn, the eminent engineer of Manchester) is a Fellow of the Royal, the Geological, and the Royal Geographical Societies; and Justice of the Peace and Deputy Lieutenant for Surrey, for which county he was High Sheriff in 1866.

BATHE, WILLIAM, an Irish divine, who was also a musical writer, was born at Dublin, about 1564. He changed his religion from Protestantism to Roman Catholicism, and about 1596 went to Flanders, where he became a Jesuit. He next journeyed to Italy and to Spain; in which last-named country he was appointed director of the Irish Seminary at Salamanca. He died at Madrid on the 17th of June, 1614. Bathe's first work was in English, written in his youth: 'A brieve introduction to the true art of musicke, wherein are set downe exact and easie rules for such as seeke but to know the trueth; with arguments and their solutions, for such as seeke also to know the reason of the trueth; which rules be meanes whereby any by his owne industrie may shortly, easilie, and regularly attaine to all such things as to his arte doe belong;' 4to, London, 1584. His other works were: 'Janua linguarum, seu modus maxime accommodatus, quo patefit aditus ad omnes linguas intelligentas;' Salamanca, 1611, 4to—a curious attempt to make the study of the Latin language easy; 'Methodical Institution of the principal Mysteries of the Christian faith,' published anonymously in English and in Latin. And a 'Preparation for the Sacrifice of Penitence,' published at Milan under an assumed name.

BATHURST, RALPH, M.D., Dean of Wells, was born at Hawthorpe, Northamptonshire, in 1620. He studied theology at Trinity College, Oxford, with a view to taking orders, but the condition of the Church of England rendering that unadvisable, he directed his attention to medicine. Having taken his degree,

he was one of the medical men appointed to take charge of the sick and wounded seamen, and obtained some notice as a scientific physician. A curious pamphlet of this period is attributed to him, entitled 'News from the Dead, or a true and exact narrative of the miraculous Deliverance of Anne Greene, who being executed at Oxford December 14, 1650, afterwards revived, and, by the care of certain Physicians there, is now perfectly recovered; together with the manner of her sufferings and the particular means used for her recovery. Whereunto are prefixed certain poems, casually printed upon that subject,' 4to, Oxford, 1651; 2nd ed. with additions, same year. The poems, which are in Latin, French, and English, were written by members of the university, Christopher Wren and Bathurst being among the authors. It was not, as has been said, Bathurst who effected the recovery, but Sir William Petty, who, like Bathurst had taken the degree of M.D., and was during these unsettled times acting as a physician: according to Evelyn ('Diary,' 22nd March, 1675), the young woman lived 15 years after her recovery, married, and had several children. In his capacity as a physician, Bathurst published a learned treatise on the voluntary nature of respiration, 'Prælectiones tres de respiratione,' Oxford, 1654. Dr. Bathurst's fame as a man of science stood so high that at the meeting for the foundation of the Royal Society, November 28, 1660, his was one of the names in the list drawn up by the founders of such as are deemed "fit to joyne with them in their designe;" and though not one of the original, he was one of the early members: it is, however, a mistake to state that he was president.

The restoration of Charles II. restored the Church of England, and Bathurst returned to his studies in divinity, took orders, and was appointed chaplain to the King. In September, 1664, he was elected President of Trinity College, Oxford, and in 1673 and 1674 he was vice-chancellor of the university, in the government of which he long took a leading part. He was installed Dean of Wells, June 28, 1670, and in April, 1691, was nominated Bishop of Bristol, but declined the honour, preferring not to leave his college, to which he was much attached, and of which he was a considerable benefactor, having built at his own cost the entrance tower and the chapel—the latter remarkable for its admirable proportions and the exquisite carvings by Grinling Gibbon. Dean Bathurst died on the 14th of June, 1704, and was interred in his own chapel under a tomb erected by himself. Evelyn, who often mentions him in his Diary, and always with marked respect, says in noticing his decease, "he was 86 years of age, stark blind, deafe, and memory lost, after having been a person of admirable parts and learning." Besides the works quoted, Bathurst wrote various Latin poems printed in the 'Museum Anglicæ Annalecta.' Thomas Warton published the 'Life and Literary Remains of Ralph Bathurst, M.D.,' &c., 8vo, London, 1761.

BATMAN, or BATEMAN, STEPHEN, a writer of the 16th century whose books are in great request with bibliographers, was born at Bruton, in Somersetshire, about 1537. Little is told of his life. He was a divine, and domestic chaplain to Archbishop Parker, by whom he was employed in augmenting his library, for which Batman is said to have collected upwards of a thousand MSS., and which now form part of the choicest treasures of the library of Corpus Christi College, Cambridge. Batman's works are chiefly theological, but all are quaint and curious in character, have much incidental matter that is valuable as illustrating the age in which they were written, and mostly contain curious wood-cut illustrations. The following are the principal:—1. 'Travayled Pilgreme, bringing Newes from all Parts of the Worlde, such like scarce harde before,' an allegorical poem on the life of man, 4to, printed by John Denham, 1560, black letter, with 20 wood-cuts. 2. 'Christil Glasse for Christian Reformation,' a treatise on the seven deadly sins, 4to, printed by John Day, 1569, black letter, with numerous curious wood-cuts. 3. 'Of the Arrivall of the Three Graces in Anglia, lamenting the abuses of the Present Age,' 4to, printed by W. Norton, black letter, n. d. 4. 'Joyfull Newes out of Helvetia from Theoph. Paracelsus, declaring the ruinate Fall of the Papall Dignitie: also a Treatise against Vsurie,' 8vo, London, 1575. 5. 'Golden Booke of the Leaden Goddes, wherein is described the vayne imaginations of Heathen Pagans and Counterfait Christians: with a Description of their seuerall Tables, what ech of their Pictures signified,' 4to, London, 1577. This is a very curious book. Warton speaks of it as the first systematic account of the heathen mythology in the language, though written rather "with a view of exposing the heathen superstitions, and of showing their conformity to the papistic,"

than of illustrating the religious fables of antiquity." ('Hist. of Eng. Poetry,' vol. iii. § 70). The little volume, which only contains 72 pages, is dedicated to Lord Hunsdon, and is believed to have been used by Shakspeare. Batman's most famous work is, however (6), 'Doom warning all Men to Judgement: in manner of a generall Chronicle,' 4to, black letter, 1581, imprinted by R. Nubery, a work of 437 pages, with many curious engravings of monsters, prodigies, &c. Batuman also made a translation of 'Bartholomæus de Proprietatibus Rerum.'

BAUDE, HENRI, a French poet and prose author, was born at Moulins, about 1430. He was fortunate enough, whilst still a youth, to recommend himself to the favour of Charles VII., by whom he was entrusted with a responsible revenue appointment in the province of Limousin. Baude performed the functions of his office by deputy, as was then usual, and passed most of his time at Paris, where, in the latter part of his life, he habitually resided. By a caprice of fortune Baude and his works have been much overlooked in the literary history of his country, so that his memory labours at the present day under a kind of proscription. His verse is lively, plain, and realistic; and he in great part owes his present oblivion to the ephemeral nature of his topics and allusions. At the commencement of the reign of Charles VIII., Baude produced a 'Morality,' the representation of which, although it was countenanced by the court of parliament, gave so great offence to the personages introduced in it, that the author was condemned to an imprisonment which lasted only three months, but which might have been indefinitely prolonged but for the charitable intervention of the parliament, at the solicitation of the municipal body. The text of this 'Morality' has not been preserved; but its quality may be inferred from a second one which is extant, under the title 'Pragmatique entre Gens de Court et la Salle du Palais.' The works of Baude consist for the most part of slight productions having relation to the politics and manners of the time, of epigrams, rondeaux, and ballads. About the time when Charles VIII. began really to govern, about 1492, Baude addressed to the King a 'Diet Moral sur le maintien de Justice,' in which he offered up prayers for the prosperity of his reign, and counselled him, in order that it might be happy, to an exact observance of the laws and of the rights of all men. He proposed as a model for the young prince, his grandfather, Charles VII., of whose panegyric, inserted at the beginning of Godefroy's *Historians of Charles VII.* (folio, Paris, Imprimerie Royale, 1661), and entitled 'Éloge du Roi Charles VII. tiré d'un Manuscrit anonyme,' Baude is now on good grounds concluded to have been the author. And there is a strong presumption from internal evidence that Baude was also the author of an anonymous manuscript poem in the 'Bibliothèque Impériale,' which has for its title 'Regrets et Complaintes de la Mort de Charles VII., dernier trépassé.' This piece mentions Queen Marie of Anjou as still living, and its date ranges, therefore, between 1461 and 1463. Baude died about the year 1495.

BAUDIER, MICHEL, historiographer of France under Louis XIII., was born in Languedoc about the year 1589. He was a fertile and laborious author, but his works have failed to interest biographers in the events of his life, so that few particulars concerning him are on record. He is known, however, to have been *Gentilhomme de la Maison du Roi*, and historiographer of France. At a comparatively early age he seems to have understood the advantages of private life; and he retired to his books and to the solace of the arts, and to endless writing. He employed a great part of his modest fortune in the collecting of books, MSS., and coins. The style of Baudier is heavy and diffuse; and one secret of his non-success is his deficiency in the critical faculty. His principal works are 'Histoire des Guerres de Flandre, depuis 1559 jusqu'en 1609, traduite de l'Italien de Francesco Lanario,' 8vo, Paris, 1618; which was supplemented by an original work of some interest, 'Histoire Succincte de la Flandre,' 'Inventaire général de l'Histoire des Turcs,' 4to, Paris, 1619, a work which, considering the time of its production, is one of much learning, and which has been of great service to historians; 'Histoire générale de la Religion des Turcs, avec la vie de leur prophète Mahomet et des quatre premiers Califes; plus, le Livre et la Theologie de Mahomet, traduit de l'arabe,' of which the first three editions were published severally in 1626, 1632, and 1636, Paris, 8vo; 'Histoire générale du Sérail et de la Cour du Grand Seigneur,' 4to, Paris, 1626, 8vo, Rouen, 1638; reprinted with the 'Histoire de la Cour du Roy de la Chine,' 8vo, Paris, 1642; 'Histoire de l'Administration du Cardinal d'Amboise, grand ministre d'État en France, où se lisent les effets de la sagesse politique; ensemble les félicités de la France sous un bon

Gouvernement,' 4to, Paris, 1634; 'Histoire de l'incomparable Administration de Romien, grand ministre d'État de Raymon Béranger, Comte de Provence, dans le 13^e siècle,' 8vo, Paris, 1635; a work curious for the simplicity with which the author has woven fables and romances into his narrative; 'Histoire de l'Administration du Cardinal de Ximénès,' 4to, Paris, 1635; the most considerable of Baudier's productions, and exhibiting the greatest diligence and research; 'Le Soldat Piémontais revenant du camp de Turin; ou, Histoire de la Campagne d'Italie de l'année 1640,' 8vo, Paris, 1644; 'Histoire du Maréchal de Toiras, ensemble une bonne partie du règne de Louis XIII. et la généalogie,' folio, Paris, 1644, and 2 vols. 12mo, 1666; 'Histoire de l'Administration de l'Abbé Suger,' 4to, Paris, 1645; and a MS. 'Histoire de Marguerite d'Anjou, femme du Roi d'Angleterre, Henri VI.,' which is preserved in the Bibliothèque Impériale. The precise time of Baudier's death is unknown; but it has been happily conjectured that so inveterate a writer must have died very soon after the publication of his last work, about the year 1645.

BAUDRILLART, JACQUES JOSEPH, a learned French writer on forestry and forest law, was born at Givron, in Ardennes, on the 20th of May, 1774. After studying at the College of Reethel, and making great advances in mathematics, physics, and chemistry, he entered the Garde Nationale of Charleville in 1791, and the regular army in 1792. He was at first quartermaster of the battalion of Ardennes, but afterwards joined the army administration, and was engaged in succession with the Corps d'Armée of the Sambre and Meuse, Mayence, the Danube, and the Rhine. Quitting the army in 1801, and losing the little money he had saved, he turned to forestry, of which he had gained some knowledge while in Germany. He obtained a post in the administration of forests, in which he gradually rose to the rank of chief of division; this office he filled from 1819 to 1831. A change was then made in the organization of the office, which led to his being placed in a lower post; this occasioned him so much chagrin as to hasten his death, which took place at Paris on the 24th of March, 1832. The writings of Baudrillart are numerous, chiefly on subjects connected with forestry. The following are the principal works: (1), in conjunction with Doniol, 'Collection Chronologique et raisonnée des Arrêts de la Cour de Cassation, en matière d'eaux et forêts, depuis et compris 1798 jusqu'en 1808,' 8vo, Paris, 1808; (2), in conjunction with Doniol and Chanlaire, 'Annales forestières,' Paris, 1808-14, 7 vols. 8vo; (3), 'Annuaire forestier,' 3 vols. 12mo, Paris, 1811-13; (4), 'Mémoire sur la pesanture spécifique des bois, &c.,' 8vo, Paris, 1815; (5), 'Code forestier,' with a commentary, &c., 2 vols. 12mo, Paris, 1827; (6), 'Traité Général des Eaux et Forêts, chasses et pêches,' 6 vols. 4to, and Atlas, Paris, 1821-28; (7), 'Code de la pêche fluviale,' 2 vols. 12mo, and Atlas, Paris, 1829; comprising, besides the code of laws and ordonnances, a commentary, a natural history of fishes, and a glossary of terms in river fishing and river navigation. He also translated into French some German works on forestry, by Hartig and Burgsdorff. In conjunction with Bosc, he compiled, in 1821, a volume of the 'Encyclopédie Méthodique,' viz., the 'Dictionnaire de la Culture des Arbres, et de l'aménagement des bois.' Baudrillart's great work, the 'Traité Général des Eaux et Forêts,' is one of much value and reputation. It comprises a collection of the laws and ordonnances relating to forests, rivers, hunting, and fishing, from 1219 to 1824; instructions for procedure; methods of plantation and culture; separate dictionaries of the technical terms used in all the four branches of the subject; the scientific principles embodied in forestry; natural history and implements of hunting and fishing; and a bibliographical notice of authors. Baudrillart was a Chevalier of the Legion of Honour, Member of the Royal Society of Agriculture of France, and member of other societies at home and abroad.

BAUER, ANTON, a German jurist, who was especially skilled in the principles of criminal law, was born at Göttingen, on the 16th of August, 1772. He became a student and graduate of the University of Marburg, where he was made lecturer and professor respectively, in 1793 and 1797. In 1813 he was transferred in the latter capacity to Göttingen, where he became at first councillor in ordinary, and afterwards, in 1840, councillor extraordinary of justice. He died at Göttingen on the first of June, 1843. He is the author of a treatise on the principles of evidence in criminal cases, 'Grundsätze des Criminalprocesses,' Nürnberg, 1805, afterwards published under the title of 'Lehrbuch des Strafprocesses,' Göttingen, 1835, and 1848; A Manual of Natural Law, 'Lehrbuch des Naturrechts,'

Marburg, 1808, 3rd edition, Göttingen, 1825, a work on the philosophy of criminal law, which subject he further treated in his 'Grundzügen des Philosophischen Strafrechts,' Göttingen, 1825; A Manual of Criminal Law, 'Lehrbuch des Strafrechts,' Göttingen, 1827, 2nd edition, 1833; Theory of Preventive Legislation, with an Exposition and Examination of all the Theories of Criminal Law, 'Die Warnungstheorie, nebst einer Darstellung und Beurtheilung aller Strafrechtstheorien,' Göttingen, 1830; Introduction to the Practice of Criminal Law, 'Anleitung zur Criminalpraxis,' Göttingen, 1837; Collection of Cases in Criminal Law, 'Sammlung von Strafrechtsfällen,' 4 vols., Göttingen, 1835-39; Dissertations on Criminal Law and Criminal Procedure, 'Abhandlungen aus dem Strafrecht und Strafprocesse,' 3 vols., Göttingen, 1840-43; and other works upon the criminal law of France and Hanover.

* BAUER, BRUNO, a celebrated philosopher and biblical critic, was born on the 6th of September, 1809, at Eisenberg, in the Duchy of Saxe-Altenburg, and received his education in the schools and University of Berlin. In 1834 he became Doctor in Theology; and took a lively part in the religious quarrels and speculations of his time. In 1839 he acted as a tutor at Bonn; but in 1842, on account of the hardihood of his opinions, the permission to lecture on theology was withdrawn. Hereupon he returned to Berlin, where he devoted himself enthusiastically to those critical and historical works which have placed him amongst the most learned men, and the foremost writers of Germany. At first Bauer sought to conciliate philosophy with theology, and in this spirit wrote, in 1835, a Review of the 'Leben Jesu,' of Dr. Strauss, and produced his Journal of Speculative Theology, 'Zeitschrift für Speculative Theologie,' Berlin, 1836-38, and his Critical Exposition of the Old Testament, 'Kritische Darstellung der Religion des Alten Testaments,' 2 vols., Berlin, 1838. His tendency to deflect more and more from orthodoxy was marked by the Epistle he addressed to Dr. Hengstenberg, Berlin, 1839; and his work on the Evangelical Established Church of Prussia and Science, 'Die Evangelische Landeskirche Preussens und die Wissenschaft,' Leipzig, 1840. He advanced rapidly to the boldest position of the young Hegelians, and published a series of writings, in which the prevailing mode of regarding Christianity was subjected to an unsparring criticism. Thus, in his Critique of the Evangelical History of St. John, 'Kritik der Evangelischen Geschichte des Johannes,' Bremen, 1840, and in his Critique of the Synoptical Gospels, 'Kritik der Evangelischen Synoptiker,' 2 vols., Leipzig, 1840 and 1841, he argues that the Gospel histories are a result perfectly natural to human self-consciousness, and a free product of literary individuality. It was after the publication of these views that Bauer was forbidden to lecture at Bonn, and he produced an apologetic treatise 'Die Sache der Freiheit und meine eigene Angelegenheit,' Zurich, 1843. The next of his works, Christianity Displayed, 'Das entdeckte Christenthum,' was destroyed before publication, at Zurich, in 1843. In a treatise on the Jewish Question, 'Die Judenfrage,' Brunswick, 1843, Bauer attacked the vagueness of the pretensions of liberalism; and further developed his opinions in the Universal Literary Journal, 'Allgemeine Literaturzeitung,' Charlottenberg, 1843-44, in which he analyses the German radicalism of 1842, and its consequent socialistic theories. Besides a large and important series of works devoted to a consideration of political questions, Bauer produced in his old field of criticism on the earliest writings of Christianity, a Critique of the Gospels, and History of their origin, 'Kritik der Evangelien und Geschichte ihres Ursprungs,' 2 vols., Berlin, 1850 and 1851; The History of the Apostles, 'Die Apostelgeschichte,' Berlin, 1850; and a Critique of the Epistles of St. Paul, 'Kritik der Paulinische Briefe,' Berlin, 1850, in which he attempts to shew that the four leading Epistles, which had been previously unquestioned, were not written by the Apostle Paul, but are the production of the second century.

BAUR, FERDINAND CHRISTIAN, the founder and head of the "Tübingen School" of theology, was born on the 21st of June, 1792, at Schmiden, near Cannstadt, where his father, from whom he received his early education, was settled as pastor. He became a pupil of the seminaries successively of Blaubeuren and Maulbronn. From the year 1809 to 1814 he was a student of theology at Tübingen; after which he exercised his ministry for short periods at divers places, until in 1817 he became professor in the Seminary at Blaubeuren. Here he wrote his work on Symbolism and Mythology; or the Natural Religion of the Ancient World, 'Symbolik und Mythologie; oder die Naturreligion des Alterthums,' 3 vols.,

Stuttgart, 1824-5. In 1826 he became titular professor of evangelical theology in the University of Tübingen, where he pursued his labours until his death on the 2nd of December, 1860.

The "Tübingen School" is a periphrasis for Baur; and the expression is vaguely intended to embrace the writers in the Tübingen Theological Journal, 'Zeitschrift für Theologie,' such as Zeller, Schwegler, Köstlin, Volkmar, and Hilgenfeld, all younger men than Baur, and chiefly his disciples, whose business it was to work out in detail the fertile principles of criticism which their master originated. It was the task of the Tübingen School to subject the Christian writings to the same process of dispassionate investigation as that which had been brought to bear upon heathen records and systems of religion. The edifice which these constructive rationalists set themselves to rear, was to be founded on purely historical criticism, from which all *a priori* dogmatical or philosophical hypotheses were to be excluded. The problem of Biblical criticism, they averred, could be completely solved only by a rigorous examination of each of the books of the New Testament, as well as the history which they contain. It was necessary not only to prove that the New Testament history was untrustworthy and ideal, but to construct, from such materials as might be available, a real and credible history of the beginnings of Christianity. The essential characteristic of the Tübingen, as of every modern, substitute for the life of Jesus given us in the four Gospels, is that it is a life of Jesus without the supernatural. "A conviction of nature's constancy and order," says Mr. Mackay, the interpreter and apologist of the Tübingen School, "was the necessary preliminary to a scientific treatment of history; for history ends where miracles begin. History would exhibit events in an intelligible order of connection and succession; whereas miracle, denying any natural connection, consigns them to unintelligible chaos." It follows, of course, that if a miracle be impossible, the Bible, as a whole, must be incredible. Such was the spirit in which the claims of the canonical books of the New Testament were to be severally scrutinized. One great feature of the Tübingen criticism is the stress which is laid on the disputes recorded in the Acts of the Apostles, and alluded to in the Epistles, as evidencing an early and extreme variance of the Christian world as divided into the Petrine or Judaical school on the one hand, and the Pauline on the other. Although all readers of the New Testament are cognizant of a certain running strife between these parties, it is startling to observe the dimensions which the difference is made to attain, and how much of it is affirmed to have been in fierce action in the identical age of the Apostles, and in the very books of the New Testament. The prevailing tone, when St. Paul appeared on the scene, was Jewish; much importance was attached to meats and Sabbaths, days and months, times and seasons, and there was a tendency to an obstinate fanaticism and an illiberal asceticism. In the view taken by the Tübingen School, it was St. Paul who enabled the nascent religion to surmount the local peculiarities and prejudices by which it was hampered. The clash between the universalism promoted by St. Paul, and the Judaism of the older Apostles, forms the turning point of the next fifty or sixty years of Christian history. The hostility passes through various phases; and is first observable in the personal antagonism of Paul and the Twelve, as, for example, on the subject of circumcision. With the fall of Jerusalem, and the destruction of the temple, the importance of a minute ceremonial seemed to diminish. The old forms of parties gave place to new; and by the middle of the second century, there appeared, in place of the Pauline and Petrine antithesis, the antagonism between speculative thought and the new episcopal organization. The coalition of these forces produced the church catholic, which began before the middle of the second century to stand out as the legitimate and all-embracing organ of Christian opinion and feeling, in contradistinction to the minor sects and heresies, which each embraced some peculiar and external tenet of its own. The object of the examination of each book of the New Testament is to decide to what epoch of this evolution of doctrines it belongs, and what particular tenets it was intended to recommend. Here a grave objection is raised against the Tübingen School of criticism on account of the assumption imputed to it, of the dishonesty of the writers of the New Testament history, who are hereby reduced to the condition of forgers, who were, and who knew they were, untruthful. They intended to deceive; the object which they had in view must have been to misrepresent the early age of Christianity and the teaching of Jesus Christ and His Apostles. They believed that the second century, to which most of them are affirmed by

the Tübingen School to have belonged, differed from the first century, both in the relation of Church parties, in doctrine, and in ecclesiastical organization. In these particulars they consider the second century greatly in advance of the first; they believed it to be a great advantage that early schisms had been healed, that the Christian creed had been brought into a far more correct and rigid form, and that the Christian communities were under the government of a well-defined hierarchy. They were sure that Jesus Christ was *not* what the Christendom of the second century believed him to be. They were sure that the teaching both of Christ and the Apostles was widely different from that which the second century was in the habit of attributing to them. But, inasmuch as the second century did reflect its own beliefs and organizations upon the first age, the writers of the New Testament perceived how extremely useful this delusion might be made. They wanted to strengthen the foundations of the doctrinal and ecclesiastical edifice of their own time; and to accomplish this they invented a life of Jesus Christ, and a book of the Acts of the Apostles, which they knew to be falsely originated by themselves. In the same spirit they wrote letters which they attributed to one or other of Christ's disciples, which were meant to be untrue both to the letter and the spirit of the Apostolic teaching. Upon this assumption, it is said, that every jot and tittle of the Tübingen criticism depends. On the other hand, it is urged that to father upon honoured names the authorship of treatises which were not really so related to them, would not be in ancient times the literary fraud which the present age would account it. The prophet, or the sibyl, was not an author; and hence it was lawful to *edit* the words of each as if authentically spoken. No fraud was intended. The affixed names were not pseudonymous, but eponymous. The custom was transmitted to the Christian church. The great object of parties and opinions in the second century was to prove themselves apostolic; and it is a mistake to suppose that a literature created with such an object can fairly be taxed with the intention to deceive. The alternative is not the acceptance of the document as authentic, or its rejection as useless and fraudulent. The document so originated is not only what the compilers believed to be true, but it is further what they believed to be the true expression of the Apostle whose name was affixed to it. Each compiler felt himself privileged to carry out in the best way he could his purpose of inculcating Christian truth, and forwarding Catholic interests. Of the five historical books of the New Testament, the Acts of the Apostles is that in which the ecclesiastical purpose is most unmistakable. Its object is to throw a veil over the dissensions of early Christianity, and to promote Catholic tendencies by representing Paul as acting in entire accord with the Twelve, and especially with Peter. The first Petrine epistle has a kindred object to the Acts, and on the whole is written in the spirit of the Roman Paulo-Petrine syncretism of the early part of the second century.

The results of the Tübingen criticism are that the claims to canonicity of the Gospel of St. John are disallowed, and its production is referred to an age in which Gnosticism was triumphant; and it may be said, in short, that out of thirteen Epistles commonly received by antiquity as the genuine writings of St. Paul, four only are admitted as such by Baur—that to the Galatians, to the Romans, and the two to the Corinthians. These four Epistles are in fact the basis of the whole critical inquiry; each of them has its own specific character, and exhibits a special phase of Christian development. Of what Baur calls the Deutero-Pauline letters—those to the Ephesians, Philipians, and Colossians—it is said that they have a certain likeness to each other; and that the monotonous iteration, the vagueness of the Catholic teaching, the general recommendation of practical duty, and, above all, the absence of specific purpose, mark them as later writings. They share the irenic tendency of the writings of the second century; giving to *Faith* and *Christ* an altered meaning, reducing the former to adhesion to a creed, and changing the latter from the regenerating power within the soul to a transcendental supermundane essence. The Pastoral letters, those, namely, to Timothy and Titus, have, it is affirmed, the general air of the second century. Heresy is denounced; ecclesiastical power is invoked to check it; there is a perpetual recurrence of the neutral formula combining faith and works; and by *faith* is meant not the inward condition of the soul, but allegiance to a creed. The lesson inculcated is peace; to shun speculation, now considered dangerous; and to follow practical righteousness.

The works in which Baur wrought out the details of the

criticism of which the principles are exhibited above, are chiefly the Christian Gnosis, 'Die Christliche Gnosis; oder die Christliche Religions-Philosophie,' Tübingen, 1835; the Christian Doctrine of the Atonement, 'Die Christliche Lehre von der Versöhnung,' Tübingen, 1838; the Christian Doctrine of the Trinity, and of the Incarnation of God, 'Die Christliche Lehre von der Dreieinigkeit und Menschwerdung Gottes,' 3 vols., Tübingen, 1841–43; the Difference between Catholicism and Protestantism, 'Der Gegensatz des Katholicismus und Protestantismus,' Tübingen, 2nd ed., 1836, a work in which the author attacks the famous 'Symbolik' of the Catholic theologian Johann Adam Möhler, who replied with his New Researches upon the Differences between Catholicism and Protestantism, 'Neue Untersuchungen der Lehrgagensätze zwischen den Katholiken und Protestanten,' to which Baur rejoined with his 'Erwiderung gegen Möhler's neueste Polemik.' Baur's works in the domain of New Testament criticism comprise a Treatise on the History of Christian Dogma, 'Lehrbuch der Christlichen Dogmengeschichte,' Stuttgart, 1847, 2nd ed., Tübingen, 1858; The Christ-Party in the Corinthian Church, 'Die Christuspartei in der Corinth. Gemeinde, der Gegensatz des paulinischen und petrinischen Christenthums;' The So-called Pastoral Letters of the Apostle Paul, 'Die Sogenannten Pastoralbriefe des Apostels Paulus,' Stuttgart, 1835, in which their apocryphal character is asserted; St. Paul, the Apostle of Jesus Christ, his life and works, his Epistles and Doctrine, 'Paulus, der Apostel Jesu Christi, sein Leben und Wirken, seine Briefe und seine Lehre,' Stuttgart, 1845, a critical and historical survey of primitive Christianity, which offers an epitome of the author's ideas as expressed in former works, with new researches on the apocryphal original of the Secondary Epistles; Critical Researches on the Canonical Gospels, their inter-relations, origin, and character, 'Kritische Untersuchungen über die kanonischen Evangelien, ihr Verhältniss zueinander, ihren Ursprung und Charakter,' Tübingen, 1847, in which the author seeks especially to disprove the historical character of the Gospel of St. John, and to refer it to an epoch later than the Apostolic; St. Mark's Gospel, its Origin and Character, 'Das Markusevangelium nach seinen Ursprung und Charakter,' Tübingen, 1851; The Christianity and the Christian Church of the first three centuries, 'Das Christenthum und die Christliche Kirche der drei ersten Jahrhunderte,' Tübingen, 1853, 2nd ed., 1860, a work which comprises the results of all the critical researches relative to the origin of Christianity. Two works were published posthumously under the joint editorial care of the author's son, Ferd. Friedr. Baur, and Zeller, the titles of which were 'Die Christliche Kirche des Mittelalters,' Tübingen, 1861; and 'Die Kirchengeschichte der neuern Zeit, von der Reformation bis zum ende des 18 Jahrhunderts,' Tübingen, 1863.

BAXTER, ANDREW, an ingenious metaphysician and natural philosopher, was the son of a merchant in Old Aberdeen, where he was born, in the year 1686 or 1687. He received his education at King's College, in his native city; and occupied the greater part of his life as a private tutor, having amongst his pupils Lord Gray, Lord Blantyre, and Mr. Hay of Drummelzier. In 1723, whilst resident at Dunse Castle, as preceptor to the last-mentioned gentleman, he is ascertained, by letters which passed between him and Henry Home, afterwards Lord Kames, to have been deeply engaged in both physical and metaphysical disquisitions. A few years after, possibly in 1730, he published his great work entitled, 'An Inquiry into the nature of the Human Soul, wherein its Immateriality is evinced from the Principles of Reason and Philosophy,' London, 4to; second edition, 2 vols., 8vo, 1737; third edition, 2 vols., 8vo, 1745. The object of this work, which won the singular commendation of Bishop Warburton, is to prove the immateriality, and consequently the immortality, of the soul, from the acknowledged principle of the vis inertia of matter. In 1741, Baxter went abroad with his pupil, Mr. Hay, and resided for several years at Utrecht. In the course of various excursions which he made through Holland, France, and Germany he was generally well received by the literati; and, whilst abroad, he formed an intimate friendship with the well-known John Wilkes, to whom he dedicated his 'Appendix to the first part of the Inquiry into the Nature of the Human Soul; wherein the Principles laid down are cleared from some Objections started against the notions of the Vis Inertia of Matter, by Maclaurin,' &c., 8vo, London, 1750. This work was edited by the Rev. Dr. John Duncan, of South Warnborough, who afterwards published 'The Evidence of Reason, in proof of the Immortality of the Soul, independent on the more abstruse

Enquiry into the Nature of Matter and Spirit. Collected from the MSS. of Mr. Baxter. To which is prefixed a letter from the Editor to Dr. Priestley, 8vo, London, 1779. This was, of course, a posthumous publication; for Baxter, who returned from the continent in 1747, died on the 23rd of April, 1750, at Wittingham in East Lothian, a seat belonging to Mr. Hay, where Baxter constantly resided during the last three years of his life. The only important work of Baxter remaining to be mentioned, is one entitled 'Matho: Sive Cosmotheoria Puerilis Dialogus. In quo prima Elementa de Mundi ordine et ornatu proponuntur,' &c., 2 vols. 8vo, London, 1740; a production which, designed for the use of the author's pupils and his son, was published in English, with the title of 'Matho: or the Cosmotheoria Puerilis, in ten Dialogues; wherein from the Phenomena of the Material World, briefly explained, the Principles of Natural Religion are deduced and demonstrated,' 2 vols. 8vo, London, 1745; third edition, "corrected and enlarged," 2 vols. 12mo, 1765. Another, "accommodated to the capacities and instructions of the youth of both sexes," by Samuel Whyte, 2 vols. 12mo, Dublin, 1776.

* BAYNES, THOMAS SPENCER, Professor of Logic and Rhetoric in the University of St. Andrews, was a pupil of the late Sir William Hamilton, Professor of Logic and Metaphysics in the University of Edinburgh, whose notice he attracted by his abilities and zeal in logical research in the commencement of Session 1846-47. The favourable regard developed into a friendly intimacy, and Mr. Baynes, in due course, became assistant to Sir William, who, in consequence of an attack of paralysis, had been, since 1844, incompetent to the unaided management and business of his class. Mr. Baynes has for some years filled with great ability the chair of logic and rhetoric in the University of St. Andrews. He has published 'An Essay on the new Analytic of Logical Forms. With an Historical Appendix,' 8vo, Edinburgh, 1850; 'The Port Royal Logic, translated from the French, with Introduction, Notes, and Appendix,' 12mo, 1851; 'The Song of Solomon in the Somersetshire Dialect,' 16mo, 1860; and 'The Somersetshire Dialect: Its Pronunciation. Two papers reprinted from the "Taunton Courier,"' 8vo, London, 1861. This last work was privately printed, and its issue limited to two hundred copies.

* BAZALGETTE, JOSEPH WILLIAM, engineer-in-chief to the Metropolitan Board of Works, was born in 1819. His family was of French origin; his father was a Commander in the Royal Navy. After the usual course of school education, he studied civil engineering under Sir John MacNeill. Mr. Bazalgette commenced practice on his own account in 1842, and soon afterwards executed some drainage works in the north of Ireland. In 1848 he succeeded Mr. Frank Forster as engineer to the Metropolitan Commission of Sewers. His duties brought him actively into the long and elaborate investigation which had been entrusted to the Commission, concerning the drainage and water supply of London: an investigation which showed interminable varieties of opinion between the Commissioners, the Board of Health, and civil engineers generally. Mr. Bazalgette planned and executed three hundred miles of sewers in the Metropolis while holding the above-named office. In 1855, by the passing of the 'Metropolis Management Act' (18 & 19 Vict. c. 120), the powers of the Commissioners were transferred to a new body—the Metropolitan Board of Works, entrusted also with many additional powers. Mr. Bazalgette was appointed engineer-in-chief to the Board. It devolved upon him to plan and carry out the vast system of main drainage for the Metropolis, which has since been nearly completed, with the exception of one particular line called the Low Level Sewer. The plan does not at present comprise any arrangement for the utilization of the sewage; which is allowed, under certain regulations as to tide, to flow into the Thames, near Barking and near Crossness. Mr. Bazalgette was the first to introduce subways under new streets made in the Metropolis, for carrying gas-pipes, water-pipes, and telegraph wires, and thereby lessening the necessity for breaking up the roadways when repairs have to be executed in the underground works. Another great work planned by him for the Board is the embanking of the Thames. The northern embankment, from Westminster Bridge to Blackfriars Bridge is (1870) far advanced towards completion. This important work has the effect of improving the navigation of the Thames, and at the same time of obtaining reclaimed ground for foot pavements, carriage road, a railway, the low level sewer, and possibly some buildings and gardens. The southern embankment, from Westminster Bridge nearly to Vauxhall Bridge, though on a less grand scale, renders the same kind

of service to the Surrey side of the Metropolis. Mr. Bazalgette, in virtue of his office, has to watch over the public interests with regard to all engineering works constructed within the Metropolitan area (with some exceptions within the City of London); and a code which he has laid down, for regulating the construction of bridges and the alteration of streets, is observed in all Railway Acts affecting the Metropolis. As a consulting engineer, Mr. Bazalgette has issued reports on plans for the improved drainage of Oxford, Cambridge, St. Leonards, Folkestone, Norwich, Cheltenham, Weston-super-Mare, Glasgow, Dublin, Belfast, Brussels, Port Louis in Mauritius, and other places.

* BEALE, LIONEL SMITH, an eminent microscopist and physiologist, was born in 1828. He is a Fellow of the Royal and several other Societies. He now holds the post of Physician to King's College Hospital, and has held the professorship of Physiology in King's College for several years, but resigned it a short time back. In 1852 a long paper by him, on the character of the urine in persons affected with pneumonia, was published in the 'Transactions of the Medical and Chirurgical Society,' since which date he has been a constant contributor to scientific literature. The paper above noticed was followed by others on urine and on the structure of the kidneys, which appeared in the 'British and Foreign Medico-Chirurgical Review,' the 'Quarterly Journal of Microscopical Science,' and in the 'Archives of Medicine.' The substance of these was incorporated in a book, of which the third edition was issued in 1869, under the title of 'Kidney Diseases, urinary deposits, and calculous disorders: their Nature and Treatment.' It is a volume of 472 pages, containing many figures. It shows, what is apparent in all Dr. Beale's works, great skill in methodical arrangement and much painstaking care. As an instance, we may notice that a large proportion of the figures were drawn by himself on the wood from nature; that most of the cuts have scales of measurement attached to them, and that the dates of publication of the plates are usually given. This work is a standard reference-book on the subject to which it is devoted. He has given much attention to the construction and practical application of the microscope to anatomy. The results of his inquiry are found in various papers, but are all brought together in his book, entitled 'How to work with the Microscope,' of which the first edition appeared in 1857-59, and the fourth in 1868. It is a thoroughly practical guide to microscopists, and towards the end contains a summary of the principal new physiological views which the author has originated. This work is also illustrated with many plates of figures, to which the same remarks apply as to those in his 'Kidney Diseases, &c.' One feature in it is characteristic. The page where the descriptive text referring to each cut occurs is appended to the figures; and the reader is recommended to examine the cuts and then read the text, if he wishes to gain information readily and accurately. The new views are such as could only have been arrived at by a long course of patient microscopical observation. It was mainly Dr. Beale's efforts that induced the optician to make microscopic object glasses of very high power, such as the $\frac{1}{4}$ th inch by Messrs. Powell and Lealand, the use of which led him to oppose the widely accepted view that nerves end peripherally. He found that what were called the ends were the points at which the nerves suddenly attenuated and ramified into a sort of mesh-work, some of the fibres of which were not more than the $\frac{1}{100}$ th of an inch in diameter. These so called ends are observable near the proximal extremity of voluntary muscles, while the interlacement of minute nerve fibres is visible over the whole body of the muscle, as well as on the under side of the sarcolemma; and the further continuation of the fibres is lost amidst the substance which fills up the spaces between the muscular tissue. This intermuscular tissue is usually designated connective; but Dr. Beale is convinced that in some places, especially beneath sensitive surfaces, the tissue so called is really in great part, if not wholly, composed of agglomerated nerve fibres. He believes also that the nerve never ends, but is reflected back to nerve centres, and generally to the same centre from which it originated. Impressed with these ideas, he advocates the notion that the nervous apparatus is a collection of continuous circuits analogous to electrical circuits in metallic wires. In accordance with this, he maintains that all nerve centres or ganglions are bi- or multi-polar, never uni-polar or apolar. His papers bearing on this subject are contained in the 'Proceedings of the Royal Society,' 'Philosophical Transactions,' 'Archives of Medicine,' and 'Transactions of the Microscopical Society.' Another important generalization made by Dr. Beale is that every tissue consists of two parts, one of which is coloured when prepared in a

certain way with glycerine; while the other is colourless. The coloured portion is said to be living or germinal matter, and has the property of altering its form, of growing, of multiplying, and, as we gather, vitalizing inorganic substances. It corresponds to what is usually called cell-contents, protoplasm, &c., and is distinguished by Beale as forming, growing, or active matter. The colourless portion is the effete germinal matter, and forms the parts known as intercellular substance, cell-wall, membrane, &c. Beale designates it as formed matter. According to him the protoplasm, or forming matter has the same properties in every organ and in every organism; but the formed matter varies whenever the conditions which governed its appearance varied. He considers that the protoplasm, or forming matter, is the only portion of the organism which is living or possesses vitality; and that it is the essential element of organic structure. From this it follows, almost consequently, that he opposes the school that maintains the cell to be the prime element of all tissues; and declares that there are many portions of the body which are not cells, such as the blood globules. His views on this subject are fully explained in his 'Lectures on the Structure and Growth of the Tissues of the Human Body,' published in the second and third volumes of the 'Archives of Medicine;' but his fullest and latest expositions will be found in a small book on 'Protoplasm,' of which the second edition has just been issued. Dr. Beale is the editor of the last edition of Todd and Bowman's 'Physiological Anatomy and Physiology of Man,' and he has edited the 'Archives of Medicine' from their commencement in 1857. For this last work he has written a number of articles, which are embodied in his books on the microscope, kidney diseases, &c.

BEAUFORT, REAR-ADMIRAL, SIR FRANCIS, K.C.B., F.R.S., &c. [E. C. vol. vi. cols. 970-71.] Sir Francis Beaufort lived but a few weeks after the publication of the volume of the E. C. which contained our brief notice of him. Full of years and honours he died on the 3rd of December, 1857, aged 84 years.

BEAUMONT, SIR JOHN, son of Francis Beaumont, one of the judges of the Court of Common Pleas, and elder brother of Francis Beaumont the dramatist [E. C. vol. i. col. 596], was born at Grace-Dieu, in Leicestershire, in the year 1582. He was admitted as a gentleman-commoner at Broadgate's Hall, Oxford, in 1596; and after spending three years at the University, came to London and commenced the study of the law, but tiring of it after brief trial, he returned to Leicestershire, married and lived the life of a country gentleman, amusing his leisure hours by writing verse. He was made a baronet in 1626, died in 1628, and was interred in the chapel at Grace-Dieu. His poetry is his title to remembrance. Ben Jonson began the verses which he prefixed to Sir John Beaumont's poems, "This book will live; it hath a Genius;" yet it may now be questioned whether book or name would have lived but for the additional vitality imparted by the relationship of the greater Francis. Sir John Beaumont's poetry is, however, often pleasing and suggestive. His poems were published in 1629, in a small 8vo. vol. of 208 pages (pp. 181 and 182 being missing in all known copies), under the title of 'Bosworth Field, with a variety of other poems;' reprinted in 1710, and in Chalmers's 'British Poets.' A new edition was issued (but only to subscribers), as a volume of the 'Fuller Worthies' Library,' by the Rev. A. Grosart, 1869, under the title of 'The Poems of Sir John Beaumont, Bart., for the first time collected and edited.' Besides 'Bosworth Field,' Beaumont's poems comprise, 'The Metamorphosis of Tobacco,' a 'Poetical Epistle to his late Majesty (James I.) concerning the true forme of Englishe Poetry;' religious, complimentary, and elegiac verses, and translations from the Latin poets, including Virgil's 4th eclogue; Horace's 6th satire and 29th ode of the 3rd book; Juvenal's 10th satire, &c. He also wrote a poem called the 'Crown of Thorns,' which appears to be lost.

BECCHER, or BECHER, JOHN JOACHIM, born at Spire in 1625, son of a learned Lutheran preacher. His father died when he was still young, and his family was reduced to poverty during the Thirty Years' War. He managed to educate himself, and to travel through Germany, Italy, Sweden and Holland. In 1666 he became professor of medicine in the University of Mainz, and soon after chief physician to the Elector. He now resided at Munich, where the Elector furnished for him a good laboratory; but falling into difficulties he went to Vienna, where his knowledge of finance procured for him the appointment of chamberlain to Count Zinzendorf, and afterwards he became a member of the newly erected College of Commerce. But falling again into difficulties, he proceeded with his wife and children to

Holland, and settled at Haarlem in 1678. But influence from Vienna compelled him to leave Holland. In 1680 he visited Great Britain, and examined the Scottish lead mines and smelting works, and in 1681-2 he studied the mines and smelting works of Cornwall and suggested various improvements. His friend Count Zinzendorf procured for him an appointment under the Duke of Mecklenburg-Schwerin at Güstrow, but while preparing to accept it he died (it is said) in London, 1682. His writings are numerous, the most important being his 'Physica Subterranea,' an edition of which was published at Leipzig in 1703, with a long introduction by Stahl. He had the great merit of contriving a chemical theory in which all the known facts were connected and deduced from one general principle. This was afterwards adopted and amplified by Stahl. A short account of Beccher's writings is given in Thomson's 'History of Chemistry,' i. 248. Thomson remarks that "Beccher had much more correct notions of the real objects of chemistry than any of his contemporaries." One of his works, called 'The Chemical Luck Pot,' contains a collection of fifteen hundred chemical processes. He writes in a pleasant, chatty style, saying a good deal about himself—in whom he had unbounded confidence, and a corresponding degree of contempt for other chemists. Referring to the hard life of the man of science, "who lives amidst smoke and vapour, soot and flame, poisons and poverty," he says, "yet among all these evils, I seem to myself to live so sweetly, that may I die if I would change places with the Persian king." His enthusiasm was grounded on a love of science. He says, "My kingdom is not of this world; I trust that I have got hold of my pitcher by the right handle—the true method of treating this study. For the pseudo chemists seek gold; but the true philosophers, science, which is more precious than any gold." Beccher was the discoverer of boracic acid.

BECCOLD, JOHANN, whose name varies as **BOCKHOLD**, **BOCKOLD**, **BOCKOLT**, **BOCKELSOHN**, (**JAN BOCKELSZOON**), and who is more commonly known as **JOHN** or **LEYDEN (JAN VAN LEYDEN)**, was born at the Hague in 1509 or 1510. He is chiefly distinguished for the part he took in the commotions excited at Münster, in 1535, by the Dutch Anabaptists. To the harmless principle which prescribed the limitation of baptism to such persons as were grown up to years of understanding, and to immersion as its mode of administration, the Anabaptists added tenets of a more enthusiastic, as well as dangerous nature. They maintained that among Christians who have the precepts of the gospel to direct, and the Spirit of God to guide them, the office of magistrate is unnecessary, and an encroachment on spiritual liberty; that all distinctions of birth or rank ought to be abolished; that a community of goods should be established, and that every man may lawfully marry as many wives as he thinks proper. Beccold was brought up to the trade of a tailor, at Leyden, and after having visited various countries of Europe, including England, Flanders, and Portugal, he settled at Leyden, where in his leisure hours he cultivated his natural talent for literature and the drama. Adopting the opinions of the Anabaptists, he became one of their itinerating prophets, and in pursuance of his commission from John Mathiesen, or Matthys, visited Münster in 1533, where by his amazing fluency and command of Scripture, he achieved a great reputation, and prepared a party against the coming of Matthys himself, who on one occasion suddenly appeared amongst his disciples, blowing on them, and bidding them "Receive the Holy Ghost." The Anabaptist movement now spread, for the zeal of its adherents was increased by the belief that they had received the gift of inspiration. Its leaders refused a conference proffered by the magistrates; and Ruthus, one of the chief of their preachers, pretending or supposing himself to be inspired, ran through the city, in December, 1533, crying out, "Repent, and be baptized again, or else the wrath of God will fall upon you, for the day of the Lord is at hand." This preaching was attended with wonderful success, and the re-baptized assumed the title of saints, into whose hands the government of the city at length fell, by the flight of the magistrates and principal inhabitants. Matthys held the chief authority, Beccold was his lieutenant; and the faithful were called to arms to defend the commonwealth against the forces of the Bishop, whose attempts to regain possession of Münster, at the close of 1534, were aided by the Duke of Treves and the Elector of Cologne. The besieged were so numerous as to command success, but they sustained a loss in the death of their leader Matthys, during a foolhardy sortie from the walls. This loss, however, was insufficient to damp their courage, for Beccold was forthwith raised to the vacant place, and by his powerful eloquence, soon had

them under his control. He was, indeed, regarded as a prophet, to whom was vouchsafed a series of divine revelations, in accordance with which he determined on a change in the form of government, and appointed twelve magistrates, "ancients or elders of the new Israel," in place of the former senate. A fresh revelation, at first not quite heartily acquiesced in by the people, who had been taught to believe that all the members of the Kingdom of Grace were equal, provided that the new Israel must henceforth be ruled by a king, and affirmed that as the Lord had raised up Saul, so had He raised up John of Leyden to rule His chosen people. King John now exemplified fully the principle of polygamy; objections against which were silenced by the execution of complainants. The dominion of the saints was a dominion of lust and blood. Nor were the externals of majesty forgotten. Arrayed in splendid robes, with a crown on his head, and a sceptre in his hand, the quondam tailor of Leyden sat on the judgment seat, protected by troops, and surrounded by counsellors clad in purple. The siege of Münster was now, however, prosecuted with vigour by the Bishop and his allies, and although the defence was successfully maintained for six months, the Bishop's troops were admitted by a traitor on the 24th of June, 1535, when most of the people perished, and the city was given up to an eight days' pillage. On the 22nd of January, 1536, John of Leyden and two of his companions were publicly tortured with red-hot pincers, stabbed and mutilated, and their bodies suspended in iron cages from the top of a lofty tower.

BECK, or BEEK, DAVID, an eminent Dutch portrait painter, was born at Aarnhem in Gelderland on the 25th of May, 1621. First pupil and afterwards assistant to Vandyck, he assimilated his own manner entirely to that of his master, whose ablest as well as most fortunate scholar he was generally reckoned. He painted under Vandyck in England, and was employed by Charles I. to teach design to his sons, the Prince of Wales (Charles II.), and the Dukes of York (James II.) and Gloucester. The King greatly delighted to watch him paint, and while admiring his remarkable dexterity and rapidity, is reported to have said to him, "Faith, Beck, I believe you could paint riding post." He painted many portraits here, but his name is scarcely ever found in the collections or attached to family portraits, and there can be little doubt that portraits ascribed to Vandyck are often the work of David Beck. On leaving England he painted for the King of France, and was then employed by Queen Christina of Sweden, who made him gentleman of her chamber, and commissioned him to paint the portraits of the principal sovereigns of Europe. In order to execute this commission he visited Denmark, France, Spain, Italy, and Germany. From several of the monarchs whose likenesses he painted, and to whom he presented portraits of Queen Christina, he received gold medals and chains, and the painters of Rome, as Houbraken is careful to tell, designated him the Golden Sceptre. It is related that whilst in Germany he had a severe fit of sickness, passed into a state of coma, and was actually laid out as dead. His two servants while watching the body cheered themselves with a bottle of wine, when one said, "Poor fellow, he loved a glass whilst he lived; let us give him one more before he is buried," and put the glass to his lips. A few drops were retained in his mouth; the man, vowing that his master tasted it, persisted: some was swallowed, and presently Beck sat up; revived to complete his commission; returned to the Hague, and there for some years pursued his profession. He died on the 20th of December, 1656, as some have said from poison. David Beck was undoubtedly an able portrait painter, but his individuality was sunk in the imitation of Vandyck.

BECKET, ISAAC, one of the best of the early English engravers in mezzotint, was born in Kent in 1653. His story, as collected by Walpole from Vertue, is to the effect that he was apprenticed to a calico-printer, but visiting Lutterel, who was then working at the new art of mezzotint engraving, without, however, having been able to penetrate the secret, Becket's ambition was fired. Having heard that Loyd, who kept a print shop in Salisbury-street, in the Strand, had bought the secret of a Dutchman named Blois, but being unable to engrave, and having quarrelled with Lutterel, was unable to use it, Becket offered his service to Loyd, and was employed by him. Meantime Lutterel had learned the true method from Vansomer, and Becket was fain to return to him for instruction. Becket's happy style of treating heads procured him ample employment, and, marrying a woman of fortune, he was enabled to secure the services of Lutterel to prepare the plates, leaving only the finishing for himself. He engraved several subject-pieces, as a 'Holy Family'; a 'Land-

BIOG. DIV.—SUP.

scape with Shepherd and Shepherdess; a 'Dutch Schoolmaster, after Heemskerk and others; but his portraits, which are rather numerous, are more valued. Among the best are Charles II. and the Duke of York (James II.), after Kneller; Kneller by himself; Le Piper, the painter, much prized; a full length of Lady Williams; Beau Fielding, capitally executed; Cartwright, Bishop of Chester, somewhat rare; the Duke and the Duchess of Grafton; Prince George of Denmark; and Sir Peter Lely. The year of his death is uncertain.

BECKINGTON, BEKYNGTON, or DE BEKINTON, THOMAS, was born in the parish of Beckington, about three miles from Frome, in Somersetshire, about the year 1385; and it is probable that he received his early education at Winchester. In 1403 he entered New College, Oxford, of which society he became a fellow in 1408. He held his fellowship for twelve years, and took the degree of LL.D. Within this period it is most probable that he was presented to the rectory of St. Leonard's, near Hastings, in Sussex, and to the vicarage of Sutton-Courtney, in Berkshire. He was collated to the prebend of Bilton, in the cathedral church of York, on the 19th of April, 1423; to the prebend of Longden, in Lichfield cathedral, on the 30th of August, 1436; and to that of Holborn, in St. Paul's, on the 10th of November, 1438. In October, 1424, he was appointed Archdeacon of Buckingham; and became, in addition, master of St. Katherine's Hospital, near the Tower of London. Beckington attained some reputation as an advocate in Doctors' Commons; and in 1429 he was Dean of the Court of Arches, in which capacity he was employed, jointly with William Linwood, an official of the court, and Thomas Brown, Vicar-General to the Archbishop of Canterbury, to draw up a form of law, by which to regulate the proceedings against the followers of Wycliffe. He was tutor to Henry VI., and enjoyed that monarch's favour, which was increased by the production of a book, in which, in opposition to the Salique law, Beckington vindicated the claims of his sovereign to the crown of France. In 1432 or 1433 he was named one of the ambassadors who were commissioned to treat of peace with France; and he assisted at the congress of Arras, which terminated in the treaty of the 22nd of September, 1435. In 1439 he was charged with fresh negotiations; and interested himself specially for the release of Charles, Duke of Orleans, known to this day as an accomplished poet, who had been a prisoner in England from the time of the battle of Agincourt. About this time Beckington was preferred to be Secretary of State; and on the 20th of May, 1442, was joined in a commission with Sir Robert Roos and Edward Hull, Esq., to negotiate a marriage between Henry VI. and one of the daughters of John IV., Comte d'Armagnac, on which occasion an attendant, probably one of his chaplains, wrote a journal, which supplies us with many interesting particulars respecting his conduct in that affair, and throws some light upon his character. Beckington returned to England in February, 1443, and in July following he was appointed Keeper of the Privy Seal, with an allowance of 20s. a day, but he seems to have resigned that office in the ensuing February. He was made Bishop of Bath and Wells, by the Pope's bulls of provision, dated the 13th of May, 1443; and the king restored to him the temporalities of the see on the 24th of September following. The archbishop delivered up the spiritualities on the 5th of October, and the consecration of the new prelate took place on the 13th of the same month, in the yet unfinished chapel of Eton College, which was on that day "hallowed," and the first Mass said in it by Beckington himself. The Bishop of Bath and Wells now withdrew himself almost entirely from public life; but there is reason to believe that he was present as a trier of petitions in the parliaments of 1444, 1447, 1449, 1450, and 1453. He died on the 14th of January, 1485, and was buried in Wells Cathedral, where a handsome monument was erected to his memory.

Beckington is said to have been the most elegant man of his time, and he was so famous for his scholarly attainments and the favour with which he regarded all learned and ingenious men, that he was called the Mæcenæ of the age. He contributed generously to various charities, and especially to the enlargement and embellishment of his cathedral; and he was so munificent a benefactor to several of the colleges of Oxford, that Fuller says he was "little less than a second founder." Beckington's work against the Salique law has never been published; but it is preserved in MS. in the Cottonian Library, Tiberius B. xii. Some other pieces by Beckington are in the same library, and a large collection of his Letters, chiefly, though not exclusively, on public and ecclesiastical affairs, is in the archbishop's library at Lambeth. A volume of sermons, and a few slighter productions

have also been ascribed to him. In 1828 Mr., afterwards Sir, Nicholas Harris Nicolas published 'A Journal by one of the suite of Thomas Becketton, afterwards Bishop of Bath and Wells, during an Embassy to negotiate a Marriage between Henry VI. and a daughter of the Count of Armagnac. A.D. MCCCCXLII.'

BECON, THOMAS, a divine and reformer of the 16th century, is variously said to have been a native of Kent, Suffolk, and Norfolk. It is probable, however, that he was born in the last-named county, about 1511. At an early age he was sent to St. John's College, Cambridge, and proceeded B.A. in 1530—31. During his residence at the University he was a diligent hearer of Hugh Latimer and George Stafford, and became a decided supporter of Protestant opinions. It has been assumed that this partisanship had the effect of retarding his ordination, which took place in 1538. About 1540 he was convened before the Privy Council on a charge of advocating heretical opinions in his exposition of the Ten Commandments. He obtained his release from confinement in the Lollards' Tower, to which he had been condemned, by a recantation and a confession that he had "preached and taughte evyll and false doctrine, against the continency of priests, prayers for the dead, and the sacrament of the altar, and the sacraments of confirmation and extreme unction." Then he assumed layman's apparel, and repaired to Kent, where, "changing the form of teachinge the people from preachinge into wrytynge," he produced various books, all advocating the principles of the Reformation, under the assumed name of Theodore Basille. His first preferment was the vicarage of Brenzet, in Kent. In 1543, having again fallen under suspicion, he was compelled to abjure his opinions at St. Paul's Cross; and in his recantation he not only recapitulated that which he had formerly made, but confessed the unsoundness of certain positions he had promulgated in his several books, entitled 'Nevyes out of Heaven, both pleasaunt and joyfull,' 8vo, London, 1541; 'The Right Pathway unto Prayer,' 12mo, London, 1542; 'Potacion, or Drinkyng for this Holy Tyme of Lent,' 12mo, London, 1542; 'The Christmas Banquet,' 8vo, 1542; 'The Catechisme,' 'David's Harpe,' 8vo, London, 1542; 'Invective against Swearyng,' 8vo, London, 1543; 'The Golden Boke of Christen Matrimonye,' 8vo, London, 1542; 'The Nosegay,' and 'A New Yeaer's Gift,' 8vo, London, 1543. All these books he publicly cut in pieces; and accompanied the act of their destruction with the most contemptuous expressions about himself, his pride, vanity, and want of learning. After this recantation, Becon retired to the Peak of Derbyshire, whence he proceeded successively to Staffordshire, Warwickshire, and Leicestershire, either gaining a livelihood by tuition, or being hospitably entertained by the friends and well-wishers of the Reformation. Whilst he was in the midland counties he published various works which became popular, and which are amongst those prohibited by a proclamation issued on the 8th of July, 1546. On the 24th of March, 1548, he was instituted to the rectory of St. Stephen, Walbrook, London, and about the same time became chaplain to Archbishop Cranmer, and one of the six preachers of Canterbury Cathedral. He was also chaplain to the Lord-Protector Somerset, with whom he resided for some time at Sheen. He appears, but at what period is unknown, to have commenced D.D. at Oxford. On the accession of Queen Mary, Becon was deprived of his living as a married priest, and was further committed to the Tower as a seditious preacher. He remained in custody from the 16th of August, 1553, till the 22nd of March following. His means of escape are unknown, but his release is said to have been occasioned by a mistake of Bishop Gardiner. He went abroad, and resided at Strasburg and Marburg. Whilst abroad he produced several works, of which one was entitled 'A comfortable Epistle too Goddes faythful People in Englande,' 8vo, Strasburg, 1554; and another in Latin, upon the Maas, which he addressed to Popish priests, with the title, 'Cœnæ Dominicæ et Missæ Papiasticæ Comparatio,' 8vo, Basil, 1559. After the accession of Elizabeth, Becon returned to England, and was reinstated in his London benefice, and collated, in 1559, to the fourth prebend in the cathedral church of Canterbury. He was now in high esteem, and in great request as a preacher. On the 21st of October, 1560, he was presented to the rectory of Buckland, in Hertfordshire; to the vicarage of Christ Church, Newgate-street, on the presentation of the Lord Mayor and commonalty of the city of London; and on the 10th of August, 1563, was admitted to the rectory of St. Dionis Backchurch, London, on the presentation of the Dean and Chapter of Canterbury. His death occurred at some unascertained date before the 2nd of July, 1567.

Becon was the author of tracts almost innumerable in favour of the Reformation, and many of them were collected in a

volume which did not quite answer to its title of 'The Worckes of Thomas Becon, diligently perused, corrected, and amended,' folio, London, 1563—4, by John Day, who also reprinted several publications separately. A collection of Becon's works was printed for the Parker Society under the editorship of the Rev. John Ayre, M.A., of Caius College, 3 vols. 8vo, Cambridge, 1843—44. Selections from his writings have been published by the Religious Tract Society, and by the Society for Promoting Christian Knowledge. Amongst the minor characteristics of Becon may be mentioned the quaintness of some of the titles chosen for his works, as, for example, 'The Jewel of Joy,' 'The Castel of Comfort,' 'The Sycke Man's Salve,' and 'The Pomaunder of Prayer.'

BEECHER, LYMAN, D.D., an American divine and philanthropist, was born on the 12th of October, 1775, at New Haven, Connecticut. After receiving his preliminary education successively at North Guilford and New Haven, he entered Yale College in 1793, where, after graduating in 1797, he entered the divinity school under the president, Dr. Timothy Dwight, favourably known for his important work on Systematic Theology. In the latter part of 1798 Mr. Beecher was licensed to the pastorate of a church at East Hampton, Long Island, to which he was ordained by the presbytery of Middleton, on the 5th of September, 1799. After spending several years at East Hampton, during which he acquired considerable reputation for his eloquence as a preacher, he became, in 1810, pastor of the First Church of Litchfield, Connecticut. On the 3rd of September, 1817, he preached at Boston, upon the occasion of the ordination of the Rev. Sereno E. Dwight as pastor of Park Street Church, a sermon in which he combated, with great applause, the system of the Unitarians; and the reputation then acquired was consolidated by further ministrations in Eastern Massachusetts, in 1819 and 1823. In 1826, Dr. Beecher, upon whom the degree of D.D. had been conferred in 1818, accepted a call to undertake the charge of the then newly-established church in Hanover-street, Boston; and took part with great ardour and ability in the controversy against Dr. Channing and others which then agitated many of the New England churches on the subject of Unitarianism. On the 26th of December, 1832, Dr. Beecher became President and Professor of Theology in the Lane Theological Seminary at Cincinnati; and, after the spring of 1833, combined with these offices the pastorate of the second Presbyterian church of that city. His learning, decided views, and stirring eloquence had a powerful effect on the population of the West; for he was thoroughly in earnest, and known to take an active part in the promotion of temperance and every great philanthropic movement of the day. In the year 1842 he retired from fixed professional employment and lived for some years at Boston, and in 1856-7 removed to Brooklyn, Long Island, where, in the enjoyment of physical vigour greater than belonged to his advanced age, he was a constant attendant upon the ministry of his son, the Rev. Henry Ward Beecher, at Plymouth Church. Dr. Beecher died in January, 1863, having been the father of nine children, who have all distinguished themselves in literature or by their exertions in the cause of abolition. The best known amongst them are the Rev. Charles Beecher, the pastor of a church in Newark, New Jersey, and the editor of 'Autobiography, Correspondence, &c., of Lyman Beecher, D.D.,' the Rev. Edward Beecher, D.D., known as an author, preacher, and professor; the Rev. Henry Ward Beecher, just referred to, the celebrated preacher of Plymouth Church; and Mrs. Harriet Beecher Stowe, the author of 'Uncle Tom's Cabin.' The principal works of Dr. Lyman Beecher are his 'Plea for the West,' 12mo, New York; 'Sermons on Various Occasions,' 8vo, New York, 1842; 'Views in Theology,' 12mo; 'Skepticism,' 12mo; 'Political Atheism,' &c. His collected works were published, under his own supervision, at Boston, in 3 vols. 12mo.

BEECHER, FREDERICK WILLIAM [E. C. vol. i. col. 614]. Rear Admiral Beecher (not Beechy, as by an unfortunate printer's alteration the heading of the memoir was printed in some copies of the revised issue of the E. C.) was born on the 17th of February, 1796, and died on the 29th of November, 1866.

BEGAS, KARL, an eminent German historical painter, was born at Heinsberg, September 30, 1794. His father, a retired judge, wished his son to adopt the legal profession, and sent him to study at Bonn with that view. But his passion for painting was so decided that his father gave way, and placed him under Philippart, who set him to copy Raffaele. In 1810 he went to Paris, where for 18 months he was in the atelier of Gros. A copy of the Madonna della Sedia, then in the Louvre, gained

for him the patronage of the King of Prussia, for whom, after his return to Berlin, he executed several works. From this time he worked on steadily, producing a great number of religious and historical paintings and many portraits, and winning his way in professional rank till he was generally regarded as the ablest and most accomplished painter of the Prussian school. He was painter in ordinary to the King of Prussia; professor and member of the council of the Berlin Academy; member of the Academy, Dresden; and Knight of the Red Eagle. By his countrymen he is thought a great colourist, and altogether perhaps a great artist. But his actual rank is that of a learned and able painter. He lacked the vivifying spark of genius. His pictures comprise such lofty subjects as 'Christ on the Mount of Olives,' painted for the garrison church, Berlin; the 'Descent of the Holy Spirit,' for Berlin Cathedral; the Transfiguration, the Ascension, &c., as well as more manageable religious subjects, like the Baptism of Christ, and the Finding of Moses. His historical and poetical pictures are numerous, and include Henry IV. at Canossa, the Lorelei, painted for the King of Hanover, and 'Maidens under the Oak-tree.' His portraits comprise among others Alexander Humboldt, Leopold Buch, Schelling, Thorwaldsen, Cornelius, Schadow, Rauch, and Meyerbeer. Begas died on the 24th of November, 1854. He left three sons, who have attained honourable rank in different branches of art. OSKAR BEGAS, the eldest, born 1828, was educated as a painter, won the gold medal of the Berlin Academy, and completed his studies in Rome. He has painted an 'Expulsion from Paradise,' and other religious and historical pictures. REINHOLD BEGAS, the second son, born 1831, won the first prize at the Berlin Academy, went to Rome, and has executed a Group of Fauna, a Psyche and other groups, statues, and portrait busts, which have been much admired. ADALBERT BEGAS, also completed his studies at Rome, and has acquired reputation as an engraver.

BEGER, LORENZ (BEGERUS, LAURENTIUS), an eminent German numismatist, was the son of a tanner at Heidelberg, where he was born on the 19th of April, 1653. His attainments secured for him the post of librarian to Frederick William, Elector of Brandenburg, and the friendship of many of his learned compatriots. He was a member of the Academy of Berlin, in which city he died on the 21st of April, 1705. His principal works, which are all in Latin, are—1. 'Thesaurus ex Thesaurio Palatino selectus, seu Gemmæ,' fol., Heidelberg, 1685; 2. 'Observationes in Numismata quadam Antiqua,' 4to, 1691; 3. 'Spicilegium Antiquitatis,' fol. Cologne, 1692, 2nd ed. 1694; 4. 'Thesaurus Brandenburgicus Selectus,' 3 vols. fol. Col. 1696—1701; 5. 'Contemplatio Gemmarum quarundam,' &c. 4to, 1697; 6. 'Bellum et Excidium Trojanum, ex antiquitatum reliquiis, tabula quam Raph. Fabrettus edidit Iliaca, delineatum et comment. illustratum,' 4to, Berlin and Leipzig, 1699; 7. 'Regum et Imperatorum Romanorum Numismata, a Romulo usque ad Justinianum,' folio, Cologne, 1700; 8. 'De Nummis Cretensium Serpenteris,' fol. 1702; 9. 'Lucernæ veterum Sepulchrales ditiones,' J. P. Bellorii, fol. 1702; 10. 'Numismata Pontificum Romanorum,' fol. 1703; 11. 'Hercules Ethnorum ex variis antiquitatum reliquiis delineatus,' fol. Cologne, 1700. The titles of his other works will be found in Ebert's 'Allgemeines Bibliographisches Lexikon.' Beger is charged with having written under an assumed name in defence of remarriage during the life of a first wife, at the instance of the Elector Karl Ludwig, who wished to marry his mistress, his wife being alive; and it is added that after the death of the Elector, Beger wrote a refutation of his own book, but no such work is known to have been printed.

BEHLEN, STEPHAN, an able German writer on forestry and forest laws, was born at Fritzlar in Hesse-Cassel, on the 5th of August, 1784. On leaving the gymnasium of Aschaffenburg he studied jurisprudence, economics, and forest law and management in the University of Mainz; after which he learnt in the Spessart Forest district the practical application of the knowledge he had acquired. In 1803 he was appointed land commissary, and he rose step by step till he obtained in 1819 the supervision of the Spessart district. On a re-arrangement of the forest courts in 1821 he was appointed professor of natural history at Aschaffenburg, and shortly after wrote an excellent account of the wild district in which he had spent the better part of his life—'Der Spessart. Versuch einer Topographie dieser Waldgegend,' 3 vols. Leipzig, 1823—27. He was pensioned in 1832, and died at Aschaffenburg, February 7, 1847. Besides the work just named, Herr Behlen is the author of several volumes of permanent value on the history, laws, wild sports, and administration of forests, with an ample technical lexicon—'Lehrbuch der Forst-

und Jagdthiergeschichte,' Leipzig, 1826; 'Lehrbuch der Jagdwissenschaft,' Frankf. 1839; 'Real- und Verballexikon der Forst- und Jagdkunde,' 7 vols. Frankf. 1840—45. In conjunction with Laurop he edited the 'Systematischen Sammlung der Forst- und Jagdgesetze der deutschen Bundesstaaten,' 5 vols. 1827—33, a book which he continued alone in the 'Archiv der Forst- und Jagdgesetzgebung der deutschen Bundesstaaten,' 29 vols. Freiburg, 1834—47; and he assisted in the establishment of the 'Allgemeinen Forst- und Jagdzeitung,' 1823.

BEHNES, WILLIAM [E. C. vol. vi. col. 971]. Owing to pecuniary and other troubles Mr. Behnes' last years were professionally almost unproductive. He died in the Middlesex Hospital on the 3rd of January, 1864.

* BEHR, JOHANN HEINRICH AUGUST VON, a Saxon minister of State, was born on the 13th of November, 1793, at Freiberg, where his father was pastor. He studied at the gymnasium of his native place, and in 1811 entered the University of Leipzig as a student of theology, which in 1813 he changed for the study of law. Having completed his studies the year before, he became, in May, 1816, an actuary in the bailiwick of Schwarzenberg, and in December of the same year was made judiciary successively of the courts of Pureschenstein, Olbernhau, and Rotherthal. In 1833, being appointed Aulic counsellor, he was called to Dresden by the duties of his office, which he performed with zeal and ability till 1838, when he accepted office in the department of finance. On the 1st of April of that year he entered the Home-office with the rank of Privy Councillor. On the occasion of the insurrection which broke out at Dresden, on the 30th of April, 1849, in consequence of the persistent refusal of the king to recognise the Frankfurt constitution, the means which Behr advocated for the suppression of the popular disturbances seemed too impracticable to allow of his being placed at the head of the ministry, otherwise a probable appointment; and he was consequently called upon, May 14th, to accept the post of Finance Minister. In this capacity he adopted the principle that the increase of existing taxes is preferable to the imposition of new ones. One of his first tasks was to restore the credit of the country; and externally his policy may be described as one of conciliation, which at first approved the 'Project of a Constitution for the German Empire,' drawn up at Berlin by the plenipotentiaries of Prussia, Hanover, and Saxony; but afterwards leaned towards Austria. Behr was accustomed, for intervals of varying length, to perform the duties of Minister of Justice, for Zschinsky, and upon the death of the latter, in 1859, succeeded to the office. Here he sought to carry out the reforms initiated by his predecessor, for the making of justice easily and popularly accessible. In 1862 he was promoted by the king to be provost of the cathedral chapter at Meissen. The independence of the country and of the official life of Saxony have for the present been absorbed in that North German dominion which is the creation of Count Bismarck.

BEHR, WILHELM JOSEPH, a distinguished German publicist, was born at Sülztzheim on the 26th of August, 1775. He studied the science of law at Würzburg and Göttingen, and the practice of it in the courts of justice at Vienna and Wetzlar. In 1799 he became professor of state-law in the University of Würzburg, an appointment which he held till 1821. During all this period he laboured, both in his lectures and his published works, to diffuse enlightened constitutional views throughout Germany. In 1819 he was elected a member of the Bavarian Chamber of Deputies, as the representative of his university, and took his place in the ranks of the opposition. He was likewise raised by the inhabitants of Würzburg to the office of burgomaster, and performed the duties devolving on him in that capacity with great energy. On the occasion of his election to be again a member of the Chamber, the royal assent to the appointment was refused. On the 27th of May, 1832, he publicly delivered himself of sentiments so distasteful to the government that an investigation was made into his conduct, the result of which was his deprivation of the office of burgomaster. He was arrested on the 24th of January, 1833, and imprisoned at Würzburg, and after a trial, protracted for several years, on the charge of complicity with revolutionary intrigues, he was sentenced in 1836 to apologise before the likeness of the king, and to be incarcerated during the royal pleasure. He was accordingly removed to the fortress of Oberhaus, near Passau; but in August, 1839, was permitted to live in a private house in Passau. In February, 1842, he was allowed to reside at Regensburg, under police surveillance; and finally he was not only restored to complete freedom by the political amnesty of the 6th of March, 1848, but received an indemnification of 10,000 florins. In the same year he was

chosen by the electoral district of Kronach to be its representative in the German National Assembly. After the date of his enlargement, Behr resided at Bamberg, where he died on the 1st of August, 1861.

His principal works are his *Examination of Feudal Rights and Feudal Powers*, 'Versuch über die Lehnherlichkeit und Lehnhoheit,' Würzburg, 1799; *System of public justice*, 'System der Staatslehre,' 3 vols. Frankfurt, 1810; *Constitution and Administration of the State*, 'Verfassung und Verwaltung des Staats,' 2 vols. Nürnberg, 1811—12; *Exposition of the wishes and hopes of the German people*, 'Darstellung der Wünsche und Hoffnungen deutscher Nation,' Aschaffenburg, 1816; *Science of Political Economy*, 'Lehre von der Wirthschaft des Staats,' Leipzig, 1822; *On the proper limits of the Influence of the German Confederation on the Government, Legislation, and Administration of the Confederate States*, 'Von den rechtlichen Grenzen der Einwirkung des deutschen Bundes auf die Verfassung, Gesetzgebung und Rechtspflege seiner Gliederstaaten,' 2nd edition, Stuttgart, 1820; *Claims and demands of the Bavarian Diet, and an impartial criticism of its transactions*, 'Anforderungen an Baierns Landtag im Jahre 1827, und unparteiische wissenschaftliche Beurtheilung seiner Verhandlungen,' 3 vols. Würzburg, 1827—28; and *Wants and Wishes of the Bavarians*, 'Bedürfnisse und Wünsche der Baiern,' Stuttgart, 1830.

* BEKE, CHARLES TILSTONE, a distinguished writer on African geography and exploration, was born in London on the 10th of October, 1800. He belongs to a family long settled at Bekebourne in Kent. Although at one time he studied law at Lincoln's Inn, he became a merchant, trading in London, Saxony, and the Mauritius; and from 1836 to 1838 was acting British Consul in Saxony. For nearly forty years he has paid great attention to historical and geographical subjects, especially in connection with Africa. He made a journey to Abyssinia, and explored much of the region about Shoa and Godjam, at that time almost unknown to Europeans; but his writings have been mostly as a commentator. The chief among them were published in the following order:—'*Origines Biblicæ, or Researches in Primæval History*,' 1834, London—an attempt to construct a science of history on a new basis; '*Abyssinia, a statement of facts*,' &c., 1845, relating to the British political mission to Shoa, in which he was aided by private subscriptions, after failing to obtain government support; '*An Essay on the Nile and its Tributaries*,' 1847; '*An Essay on the Sources of the Nile in the Mountains of the Moon*,' 1848; '*On the Geographical Distribution of the Languages of Abyssinia, and on the means requisite for their determination*,' 1849; '*On the Sources of the Nile*,' being an attempt to assign the limits of the basin of that river, 1849; '*An Enquiry into M. A. D'Abbadie's Journey to Kaffa in the years 1843 and 1844, to Discover the Sources of the Nile*,' 1850; '*A Summary of the recent Nilotic Discoveries*,' 1851; '*The Sources of the Nile, a general survey of the head stream, and of the steps by which discoveries in that region have been made*,' 1860; '*On the Mountains forming the Eastern Side of the Basin of the Nile, and on the Origin of the designation Mountains of the Moon, applied to them*,' 1861; '*A Few Words with Bishop Colenso on the subject of the Exodus of the Israelites, and the position of Mount Sinai*,' 1862; '*Who Discovered the Sources of the Nile?*' two letters, 1863; '*The British Captives in Abyssinia*,' 1865; '*King Theodore and Mr. Rassam*,' a letter to the editor of the '*Quarterly Review*,' 1869. Dr. Beke has also written largely in the publications of the Hakluyt Society, the '*Archæologia*,' the '*British Magazine*,' the '*Edinburgh New Philosophical Journal*,' the '*St. James's Chronicle*,' the '*Journal of the Royal Geographical Society*,' the '*Bulletin de la Société de Géographie*,' the '*Collections Topographiques et Généalogiques*,' the '*London and Edinburgh Philosophical Magazine*,' the '*Transactions of the Royal Society of Literature*,' the '*Transactions of the British Association for the Advancement of Science*,' the '*Athenæum*,' &c. Dr. Beke's '*Origines Biblicæ*' brought him the diploma of Doctor in Philosophy from the University of Tübingen; and he has since been elected Fellow of the Geographical Society and of the Society of Antiquaries.

BEKKER, BALTHASAR, a Dutch preacher and theologian, was born on the 20th of March, 1634, at Metselawier in Friesland, where his father, Hendrik Bekker, was pastor. After studying at Groningen and Franeker, he became preacher at Oosterlittens on the 13th of April, 1657; and subsequently officiated in the same capacity at Loenen and other places in Holland. He died at Amsterdam on the 11th of July, 1698.

Bekker was a follower of Descartes, and an interpreter of his system in its possible harmony with orthodox theology, in a

small work entitled '*De Philosophia Cartesiana Admonitio Candida et Sincera*,' 12mo, Wesel, 1688, and 12mo, Amsterdam, 1693. He composed a Short Catechism for Children, with the title of Cut Bread, '*Gesneden Brood*,' 1668; and one for persons of a more advanced age, entitled *Lenten Fare*, '*Vaste Spyze*,' 1670, which obtained for him in some quarters the reputation of Socinianism. He is also the author of an Exposition of the Prophet Daniel, '*Uitlegginge van der Propheet Daniel*,' 4to, Amsterdam, 1688. But the literary efforts by which Bekker is at present remembered are those in which he opposed the prevailing superstitions of his age. One of these was a small volume entitled *An Enquiry concerning Comets*, '*Onderzoek van de betekening der Kometen*,' 8vo, Leeuwarden, 1683, which was occasioned by the appearance of a comet in 1680 and 1681, and the object of which was to protest against the current opinion that comets are presages or forerunners of evil. The great work of Bekker in this kind, however, is his *World Bewitched*; or, an Examination of the Common Opinions concerning Spirits, '*De Betoverde Waereld, zynde een grondig Onderzoek van't gemene gevoelen aangaande de Geesten derzelve aart vermogen bewind en bedryf, als ook het geen de Menschen door derzelve Kragt of gemeenschap doen*,' which, appearing first in 1691, has since gone through various editions, and been translated into several European languages. In consequence of the boldness with which the writer attacked the opinions of his time, he was suspended for two years from his clerical functions, and became the object of attack to many champions of the older ways of thought.

BEL, or BEHL (BELIUS), MATTHIAS, an eminent Hungarian historian, was born in 1684 at Orsova, and completed his education at the University of Halle. On returning to Hungary he was appointed in 1714 minister to the evangelical church at Neusohl, and in 1719 rector of the Lyceum at Presburg, where he resided till his death in 1749. He held for some years the honorary post of historiographer to the Emperor Charles VI. His works, which are of much value both for their materials and treatment, especially of early Hungarian history, are—1. '*De Vetere Literatura Hunno-Scythica exercitatio*,' 4to, Leipzig, 1718; 2. '*Hungariæ antiquæ et novæ prodromus*,' folio, Nürnberg, 1723; 3. '*Adparatus ad Historiam Hungariæ, sive Collectio Miscella Monumentorum*,' Presburg, 1735—46; 4. '*Notitia Hungariæ novæ historico-geographica*,' in IV. partes divisa, 4 vols. folio, Vienna, 1735—42, a work of great erudition, but unfortunately left unfinished at the author's death, the portion of the 2nd part completed (only 71 pages) was published, but is now rarely met with: an abridgment of the work has been several times reprinted; a 4th ed. in 8vo appeared at Posen in 1792; 5. '*Scriptores rerum Hungaricarum veteres ac gemini cum Prefatione M. Belii, ex recens. J. G. Schwandtneri*,' 3 vols. fol. 1746—48. To him is also attributed '*Der Ungar. Sprachmeister*,' Presburg, 1728.

* BELCHER, SIR EDWARD, who belongs to an old English family, is best known as an intrepid Arctic voyager and as an eminent hydrographer. He was born in 1799. In 1812 he entered the navy, and in the four succeeding years saw active service on the coasts of France and Spain, at Gaeta, and off Algiers. On August 27, 1816, he shared in the battle off the last-mentioned place, which was probably one of the sharpest actions ever fought by the British navy. In 1818 he was promoted to a lieutenancy, and from 1825 to 1828 he accompanied Beechey, who was then commander of the '*Blossom*,' as assistant surveyor. Soon after his return home he himself was made a commander, and as such he carried on some survey work on the coast of Africa in the '*Etna*.' In 1833 he married a Miss Jolliffe, just before which event, however, he had carried out some special service on the river Douro. In the year of his marriage he was appointed to the command of an Arctic expedition, well known from the two ships which formed the squadron, the '*Terror*' and '*Erebus*.' In 1836 he took the command of the '*Sulphur*,' in which he sailed round the world, and materially aided in the successes of the British force in China by his surveying operations. This voyage occupied him about six years, and a full account of it is given by himself in his '*Narrative*,' published in 1843. His services in China were rewarded by his promotion to a captaincy in 1841, and by knighthood in 1843. In the last-mentioned year he was transferred to the '*Samarang*,' which was stationed in the East Indies for surveying purposes from 1843 to 1846. He published an account of this voyage in his '*Narrative*,' issued in 1848, and records his struggle with the pirates of Borneo, in the course of which he was severely wounded. From 1852 to 1854 he was engaged in prosecuting the search for Sir John Franklin, the results of which expedition will be found in his book,

entitled 'The last of the Arctic Voyages: being a Narrative of H.M.S. Assistance, in search of Sir John Franklin during 1852—54. With Notes on the Natural History by Sir John Richardson, Professor Owen, T. Bell, J. W. Salter, and Lovell Reeve,' 2 vols. 1855. In 1861 he became rear-admiral, and in 1866 a vice-admiral, since which last date he has been on the retired list of officers. He is a fellow of the Royal Geographical and other Societies. In 1867 he was made a K.C.B. During his lifetime he has had intimate communication with the natives of Arctic North America, and has thoroughly informed himself of their ways of life and modes of thought. The observations made by him to the Ethnological Society, to the British Association, and other scientific bodies, did much towards explaining the use of those pre-historic implements of Western Europe, about which so much interest is now taken.

BELGRADO, GIACOMO, a distinguished Italian mathematician, was born at Udine on the 16th of November, 1704. He was a Jesuit, and was for several years professor of mathematics at Parma, and also director of the observatory there. On the suppression of the Order of the Jesuits he retired to Bologna, where he was nominated rector of the College of Sta. Lucia. He was a member of the Institute of Bologna, and a corresponding member of the French Institute. He died on the 17th of April, 1789. Belgrado had the reputation of being one of the best mathematicians of his time and country. He wrote much on his proper science; but he also wrote on archæology; some verses; and on theology, one of his themes being a demonstration of the existence of God by the theorems of geometry. His writings are chiefly in Latin; the following are among the more important:—*Ad disciplinam mechanicam, nauticam et geographicam*, 4to, Parma, 1741; *De lignorum equilibrio Acroasis*, 4to, 1742; *De gravitatis legibus*, 4to, Parma, 1744; *De Corporibus elasticis disquisitis*, 4to, 1747; *De Analyseos vulgaris usu in re physica*, 2 vols. 4to, Parma, 1761; *Theoria cochleæ Archimedis*, 4to, 1767.

BELIN, JEAN ALBERT, Bishop of Bellay, celebrated as a popular preacher and writer, was born about 1610, at Besançon. He was received into the Order of Benedictines in 1630; was attached first to the Abbey of Cluny; afterwards to the Priory of la Charité-sur-Loire; and then to various houses in Paris and elsewhere, in every place attracting great numbers to his sermons. From time to time he put forth one and another religious publication, some being of a semi-mystical turn, others exhibiting a singular admixture of science and philosophy with the popular theology, others trusting to an attractive title. By these, and, as is said, some personal services, he gained the friendship of Colbert, who in 1666 made him Bishop of Bellay. He died in 1677. The character of his writings is tolerably indicated by their titles:—*Les Emblèmes Eucharistiques*, 8vo, Paris, 1647; *Les Fidèles Pensées de l'Âme pour la porter à son devoir*, 8vo, 1647; 12mo, 1660; *Les Solides Pensées de l'Âme*, 12mo, 1648; *Pierre Philosophale*, 1653; *Aventures du Philosophe inconnu à la recherche et invention de la Pierre Philosophale*, divisées en quatre livres, au dernier desquels il est parlé si clairement de la manière de la faire, que jamais on n'en a parlé avec tant de candeur, 12mo, 1664; 1674; *Preuves convaincantes des vérités du Christianisme*, 4to, 1666; *Traité des Talismans, ou Figures Astrales, dans lequel est montré que leurs effets et vertus admirables sont naturelles; ensemble la manière de les faire et de s'en servir avec profit*, 12mo, Paris, 1671, and several times reprinted.

BELL, ROBERT, a prolific writer, was born at Cork in 1800, and completed his education at Trinity College, Dublin. At Dublin he wrote for magazines and newspapers, composed a couple of plays, and assisted in founding the Dublin Historical Society. Removing to London, he met with ready employment as a journalist, having a fluent pen, and a genial manner. For some years he edited the 'Atlas' newspaper, and on one occasion successfully defended in person an action for libel brought against the proprietors of the journal by the Lord Chancellor Lyndhurst. For more than thirty years Mr. Bell continued to lead the life of a busy literary man, contributing to various periodicals, sometimes editing one, and diversifying his journalistic labours by writing a history or a biography, a play or a novel. Commissioned by publishers, and written for the day, none of his writings are likely to have more than an ephemeral existence, but they are favourable specimens of their class, and creditable to their author. Among the best, perhaps, are those written for 'Lardner's Cyclopædia,' the 'Lives of British Poets,' 1 vol.; 'Lives of British Admirals' (written to complete the series commenced by Southey), and 'History of Russia,' 3 vols.

Mr. Bell also wrote a 'Life of George Canning,' and edited 'Memorials of the Civil War,' a selection from 'The Fairfax Correspondence,' 'Wayside Pictures in France, Belgium, and Germany,' the novels entitled 'The Ladder of Gold,' and 'Hearts and Altars,' and the five-act comedies of 'Marriage,' 'Mothers and Daughters,' and 'Temper' sufficiently illustrate his industry and versatility. But the work by which he will be longest remembered is probably his 'Annotated Edition of the English Poets,' of which 29 volumes were published in 1854 and following years. Mr. Bell was a Fellow of the Society of Antiquaries and of the Royal Society of Literature, and a member of the committee of the Literary Fund. Of a frank, obliging, and social disposition, he was generally and deservedly esteemed. He died on the 12th of April, 1867, in his 68th year.

* BELLANGÉ, JOSEPH-LOUIS-HIPPOLYTE, a distinguished French historical painter, was born at Paris on the 17th of January, 1800. At an early age he gave strong indications of a love for art; his taste was carefully cultivated, and his artistic education was completed in the atelier of Gros, on whose style his own was formed. From the first he has pursued with almost undeviating consistency a line of art very popular in France, though little practised in this country, that dealing with the scenes and circumstances of war. He has painted a large number of the battles of the republic and the empire, always doing ample honour to his countrymen. But besides battles proper—such as 'The Battle of Wagram,' 'The Battle of Fleurus,' 'Corogne,' 'Ocagno' (which are in the Museum of Versailles), 'Alma,' 'Magenta,' and the like—he has painted various incidents of war, as an 'Episode de la Retraite de Russie,' 'Le Lendemain de la Bataille de Jemmapes,' with occasionally such subjects as 'Le Retour de l'Île d'Elbe,' and 'Episode du Retour de l'Île d'Elbe.' Two thoroughly characteristic examples of his pencil were exhibited at the International Exhibition of 1862—'Un carré d'infanterie republicaine repoussant une charge de dragons autrichiens (Campagne du Rhin, 1796),' and 'Les deux Amis (Sébastopol, 1855).' The latter, a painful but powerful picture, attracted very general attention. M. Bellangé obtained second-class medals (genre historique) in 1824 and 1855; was made knight of the Legion of Honour in 1834, and officer in 1861.

BELLAY, GUILLAUME DU, known also by his territorial designation of Lord of Langey, and celebrated as a soldier and diplomatist, was born in 1491 at the Château de Glatigny, near Montmirail. He was the eldest son of Louis du Bellay, who was of an ancient and noble family, originally of Anjou. Embracing a military career, he became celebrated at once for his skill and his courage, being esteemed by some the greatest captain of his age. He was especially noted for his adroitness in acquiring information, whether for purposes of state or warfare. He penetrated into an enemy's designs with rare address, and paid liberally for the intelligence he received of the most secret councils of Charles V. and his generals. He has the credit of having procured from some of the universities of France a judgment in favour of the divorce of Henry VIII. from Catherine of Aragon. In order to cement an alliance between Francis and Henry against Charles V., Du Bellay was sent upon several embassies into Germany, England, and Italy, where his services were as useful as they had been on the field of battle; and in acknowledgment of them he received the knighthood of St. Michael, was made lieutenant-general of the armies of Italy, and viceroy of Piedmont, A.D. 1537, where he took several towns from the Imperialists. He discovered in 1541 the web which had been woven to take the agents whom Francis I. sent to Venice and Constantinople; and it was in spite of the warnings which he furnished that they rushed upon the fate prepared for them. At the end of the year 1542, being in Piedmont, and having some important intelligence which he was desirous of communicating to the king in person, Du Bellay set out from Turin, and, in consequence of his extremely infirm state of health, had a litter prepared for his journey. The exertion of travel increased his indisposition, so that he was obliged to stop at St. Saphorin, or St. Symphorien de Lay, a small town about 24 miles north-west of Lyon, where he died on the 9th of January, 1543. He was buried in the cathedral church of St. Julien, in the ancient city of Mans, where his brothers, Jean and Martin, erected to his memory a noble monument, bearing the following inscription:—

Cy git Langey, dont la plume et l'épée
Ont surmonté Cicéron et Pompée.

Although wielding more than a courtier's influence, Du Bellay

did not conform to the general type of courtier, for his manners were remarkable for their plainness and brusquerie. Yet he was a scholar, and gave evidence of his abilities and genius as a writer. Charles V. used to say of him "that Langey's pen had fought more against him than all the lances of France." In his 'Memoires,' published jointly with those of his brother Martin in 1569, Du Bellay is betrayed by his loyalty into disparaging Charles V. in comparison with his own sovereign, Francis I. He was the author of an 'Epitome de l'antiquité des Gaules et de France,' 4to, Paris, 1556, a work which was reprinted in 1587. Another work has been ascribed to Guillaume du Bellay, which has gone through many editions, and which was first published under the title of 'Instructions sur le fait de la Guerre, extraictes des livres de Polybe, Frontin,' &c., fol. Paris, 1548; and of which an English version, translated by "P. I've, Gent.," appeared with the title of 'Instructions for the Warres, describing the method of military discipline,' &c., 4to, London, 1589. But this work is more properly referred to Raymond de Pavie, Baron de Fourquevaux, a Gascon gentleman, and a gendarme in the company of the Sieur de Négrepellisse in 1528, who, perhaps, might have served under Du Bellay in his Italian wars.

BELLAY, JOACHIM DU, a celebrated poet, known as "the French Ovid," was born about 1524, at the Château de Lire in Anjou. He was the son of Jean du Bellay, Sieur de Gonor, and the nephew of Cardinal du Bellay, and Guillaume du Bellay, Lord of Langey. His education was neglected by an elder brother to whom it was committed, and he had scarcely reached manhood when it became his own turn to undertake the guardianship of a nephew. The affairs of this relative were deeply embarrassed, and the lawsuits with other vexations that preyed upon Joachim du Bellay, brought on an illness of two years' continuance. To beguile time and pain, he read the Greek, Latin, and French poets, and produced some compositions of his own, which procured him access to Francis I., Henry II., and Marguerite of Navarre. Although an ecclesiastic, Du Bellay conformed to the fashions of the gay world, and published 'Cantiques,' which he had produced in honour of a lady whose name, Viole, he rendered under the anagram of Olive. Upon the invitation of Cardinal du Bellay, Joachim repaired in 1549 to Rome, where he passed three pleasant years, at the end of which he returned to France on family business. Ill-natured reports alienated the Cardinal, and brought on Joachim a return of his old malady; and in pity of his suffering condition his cousin-german, Eustace du Bellay, Bishop of Paris, appointed him to a canonry in the church of Notre Dame, A.D. 1555. He died at Paris of apoplexy on the 1st of January, 1560, at the moment when Cardinal du Bellay was on the point of preferring him to the see of Toulouse. His principal works are a series of sonnets on the 'Antiquités de Rome, contenant une générale description de ses monuments et comme une déploration de sa ruine,' 4to, Paris, 1558, to which he added 183 Sonnets with the title of 'Regrets,' Poems in French and in Latin; and a 'Défense et Illustration de la Langue Française,' which is the only work the author wrote in prose, and is regarded as one of the most remarkable books in the language. A recent edition of it was published by Ackermann in 1849.

BELLEAU, RÉMY, one of the seven versifiers, Ronsard being the principal, who were known in the 16th century as the 'Pleiade Française,' was born in 1528 at Nogent-le-Retrou (Eure-et-Loire). He lived in the family of the Marquis d'Elbeuf, who entrusted to him the education of his son. He died at Paris on the 6th of March, 1577. Ronsard styled him Nature's Painter, and there is less of fantastic glitter in his poetry than in that of the other pleiades. His 'Bergeries' were most admired by Ronsard, and they are very pretty pastorals in the French taste, whilst his Anacreontics are not at all in the Greek. There are besides an 'Epithalame sur le mariage de M. le Duc de Lorraine et de Madame Claude, fille du Roy,' 4to, Paris, 1559; 'Larmes sur le Trepas de René de Lorraine et de Louise de Rieux, marquis et marquise d'Elbeuf, ensemble le Tombeau de François de Lorraine, Duc de Guyse,' 4to, 1566, and other occasional pieces; also 'L'Innocence prisonnière, l'Innocence triomphante, la Vérité fugitive,' 8vo, 1561; 'Les Amours et nouveaux échanges de Pierres précieuses, discours de la vanité pris de l'ecclésiaste, eglogues sacrées prises du Cantique, &c.,' sm. 4to, 1576; 'La Reconnuë,' a comedy, 8vo, 1577, several times reprinted; and 'Dictamen metricum de bello Huguenotico et reistrorum pigliamine ad sodales,' a macaronic rhyme regarded as among the most successful of its class. The poetic works of Rémy Belleau were published in 2 vols. 8vo, Paris, 1578; 12mo, 1585, and 2 vols. 12mo, Lyon, 1592.

BELLEFOREST, FRANÇOIS DE, French poet and mis-

cellaneous writer, was born in November, 1530, at Sarzan, near Samatan, in Guienne. Having lost his father early, he was taken under the protection of Marguerite, Queen of Navarre, and at the proper age sent to study for the bar under the best professors at Bordeaux and Toulouse. But tiring of the arid details of institutes and pleadings, he abandoned the law and took to the easier profession of verse-making. Sonnet in hand, he wandered from château to château, always well received and liberally feasted, and paying in complimentary rhymes for the hospitality vouchsafed to him. Thus he idled away pleasantly enough some seven or eight years in the province of Toulouse, when, finding that he was as poor as ever in purse and little richer in fame, he determined to try his fortune in Paris. There he was welcomed as a brother singer by Ronsard, Bellay, Baif, and Vigenere, and in good time admitted into the constellation of the Pleiade. At Paris, as in Toulouse, making verses "pour plaire aux Dames et Damoiselles," he was, says his friend Du Verdier, "caressed by princes, admired by nobles, and sought after by all the best people in the realm." But here again he found that, however courted and feasted, he obtained little wealth, and so he was constrained, though much against his inclination, to leave the salons of the princes, nobles, and other great people, and turn to the booksellers, who, though they proved hard task-masters, paid so handsomely for the work they ordered that Belleforest was not only able to live well and put money in his pocket, but might, had he been so minded, have maintained a very pretty establishment. Belleforest seems to have been rarely endowed with the qualities of a successful 16th (or for the matter of that 19th) century bookseller's author. He knew no subject thoroughly, but he knew something of a good many, and was ready to write at a moment's notice on any one, or half-a-dozen, as required. And as nothing came amiss to him, he always finished off his task at a heat. It used to be said, as Bayle tells us, that he had a lot of moulds in which he cast his new books. Poems, romances, dissertations, sacred, profane, serious, and amusing matter flowed with equal facility from his pen. But as Chaudon writes somewhat sourly, "an historian without discernment and without taste, he defaced whatever he touched; a poet of the hindmost rank, he crawled at the base rather than climbed the heights of Parnassus;" he wrote because he was incapable of doing anything else, and sent forth a flood of new books without anything new in them. But if Belleforest added nothing permanent to the literature of France, he is the most characteristic illustration of a special phase of French literature in the 16th century, and the student of French literary history would make a grave mistake who overlooked him. Belleforest was appointed historiographer of France, but was dismissed for having performed its functions with too little regard to exactitude. He died poor on the 1st of January, 1583. Croix du Maine and Du Verdier Vau-Privas give long lists of Belleforest's writings. The following may serve as specimens:—'Chant Pastoral sur les Noces de Philippe d'Autriche roy des Espagnes et Madame Elizabeth, fille aînée du roy tres Christien Henri II. et d'Emmanuel Philibert duc de Savoye, avec Madame Marguerite fille et sœur des roys François I. et Henri II.,' 4to, Paris, 1559; 'La Chasse d'Amour, avec les fables de Narcisse et de Cerbere,' sm. 8vo, Par. 1561; 'La Pastorale Amoureuse, contenant plusieurs discours nō moins prouffitables que recreatifs, avec des descriptions de paysages,' 8vo, 1569; 'Arraisonnement fort gentil et profitable sur l'infelicité qui suyt ordinairement le bonheur des Grans: avec un beau discours sur l'excellence des Princes du sang de France, qui gouvernent l'estat du Royaume,' 8vo, 1569, reprinted, with altered titles, 1572 and 1585; 'Discours des Présages et Miracles advenuz en la personne du Roy, et parmy la France, dès le commencement de son règne,' 8vo, 1568, reprinted according to Brunet with somewhat different titles in 1572 and 1576; 'Histoire des Neuf Rois de France qui ont eu le nom de Charles,' folio, Paris, 1568, a sort of forecast of the Strickland series, but it is somewhat curious that none of our Belleforests have thought of the 'Four Williams' or 'Eight Henries' as the subject of an attractive history; 'Les Grand Annales et Histoires générales de France dès la venue des Francs en Gaule jusques au règne du roi Henry III.,' 2 vols. folio, Paris, 1579. This, which is Belleforest's most important contribution to history, was published, with a continuation to 1591 by Gabriel Chappuis, in 1600, and again with a continuation to 1620: as an authority it is not of the smallest value. Besides these, there is a crowd of compilations, translations, and verselets to which Belleforest's name is attached.

BELLICARD, JÉRÔME-CHARLES, French architect, draftsman, and engraver, was born at Paris, on the 21st of

February, 1726. Having gained the grand prize in architecture, 1747, he went to Rome, where, in addition to the usual architectural studies, he gave much time to engraving, in which he became a proficient, and published, about 1750, many views of Rome and its vicinity. He also published the first full description of the discoveries made at Herculaneum, then newly exhumed, 'Observations sur les Antiquités de la Ville d'Herculaneum, avec quelques réflexions sur la Peinture et la Sculpture des Anciens et une courte description des Environs de Naples,' 8vo, with engravings, 1754, 2nd edition, 1757: an English translation followed almost immediately upon the publication of the original. On his return to Paris he was nominated member and professor at the Royal Academy of Architecture, and appointed comptroller of the royal buildings. He made numerous drawings and engravings, and published, among other things, the 'Loge des Chances de Lyon,' and various of his own designs. But he erected no building of consequence, and his last years were embittered by poverty, the result of his addiction to gaming. He died on the 27th of February, 1786, leaving unfinished a work on which he had been employed for over ten years—'Architectographie, ou Cours Complet d'Architecture.'

BELLORI, GIOVANNI PIETRO, an eminent Italian archaeologist, was born at Rome in 1615. From his youth Bellori devoted himself to the study of art and antiquity, in which he was encouraged, and at the outset greatly assisted, by his uncle, Francesco Angeloni, secretary to Cardinal Aldobrandini, himself a good antiquary, and author of an account of the coins of the Roman Emperors, and of the 'Historia di Terni.' Bellori wrote many works of great use in their day, and which are still often referred to with advantage. He was nominated Antiquario di Roma by the Pope, Clement X., and Queen Christina of Sweden, then resident at Rome, appointed him her librarian and keeper of her cabinet of antiquities. He died at Rome in 1696. Most of his works are in Latin, but the two now most valued are in Italian—'Vite de' Pittori, Scultori, ed Architetti Moderni,' part i., with 12 portraits engraved by Bloemart, 4to, Rome, 1672—75; this is a valuable and pleasantly written book, but remained unfinished at the author's death: an augmented edition appeared at Rome in 1728, and another, in 3 vols. 8vo, at Pisa in 1821; 'Descrizioni delle Immagini dipinte da Raffaello d'Urbino nel Vaticano,' &c., small folio, with a portrait of Raffaele and vignettes of his designs, Rome, 1695: of this work, which has always been a favourite with artists, an augmented edition was published at Rome in 1750, and another, still further enlarged, in 1821. Among the more noteworthy of Bellori's other works are—'Icones et segmenta illustrium e marmore tabularum que Romæ extant,' large folio, Rome, 1645; 'Le Gemme Antiche figurate di Leonardi Agostini, con l'annotazioni di G. P. Bellori,' 4to, Rome, part i. 1657, part ii. 1670; 'Notæ in Numismata tum Ephesiæ, tum aliarum urbium apibus insignita,' 4to, Rome, 1658; 'Columna Antoniniana a Petro Sante Bartolo delineata et incisa, cum notis excerptis ex declarat. J. P. Bellorii,' oblong fol. with 80 plates, on which Bellori's explanations are engraved; 'Fragmenta vestigii veteris Romæ ex lapidibus farnesianis, nunc primum in lucem edita, cum notis Bellorii,' with 20 engravings, fol. Rome, 1673; reprinted in the 4th vol. of Gronovius' 'Thesaurum Ant. Rom.'; 'Scelta di Medaglioni più rari nella Bibliotheca del Cardinale Gasparo Carpegna,' 4to, Rome, 1679; 'Admiranda Romanarum Antiquitatum ac veteris sculpturæ vestigia, a P. Sante Bartolo del. et incisa, notis J. P. Bellorii illustrata,' with 81 plates, oblong folio, Rome, n. d., 2nd ed., with 84 plates, 1693; 'Le Pitture antiche del Sepolcro de' Nasoni, designate da P. Sante Bartoli,' with 35 plates, folio, Rome, 1680, a splendid work, the plates being regarded as Bartoli's finest productions; 'Historia Augusta da Giulio Cesare a Constantino il Magno, illustrata da Francesco Angeloni et J. P. B.,' &c., fol. Rome, 1685; 'Veterum Illustrium Philosophorum, Poetarum, Rhetorum et Oratorum imagines, vetustis nummis, gemmis, hermis, marmoribus aliisque antiquis monumentis desumptæ,' with 90 plates, Rome, 1685; 'Expositio Symbolici Dædæ Cypriæ simulacri,' fol. Rome, 1688; 'Veteres Arcus Augustorum triumphis insignes,' &c., with 52 fine plates by Bartoli, large folio, Rome, 1690, one of Bellori's most important works. The same plates were employed in the 'Admiranda Romanarum,' noticed above. Several of Bellori's works were posthumous; among them may be noticed—'Le Antiche Lucerne Sepolcrali, figurate, raccolte dalle cave sotteranee e grotte di Roma, disegnate ed intagliate da P. Santi Bartoli, con l'osservazioni di G. P. Bellori,' 3 parts, in 1 fol. vol. with 116 (some copies 12 more) plates, Rome, 1691, 2nd ed., 1729, Latin version, by L. Beger, 1702; 'J. P. Bellorii Adnota-

tiones, nunc primum evulgatæ in duodecim priorum Cæsarum numismata, ab Enea Vico olim edita, noviter additis eorundem Cæsarum imaginibus,' with 84 plates, folio, Rome, 1730: this was edited by B. Amidei. G. Bottari published an imaginary conversation on the arts of design between Bellori and Carlo Maratti—'Dialoghi sopra le tre Arti del Disegno,' 8vo. Lucca, 1754.

BELOE, WILLIAM, the son of "an eminent china-man" of Norwich, and both of whose parents were estimable for their virtue and ability, was born in 1756. After receiving the rudiments of education at a good school at Norwich, he was placed under the care successively of the Rev. Matthew Raine, of Hartforth, near Richmond, Yorkshire, and of the celebrated Dr. Parr, then residing at Stanmore, in Middlesex. He became a member of Bene't, or Corpus Christi College, Cambridge, where he obtained the Declamation Prize, and took the degree of B.A. in 1779. Upon the invitation of Dr. Parr, who in 1778 had become head-master of the grammar-school at Norwich, Mr. Beloe accepted the post of under-master in that institution, and held this situation for about three years. In this interval he married the daughter of William Rix, Esq., town-clerk of London. Whilst in Norfolk he acted as curate of Earham, near Norwich, and was afterwards preferred to the living. But finding the emoluments of his vicarage insufficient, he removed to London, where he entered upon the pursuit of literature with great zeal and industry. He was elected master of Emanuel Hospital, Westminster, and continued so for upwards of 20 years. In 1792 he was made F.S.A., and in 1796 was presented by Lord Chancellor Loughborough, afterwards Earl of Rosslyn, to the rectory of Allhallows, London Wall. On the 24th of September, 1800, he was collated by Bishop Pretymann to the prebend of Milton Manor, in the cathedral church of Lincoln; and on the 8th of June, 1804, Beilby Porteus, Bishop of London, collated him to the stall of St. Pancras in St. Paul's Cathedral. In 1804, on the recommendation of the Honourable Shute Barrington, Bishop of Durham, to whom he afterwards dedicated the first two volumes of his 'Anecdotes,' Beloe was appointed under-librarian in the British Museum; which situation he lost by an act of treachery and fraud on the part of a plausible person who purloined valuable literary property which was under Beloe's charge, so that it "was thought that the good government of the institution demanded his dismissal." Thus, further to quote substantially his own words, "all his literary and domestic plans were, in one unexpected moment, overthrown, and he exchanged peace, competence, and a situation most congenial to his feelings and pursuits, for loss, anxiety, uncertainty, and, above all, dread of unmerited obloquy." The obloquy, however, he was glad to confess, was spared him; and he passed through the ordeal without the sacrifice of reputation. Yet the disappointment was acutely and disastrously felt; and "a constitution of body, delicate and irritable to an unusual degree, proved unable to sustain the repeated shocks of grief and vexation, which sound religion had disciplined the mind to bear; and in his latter years physical disease of a painful and incurable kind was added to his other sufferings." His intellect, however, remained unclouded, and his literary activity almost unslackened. In the latter part of March, 1817, he was seized with an attack which terminated in his death on the 11th of April, when he "had very recently entered into his 60th year. He was buried in his own church of Allhallows, London Wall, attended only by his sons, and three or four select friends."

Beloe's works are very numerous, and embrace his 'Ode to Miss Boscawen,' 4to, 1783; 'The Rape of Helen, from the Greek of Coluthus, with Notes,' 4to, London, 1786; 'Poems and Translations,' 8vo, London, 1788; 'Alciphron's Epistles, translated from the Greek,' 8vo, London, 1791, produced jointly by Mr. Beloe and Mr. Monro; 'The History of Herodotus, translated from the Greek, with Notes,' 4 vols. 8vo, London, 1791, a work which had a very favourable reception, and which has gone through several editions, but of which the laurels are at present somewhat faded; 'The Attic Nights of Aulus Gellius, translated into English,' 8vo, 1795, to which Dr. Parr contributed a learned preface; 'Miscellanies, consisting of Poems, Classical Extracts, and Oriental Apologues,' 3 vols. 8vo. London, 1795; 'Translation of the Arabian Nights' Entertainments, from the French,' 4 vols. 12mo.; 'Joseph, translated from the French of M. Bitanbé,' 2 vols. 12mo.; 'A Sermon preached on Wednesday, October 19th, 1803. Being the day appointed for a general fast,' 8vo, London, 1803; 'Anecdotes of Literature and Scarce Books,' 6 vols. 8vo, London, 1807—12, a valuable work, indicative at once of great research and of the fact that its author was a disappointed

valetudinarian; and 'The Sexagenarian, or Memoirs of a Literary Life,' London, 1818, which was a work of posthumous publication, and edited by a friend. Mr. Beloe was also a frequent contributor to the 'Gentleman's Magazine,' and was from May, 1793, to December, 1813, joint conductor with Archdeacon Nares of the 'British Critic,' of which they, with the publishing house of Rivington, were also the proprietors. Another of Beloe's joint labours was upon a 'Biographical Dictionary,' in 15 volumes, 8vo, which he undertook in conjunction with the Rev. W. Tooke, Mr. Morrison, and the Rev. R. Nares.

BELTRAFFIO, GIOVANNI ANTONIO, a celebrated Italian painter, was born at Milan in 1467. He was a pupil of Leonardo da Vinci, whose manner he imitated. His pictures are characterised by exceeding gentleness of expression and refinement of execution, bordering often on tameness. Like his master, he was fastidious and painted little, and his works are consequently rare. The National Gallery, London, possesses a very fine 'Madonna and Child' (No. 728) by him. The figures are life-size and very beautiful, but hardly divine. There is also in the Louvre a good 'Madonna and Child' (No. 71), somewhat larger than that in the National Gallery, and known as 'The Casio Virgin.' Beltraffio died at Milan on the 15th of June, 1516, aged 49.

* **BENDEMANN, EDUARD**, German historical painter, chief of the Düsseldorf School, was born at Berlin, on the 3rd of December, 1811. The son of a banker he received a good general education, and evincing a strong passion for painting he was placed as a pupil with W. Schadow. His progress was great, and in 1832 he made his début at the Berlin Exhibition with a large picture, 'The Mourning of the Jews by the Rivers of Babylon,' which excited much attention, was awarded a prize of the highest class, was purchased by the king for the museum at Cologne, was engraved by Ruscheweyh, and lithographed by Weiss and Schreiner. 'Girls at the Fountain' followed, and then another large and elaborate work, 'Jeremiah lamenting over the Ruins of Jerusalem,' which gained a medal of the first class at the Paris Salon in 1837, was lithographed by Weiss, and purchased for his private collection by the king of Prussia. Bendemann now turned aside for awhile from high art to works of a lighter character, like 'Harvest,' 'Shepherd and Shepherdess,' for Count Raczynski, and the 'Daughter of a Servian Prince,' in illustration of poems by Uhland and Herder. In 1838 he was appointed professor and member of the council of the Academy of Arts at Dresden. He now recurred to the more ambitious subjects of his earlier days, his style however having gained in strength, and his technical knowledge being enlarged by a visit to Italy. The great pictorial undertaking of his residence in Dresden was the decoration of the royal palace with a series of large paintings in fresco. On the walls of the throne room he filled four large compartments with the leading events in the life of the Emperor Henry, the founder of the city, and four other compartments with symbolical subjects, adding elsewhere a series of portraits of distinguished men of all ages, and a frieze symbolising the life of man. The decoration of this room was treated in the spirit of the German middle-ages. The great ball-room, on the other hand, he filled with subjects from the heathen mythology chiefly of a festal character. The Hall of Alliance he decorated with religious subjects. His other paintings of this period include a fresco of 'Poetry and the Arts,' a portrait of the Emperor Lothar II., for the Römer, or old Palace of Frankfurt, and 'Ulyses and Penelope' for the Cassel Museum. He also designed the monument of Sebastian Bach, erected at Sandstein, under the superintendence of Knauer. In 1859 he was appointed director of the Düsseldorf Academy, a dignity to which he seemed naturally entitled on the retirement of his father-in-law Schadow. He has since painted several works which have fully sustained his previously high reputation: notably 'The Death of Abel,' for Naumburg and a frieze for the Realschule of Düsseldorf. He has also painted some portraits which have been greatly admired, as the Countess von Hohenzollern-Sigmaringen; his wife, Schadow's daughter, whom he married in 1838; and Wilhelm von Schadow for the Antwerp Academy. Bendemann is remarkable for breadth of treatment, power combined with sweetness of expression, and freedom from the excessive academical frigidity of some eminent contemporary German historical painters.

* **BENEDEK, LUDWIG VON**, a celebrated commander in the Austrian service, and son of a medical professor, was born at Odenburg, in Hungary, in the year 1804. He received his education at the Imperial Military Academy of Neustadt, which he quitted at 18 to join the army as a cadet. He received his

first commission in 1831, was promoted to be second lieutenant, placed on the staff, and sent to Italy. In 1835 he was a captain, five years later he was advanced to the rank of adjutant-major, and left Italy for Poland, where he manifested great tact and clemency. In 1843 he attained the rank of lieutenant-colonel. The breaking out of the insurrection in Galicia in February, 1846, gave him the opportunity of displaying his courage and conduct as a commander; and, entering the western district with a commission from the governor of the province, the Archduke Ferdinand d'Este, whose adjutant he was, his operations in and around Wieliczka enabled General Collin to act on the offensive and to take Podgorze by assault. This capture involved the general pacification of Galicia, and for his important services Benedek was rewarded with the insignia of the Order of Leopold. In August, 1847, he obtained the full rank of colonel, and received the command of the regiment of Gyulai Lancers, at the head of which he next year joined the army of Italy. Here he took part in the memorable campaign under Radetzky, and distinguished himself by his conduct of the retreat from Milan to Verona, at Osone, and especially at the battle of Curtatone, where, being in command of a brigade, his prudence and courage procured for him an honourable mention by Marshal Radetzky, and, later, the Cross of the Order of Maria Theresa. He won fresh honours in the campaign of 1849 by his brilliant occupation of Mortara on the 21st of March, and his important share in gaining the decisive battle of Novara on the 24th. On the 3rd of April, 1849, he was promoted to the rank of major-general in the Heynau brigade, and being transferred to the army of the Danube, took an active part in the military events of Hungary. He led the vanguard at Raab and Oszöny, and was slightly wounded at Uj-Szegedin, and more seriously by the fragment of a shell at Oza-Ivany. Both in Hungary and in Poland, Benedek's name, from the necessity of his duty, became connected with many proceedings little in accordance with his real nature. But though he was most exact in obeying orders once received, his voice in the council-chamber was always heard in favour of conciliation and mercy. At the conclusion of the Hungarian war he was appointed to be chief of the quartermaster-general's staff of the second army of Italy under the veteran Radetzky. In 1853 Benedek became Lieutenant-Field-Marshal, and received, in view of the possibility of Austria taking part in the Russian war, the command of the fourth army corps in Lemberg. In 1859, at the outbreak of the war of Italian independence, he was appointed to the command of the eighth army corps; and, though for a time his energy was spent in unimportant skirmishes, he distinguished himself at Solferino, where the right wing of the Austrians, which was under his command, had for an instant the advantage over the left wing of the allies. He unwillingly obeyed the emperor's command to retreat behind the left bank of the Mincio, and the peace of Villafranca filled him with vexation. Though the war of 1859 ended disastrously for Austria, Benedek made himself both known and dreaded by the French and Italian troops; and at the cessation of hostilities he remained in Venetia at the head of the Austrian forces. For a few months in 1860 he acted as master of the ordnance and governor-general of Hungary, which he vacated upon his appointment to the chief command of the Austrian army in Italy. In the late German war Benedek was summoned by the Emperor to be commander-in-chief of the Austrian army, and fixed his headquarters successively at Pardubitz and Olmütz, from the latter of which he issued an order of the day full of confidence in the successful termination of the struggle. But, impeded from the first by both actual and diplomatic clogs upon his movements, and by the fact of his previous war-training having been chiefly in the plains of Lombardy; failing to appreciate the improved tactics of the Prussians, and the increased power of their weapons; and over-estimating the capabilities of his own army, Benedek sustained on the 3rd of July, 1866, the crushing defeat of Sadowa, and was soon afterwards superseded by the Archduke Albert.

In person General Benedek is of the middle height, spare, wiry, and exceedingly active; of upright and military bearing, with finely sharp-cut features, and a high aquiline nose, and, like most of the continental officers, much shorn and shaven, with the exception of a pair of thick moustaches. He has quick, penetrating eyes, and his manner is distinguished by the courtesy and attractive mixture of gentleness, high courage, and gaiety, which used to be the mark of the old school. He boasts of being every inch a Hungarian, and in his staff appointments he was accustomed to show a marked preference for Poles and Hungarians over Germans. Whether in success or adversity, in his

private or his public character, the reputation of General Benedek for scrupulous honour remains unshaken.

* **BENEDEN, PIERRE JOSEPH VAN**, an eminent Belgian zoologist, but about whom we can find very few easily accessible biographical facts. In one of his early papers he alludes to M. Stoffels, a chemist at Malines as his master and guide. In 1835 he was the keeper of the natural history museum at Louvain, but how long before he had filled this post we are not aware. In this year or in the following he was appointed professor of zoology at the Catholic University of Louvain. It was also in 1835 that his earliest paper was published. The subject was *Dreissena*, a genus of mussel-like shells which he was the first to establish. The paper indicates a full and comprehensive mode of treatment, which characterizes most of his later productions. In it he urges the importance of drawing generic characters from the soft as well as the hard parts, as he was convinced these last alone could not be exclusively relied on. This idea was more fully developed in 1836 in his paper on *Helix algira*. He notices the great increase in the number of species of *Helix* during the few previous years, and remarks that the characters of the 1200 or more species then known were based upon the shell. He compared *Helix algira* with *H. pomatia* for the purpose of discovering what was the value of the characters afforded by the soft parts. He came to no noteworthy conclusion, recognising the necessity of examining a far larger number of species; but he pointed out that the lingual band promised to yield good classificatory points, an observation which has been confirmed by the subsequent researches of Troschel and others. About this time Alcide D'Orbigny, who was on the eve of departure for South America, requested Beneden to co-operate with him in investigating the *Pteropoda*, and he agreed to do so. The first result of the agreement was his memoir on *Pneumodermion violaceum*, in which he discovered a sympathetic or stomato-gastric system of nerves, the occurrence of which had not been observed before in the *Mollusca*. In 1836 he was elected a corresponding member of the Royal Academy of Belgium, and in 1842 a full member thereof. He has written very few separately-published works, but has contributed largely to the 'Bulletins' and 'Mémoires' of the Royal Academy of Belgium. The list of his communications in the Royal Society's catalogue of scientific papers comprises 122 items, to which must be added about half-a-dozen more which have appeared since the catalogue was issued. Looking at these papers as a whole, they may be described as the materials for an excellent anatomical, developmental, and synoptical account of the Belgian fauna. The most important are, 'Mémoire sur les Campanulaires de la côte d'Ostende, &c.'; 'Sur l'Embryogenie des Tubulaires'; 'Recherches sur l'Anatomie, la Physiologie, et le développement des Bryozoaires qui habitent la côte d'Ostende'; a similar memoir on the Ascidians; 'Les Vers cestoides considérés sous le rapport physiologique, embryogénique, et zoologique'; 'Recherches sur quelques Crustacés inférieurs', which is a monograph on the *Lernæidæ*; 'Histoire Naturelle du genre *Capitella* de Blainville, &c.', in which he added much to the knowledge already acquired by Oersted and Leuckart; and a series of papers which began in 1861, entitled 'Recherches sur la Faune littorale de Belgique.' Much of our present knowledge respecting the curious changes of form undergone by the *Hydrozoa* and *Entozoa* or *Scolecida* is due to his research. In conjunction with M. Gervais he has recently written a magnificent work on whales, 'Ostéographie des Cétacés vivants et fossiles.

BENEDETTO DA MAIANO [MAIANO, BENEDETTO DA, E. C. vol. iv. col. 56.]

BENEDICT, BISCOP, an ecclesiastic of the 7th century, famous as the teacher of Bede, and still more for the influence he exerted on Anglo-Saxon or Early English arts and civilization, was born about 629, of a noble family in Northumbria, and brought up at the court of King Oswy. At the age of 25 he went by command of the king to Rome, having for companion a young man named Wilfrid, afterwards the celebrated Bishop of York. Benedict remained at Rome nearly ten years, seemingly engaged in study, returning to England soon after the synod of Whitby. He found King Alfred of Northumberland preparing to visit Rome; but he was persuaded to abandon his intention and send Benedict as his messenger. During this second visit to the Holy City Benedict arrived at the determination to become a monk. He was accordingly admitted into the abbey of Lerins in Provence, received the tonsure, and passed through the usual course of monastic training. After a short visit to Rome, 668, he set out on his return to England in company with Bishop Theodore and Abbot Adrian [E. C. S. col. 28]; and at Theodore's request served as abbot of St. Peter's, Canterbury, until the arrival of

Adrian, who had been detained on the Continent, and did not reach England till some months after his companions. Benedict now made a third journey to Rome, with what specific object is not known, but it was probably in connection with some religious establishment, as it was on this occasion that he first appears in the character by which he is still remembered, that of a collector of pictures, works of ecclesiastical art, and books. With his collected stores he went into Northumberland, where the king, Ægfrid, gave him a piece of land near the mouth of the Wear on which to found a monastery, and the erection of which Benedict pressed forward with so much vigour that the building was completed within a year of its commencement. This was the afterwards famous Abbey of Wearmouth, and according to Bede (Vita Abb. Weremouth) was the first in England which was "built of stone in the Roman manner." For its erection Benedict had brought masons from Rome, and when it was drawing towards completion he sent messengers to Gaul to bring over workers in glass, "who were at this time unknown in Britain, that they might glaze the windows of his church as well as those of the cloisters and dining-rooms. This was done, and they came, and not only finished the work required, but taught the English nation their art, which was well adapted for enclosing the lanterns of the church, and for the vessels required for various uses." Bede, when he wrote this, it must be remembered, was not only the contemporary of Benedict, but himself an inmate of the monastery whose erection he describes. Wearmouth Abbey church was not, as is sometimes stated, the first church built in England of stone, but the first stone church built in the Roman manner, and of which the windows were glazed. Four years later, 678, Benedict made another voyage to Rome, and this time, as we are told, expressly in order to collect books, pictures, and relics, and to obtain from the pope special privileges and exemptions for his monastery. He succeeded in all these objects, bringing back with him a large number of ecclesiastical ornaments for his monastery, and also John, the archcantor of St. Peter's at Rome, to introduce the Roman choral service into England, of which, as well as of other Roman rites and dogmas, Benedict was an ardent advocate. About this time King Ægfrid gave Benedict land at Jarrow for another monastery, the new house, which he dedicated to St. Peter, being made dependent upon that of Wearmouth, and placed under the same abbot.

Having finished his new monastery, Benedict transferred the abbacy to one of his monks named Eosterwin, and again set out, 685, for Rome. From this his fifth, and, as it proved, his last, journey, he returned in 687, as usual laden with books and works of art. Besides rich vestments, including "two palls of matchless workmanship" for the service of his monasteries, he brought a series of paintings from the Old and New Testament in type and antitype, which he placed in the church at Jarrow, and another series of events in the life of Christ, which he set up in the church at Wearmouth. Shortly after his return he was seized with paralysis. For three years he endured grievous bodily suffering, but he never ceased to exhort his monks to continue the good work he had begun; and whilst he related the history and pointed out the value of the literary and pictorial treasures he had collected, he exhorted his monks to read and carefully preserve the books. He died on the 12th of January, 690, and was buried in his own church at Wearmouth; but in the tenth century, Ethelwold, Bishop of Winchester, transferred his relics to Thorney. His library was destroyed by the Danes in one of their predatory excursions.

Benedict was, for his age, a man of great learning as well as refined taste. Several books, chiefly on the monastic rule, are attributed to him, but none have come down to us; and he left several distinguished scholars, the most eminent being the Venerable Bede. But his great merit is that he was the first to introduce or cultivate a knowledge of art among the English people, and he divides with Adrian the honour of stimulating a taste for literature. In the sermon which he delivered in the church at Wearmouth on the day of Benedict's commemoration, Bede very clearly and distinctly set forth this phase of Benedict's character and the purpose he had in view—a purpose it is necessary to keep in mind in considering the history and character of early ecclesiastical art:—"He never returned from abroad empty-handed, always bringing with him a large supply; at one time of holy books, at another relics of the blessed Martyrs of Christ; introducing, on one occasion, architects for the building of the church; on another, glass manufacturers, for the ornament and security of its windows; on a third, instructors for teaching singing and the services of the church; at one time, too, he imported paintings of the holy histories, which should

serve not only for the decoration of the church, but for the instruction of beholders; so that those persons who could not learn from books what had been done by the Saviour, might be thus far instructed by the representations placed around them."

(Bede, Homily on Benedict Biscop, printed in Bede's Minor Works, 1841, p. 335; *Vita S. Benedicti Abbatis*; *Vit. Abbot. Weremuth*, and *Hist. Ecc.*; Malmesbury, *De Gestis Regum*, B. i. c. 3; Capgrave, *Nova Legenda*; Warton, *Hist. of Brit. Poetry*, vol. i. Diss. ii. p. xcvi.; Wright, *Biog. Britt. Lit.* vol. i. pp. 185—192; Hardy, *Desc. Cat. of Materials, relating to the History of Great Britain*, vol. i. pp. 366—68.)

BENEFIELD, SEBASTIAN, a learned English divine of the early part of the 17th century, was born at Prestbury, Gloucestershire, Aug. 12, 1559; was admitted scholar of Corpus Christi College, Oxford, in 1586; and elected fellow in 1590; proceeded M.A. and took holy orders; and in 1599 was appointed reader in rhetoric in his college. In 1608 he took the degree of D.D., and in 1613 was appointed Margaret Professor of Divinity in the University. This office he filled with great reputation for 14 years, when he resigned it, and returned to his rectory of Meysey Hampton, near Fairford in Gloucestershire, where the rest of his life was spent in study, writing, and the diligent discharge of his parochial duties, and where he died on the 24th of August, 1630. Benefield was a man of earnest piety, of great learning, and an excellent teacher. In doctrine he was a decided, or, as he was termed, a "downright and doctrinal" Calvinist. He wrote many books, in their time much read, but now probably seldom if ever looked into. The following are the principal:—1. 'Doctrinæ Christianæ sex capita totidem prælectionibus in schola Theolog. Oxon. pro forma habitis discussa et deceptata,' 4to, Oxford, 1610; 2. 'A Commentary or Exposition upon the First Chapter of Amos, delivered in 21 sermons, in the parish church of Meysey Hampton, in the diocese of Gloucester,' 4to, Oxford, 1613; 3. 'Commentary or Exposition upon the Second Chapter of Amos, delivered in 21 sermons in the parish church of Meysey Hampton,' 4to, London, 1620; 4. 'Commentary or Exposition on the Third Chapter of Amos,' &c., 4to, London, 1629; 5. 'Eight Sermons publicly preached in the University of Oxford, the second at St. Peter's in the East, the rest at St. Mary's Church,' 4to, Oxford, 1614; 6. 'The Sin against the Holy Ghost, and other Christian Doctrines, delivered in 12 sermons, upon part of the Tenth Chapter of the Epistle to the Hebrews,' 4to, Oxford, 1615; 7. 'Prælectiones de perseverantia sanctorum,' 8vo, Frankfurt, 1618.

BENEKE, FRIEDRICH EDWARD, a German philosopher, was born at Berlin on the 17th of February, 1798. After having taken part, as a volunteer, in the war for the independence of his country in 1815, he entered in 1816 the University of Halle, where he studied theology. In 1817 he removed to Berlin, where he devoted himself to the study of philosophy, in which faculty he commenced in 1820 a course of lectures which were interrupted by the prohibition of the minister von Altenstein, on account of their opposition to the doctrines of Hegel. Hereupon he removed to Göttingen, where he held private lectures, until, being recalled by family circumstances to Berlin, he received permission to resume his lectures at the university of that city, of which, after the death of Hegel in 1832, he was named extraordinary professor of philosophy, and successfully laboured in that capacity until the year 1853. After suffering from a severe physical affliction, Beneke was missing for a period of twelve months from the 1st of March, 1854, when he was found a corpse in the water.

The central point of Beneke's system is to be found in his conviction that the true principle of philosophy is a free and determined attachment to the phenomena of our own self-consciousness, a studying of our own sensations and emotions; and his psychology is therefore to be characterized as empirical and inductive. The following are the most important of the works of Beneke:—Experimental Psychology as the principle of all Science, expounded in its leading Features, 'Erfahrungseelenlehre, als Grundlage alles Wissens, in ihren Hauptzügen dargestellt,' Berlin, 1820; Doctrine of Perception, &c., 'Erkenntnislehre nach dem Bewusstsein der reinen Vernunft, in ihren Grundzügen dargelegt,' Jena, 1820; Psychological Sketches, 'Psychologische Skizzen,' 2 vols. Göttingen, 1825—27; Concerning the Relation of Soul and Body, 'Ueber das Verhältniss von Seele und Leib,' Göttingen, 1826; and a Handbook of Psychology, considered as a Physical Science, 'Lehrbuch der Psychologie als Naturwissenschaft,' Berlin, 1833, 2nd edition, 1845. To these works were added a series of amplificatory or explanatory treatises—The New Psychology, 'Die neue Psycho-

logie,' Science of Education and Instruction, 'Erziehungs- und Unterrichtslehre,' 2 vols. Berlin, 1835—36, 2nd ed. 1842; Outlines of the Natural System of Practical Philosophy, 'Grundlinien des natürlichen Systems der praktischen Philosophie,' 3 vols. Berlin, 1837—41; System of Metaphysics, and of the Philosophy of Religion, &c., 'System der Metaphysik und der Religionsphilosophie aus den natürlichen Grundverhältnissen des menschlichen Geistes abgeleitet,' Berlin, 1840; System of Logic, &c., 'System der Logik als Kunstlehre des Denkens,' 2 vols. Berlin, 1842; and Pragmatic Psychology, or the Doctrine of the Soul in its application to Life, 'Pragmatische Psychologie, oder Seelenlehre in der Anwendung auf das Leben,' 2 vols. Berlin, 1850. For the further exposition of the subject treated of in the last-mentioned work its author instituted the publication of a quarterly journal, entitled Records of Pragmatical Psychology, 'Archiv für die pragmatische Psychologie,' &c.

* BENFEY, THEODOR, a distinguished German Oriental scholar, was born January 28, 1809, at Nörten, near Göttingen. After completing his course at the Göttingen Gymnasium, in 1824, he entered the university, where he studied philology under Karl Otto Müller and Dissen. In 1827 he proceeded to Munich, and thence to Frankfurt and Heidelberg universities, returning in 1834 to Göttingen, where he was named professor in the faculty of philosophy, and has long held the chair of Sanskrit and Comparative Grammar. The Oriental languages have since mainly engaged his attention, and without having attained to the same elevation, either as discoverer or scholar, as one or two of his countrymen, he is generally regarded as in the very foremost rank of living systematic orientalisks. In 1861 he was elected corresponding member of the French Académie des Inscriptions. Of his numerous works the following are among the most valuable:—'Ueber die Monatsnamen einiger alten Völker' (On the Names of the Months among the ancient peoples), Berlin, 1836; 'Griechisches Wurzellexikon' (Greek roots Lexicon), 2 vols. Berlin, 1839—42; 'Ueber das Verhältniss der ägyptischen Sprache zum Semitischen Sprachstamm,' an essay on the connection of the Egyptian with the Semitic language, Leipzig, 1844; 'Der Hymnen des Samaveda' (the text of the hymns of the Samaveda, with a glossary and translation), Leipzig, 1848; 'Beiträge zur Erklärung des Zend' (contribution towards an explanation of the Zend), Göttingen, 1853; 'Vollständige Grammatik der Sanskritsprache' (Complete Grammar of the Sanskrit Language), Leipzig, 1855, which was followed by a shorter grammar in 1855, and by a modified English version, 'A Practical Grammar of the Sanskrit Language,' 8vo, 1863; and 'A Sanskrit-English Dictionary,' 1865; 'Pantschatantra,' 2 vols. Leipzig, 1859. He has also contributed largely to 'Orient und Occident,' Göttingen, 1863, &c.; and he is the author of the elaborate article 'Indien,' in Ersch and Gruber's 'Encyclopädie.'

BENOIT DE SAINTE MAUR, a Norman trouvère of the 12th century, was probably a native of Sainte Maur in Provence, and a monk of the convent of Marmontier. Little or nothing is known of his personal history. From his chief work, the metrical chronicle of the Dukes of Normandy, we learn that he wrote that poem by desire of "le bon Henri Secund, flors des princes de tut le mond" (our Henry II. of England), after Robert Wace had ended his chronicle, and consequently after the year 1170. The chronicle extends from the creation to the reign of Henry II., and contains about 30,000 lines. He is very laudatory of the Norman dukes generally, but particularly so of Henry II., to whose liberality Benoit makes frequent reference. The descriptive passages are not without elegance, and there is something of simplicity and directness in the narrative, but as a whole it is insufferably tedious; and whilst it has a certain value for the student of the literature of the period, and will probably continue to be referred to by the historian, it has in itself little historical value, the greater part being translated from the earlier Latin chroniclers and memoir writers. Benoit's other great work is a metrical History of Troy, written before his Dukes of Normandy; indeed it was in consequence of the popularity of the History of Troy that Benoit was asked by Henry II. to write the Norman chronicle. The History or Romance of Troy is almost as long as the Dukes of Normandy, and to readers of the present day very much duller and more wearisome, since it wants even the interest which the Chronicle possesses in the fact of the poet being contemporary with at least some of the persons and events he treats of. 'The Roman de Troye' has only been printed in parts: by M. Michel in the work cited below, by Keller in his 'Romvart,' and a few brief extracts by Wright in his 'Biographia Britannica Literaria,' vol. ii.; but a fine MS. of it is in the British Museum, Harl. Coll., No. 4482. Portions of the Chronicle

of the Dukes of Normandy were printed by M. Michel at the end of 'L'Histoire de Normandie de Th. Licquet,' Rouen, 1835, and in his 'Chroniques Anglo-Normandes,' Rouen, 1836; and it was printed at length in the 'Collection de Documents inédits sur l'Histoire de France,' under the special title of 'Chroniques des Ducs de Normandie, par Benoit, trouvère Anglo-Normand du XII^e siècle, publiées pour la première fois d'après un manuscrit du Musée britannique, par Francisque Michel,' 3 vols. 4to. Paris, 1837-44. Some writers have attempted to show that Benoit the author of the 'Chronique des Ducs de Normandie' was a different person from the Benoit who wrote the 'Roman de Troye,' and at first M. Francisque Michel was of that opinion; but a second MS. of the Chronicle, discovered in the Public Library of Tours, is considered by M. Michel to leave no doubt that both poems were written by Benoit de Sainte Maur.

A metrical life of Thomas à Becket, 'La Vie Saint Thomas, le glorieux Martir de Canterberie, par Benoit le Moine,' of which several MSS. are extant, and which is printed by M. Michel at the end of his edition of the 'Chroniques des Ducs de Normandie,' has also been attributed to Benoit de Sainte Maur; but the author calls himself "Benet a black monk," and he probably belonged to St. Alban's Abbey, as he speaks of "Saint Auban nostre patron."

* BENTHAM, GEORGE, an eminent botanist, who is so generally ignored in the principal text-books on biography, that we are unable to say when or where he was born. In 1833 he was appointed secretary to the Royal Horticultural Society, and as such drew up several reports on the plants collected for the society by the travelling botanists, Douglas and Hartweg. In this capacity also he took an active share in the general management of the Society's affairs until the cessation of his secretaryship in 1841. During this period he contributed several important papers on systematic botany to the scientific journals, the most noteworthy of which is his enumeration of the plants collected in British Guiana by Schomburgk, extending over more than two hundred pages of Hooker's 'Journal of Botany.' Enjoying as he did the personal friendship of Sir W. J. Hooker, he had free opportunities of consulting and examining that gentleman's library and herbarium as also the extensive collection at Kew; and from 1841 onwards many papers issued from his pen, descriptive of plants sent from all parts of the world by Hinds, Barclay, Schomburgk, Hostmann, Leprieur, Champion, Hohenacker, and others. Not only did he consult the collections at home, but for some forty years or more he has spent much time in visiting all the principal herbaria on the continent, and has personally examined many parts of Europe for the purpose of studying the living plants. Constantly engaged in describing plants, and accustomed to check the observations made on dry specimens by others drawn from the growing organisms, he has acquired an almost unrivalled skill in framing the diagnoses of genera. It is his later works which more especially give him a claim to be regarded as the most eminent systematic botanist of his day. The first of these was his 'Manual of the British Flora,' in which he evinces so great an aversion to the founding of species upon characters of trivial importance, that his estimates of the British species falls far short of the estimates of most other authorities. Thus he considers that there are 1285 phanerogamous plants in the British Isles, while Hooker and Arnott give 1571, and Babington 1708, as the number. Another special feature of this book is the analytical key which it contains, and which is intended to help the unlearned student to determine the name of any plant he may have found from its character by a process of exhaustive analysis. This key, although it necessitates a somewhat artificial grouping of the plants, is an excellent example of its kind. In 1861 appeared his 'Flora Hongkongensis,' which does for the neighbourhood of Hong Kong what the above-noticed Manual does for our own islands. In 1863 the first volume of his 'Flora Australiensis' was published, and was succeeded soon after by three others. This work was entrusted to Mr. Bentham in preference to Dr. Ferd. Mueller (who was specially fitted for the task by his local knowledge) in consequence of his intimate acquaintance with the Australian herbaria in Europe. Another of his works which requires mention is the 'Genera Plantarum,' which is being drawn up by him in conjunction with Dr. J. D. Hooker. The first volume, in three parts, was published at intervals from 1862 to 1867. It promises to be the most important work on systematic botany published during the last quarter of a century, and will be invaluable to the botanical student. In addition to the papers and books mentioned, Mr. Bentham has published many others. He has been President of the Linnæan Society since 1861.

BENTKOWSKI, FELIX, a learned Polish writer, was born in 1781. From the foundation of the University of Warsaw in 1817 to its suppression in 1831, Bentkowski was professor of history and bibliography, dean of the faculty of letters, and principal librarian of the university; he was also professor of history at the Warsaw lyceum, and keeper of the archives of the kingdom of Poland. He died at Warsaw in 1852. Bentkowski's most valuable literary production is his History of Polish Literature ('Historia Literatury Polskiej'), in two large 8vo volumes, Warsaw, 1814. It displays little critical power, but it is comprehensive; the bibliographical details are full and accurate; and on the whole it affords a useful general survey of the subject. Bentkowski wrote an 'Introduction to General History,' 8vo, Warsaw, 1812, and translated Guizot's 'History of Civilization in Europe' into Polish. He likewise contributed several biographical notices of members and various antiquarian and philological papers to the Royal Society of Warsaw.

* BENTLEY, ROBERT, a botanist who has given much attention to the pharmaceutical aspects of the science he cultivates. He is the son of William Bentley, a solicitor at Hitchin, Herts, and was born March 25, 1823. His medical education was carried on at King's College, London, with which institution his own subsequent career has been intimately connected. In 1847 he qualified himself as a member of the College of Surgeons, and in the following year was elected lecturer on botany at the London Hospital. In 1849 he became a medical associate of King's College, lecturer on botany at the Middlesex Hospital, and professor of botany to the Pharmaceutical Society of Great Britain. In 1851 this last appointment was conjoined with the professorship of materia medica, which had been held by Dr. Pereira. In 1854 when Forbes was transferred to the chair of botany at Edinburgh, he had not delivered more than half-a-dozen lectures out of his full course of forty at King's College. In this emergency Professor Bentley undertook to complete them. The next year a successor to Forbes was sought for, and Professor Bentley appeared as a candidate, but Dr. Henfrey obtained the appointment. Upon this a testimonial was given to him by the students, in which they thanked him for his urbanity and instructive lectures; and regretted he was not to be their professor. In 1859, however, the chair again became vacant in consequence of Dr. Henfrey's death, and Professor Bentley was appointed to be his successor. Just before this he became lecturer on botany at St. Mary's Hospital, but this and his other botanical lectureships were given up on his joining the staff at King's College. In 1862 he became professor of botany to the London Institution; and in 1863 Dean of the Medical Faculty of King's College, as also a honorary fellow thereof. He is a fellow of several learned societies, and was President of the British Pharmaceutical Congress in 1866 and 1867. He has been long an energetic worker on the Council and Garden Committee of the Royal Botanical Society. His principal separate work is his 'Manual of Botany,' of which a second edition will be shortly published. He was associated with Dr. Farre and Mr. Warrington in editing Pereira's 'Manual of Materia Medica and Therapeutics,' of which also a second edition is nearly ready for publication. This work is an amended abridgment of Dr. Pereira's 'Elements of Materia Medica and Therapeutics,' and Professor Bentley's share in it chiefly relates to the description of organic substances and of the beings from which they were obtained. He has published a work of somewhat similar scope, comprising lectures on the organic materia medica of the 'British Pharmacopœia.' He has also contributed numerous articles to the 'Journal of the Pharmaceutical Society,' mostly upon the plants and plant substances used in pharmacy, and of which a list is given in the Royal Society's 'Catalogue of Scientific Papers.'

BENVENUTI, GIOVANNI BATTISTA, an eminent Italian painter, commonly called L'Ortolano (the Gardener) from the occupation of his father, was a native of Ferrara. The years of his birth and death are alike unknown; the former must, however, have occurred towards the close of the 15th century; the latter probably soon after 1525, in which year he is known to have been painting. Between 1507 and 1513 he was at Bologna, studying the works of Raffaele and Bagnacavallo. According to Lanzi he was compelled to leave Bologna on account of an act of homicide. His manner of painting most resembles that of Garofalo, with whom indeed he is often confounded, as well from the similarity of their names (Garofalo's being Benvenuto Tisio) as of their styles. Several of Benvenuti's altarpieces have been removed to Rome; others are still in the churches of Ferrara. Lanzi makes particular mention of one

which, when he wrote, was in the church of Bondino, near Ferrara, in which are represented the saints Sebastian and Rocco, with Demetrius in military costume, leaning on his sword absorbed in thought. This fine work, which is also eulogised by Scannelli, is now in our National Gallery (No. 669), having been brought from the church of Bondino in 1844.

BÉRANGER, JEAN PIERRE DE [E. C. vol. i. col. 659]. M. Béranger died at Paris on the 16th of July, 1857. The announcement of his death called forth a universal expression of sorrow from his countrymen, and the government of the emperor, in recognition of the general feeling, directed that the interment should be of the most solemn and stately kind, and at the public cost. Shortly after his death appeared the autobiography which it had been long known he was preparing, and to which reference was made in the article above cited (col. 660). It was printed in a single volume entitled 'Ma Biographie,' with an appendix by Paul Boiteau, 8vo, 1858. A posthumous volume of poetry, 'Dernières Chansons de Béranger, de 1834 à 1851, avec une lettre et une préface de l'auteur,' appeared about the same time in one large 8vo volume; it contained 74 new pieces, some of them possessing all the old charm if not quite all the old freshness. The two works were republished under the title of 'Œuvres Posthumes de Béranger,' in two large 8vo vols. with 23 engravings, Paris, 1860. Béranger had completed a revised edition of his works shortly before his decease, 'Œuvres Complètes de Béranger, nouv. éd. revue par l'auteur,' 2 vols. 8vo, with 53 engravings, Paris, 1856—57. The 'Correspondance de Béranger, recueillie par Paul Boiteau,' appeared in 4 vols. 8vo, Paris, 1860. M. Paul Boiteau had already published (1858) a volume on the 'Philosophie et Politique de Béranger.'

BERCHETT, PIERRE, French painter, was born in 1659; studied under Charles de la Fosse, and was employed at Marly. In 1681 he came to England in order to assist another French painter, M. Rambour, then much occupied in decorating the houses of the nobility. He only stayed a year in England; but afterwards came over again, and was engaged for fifteen months in painting the palace of William III. at Loo. On his third visit he decided on settling in England. His paintings which at this time drew most attention were the staircase of the Duke of Schomberg's mansion in Pall Mall, and the ceiling of the chapel of Trinity College, Oxford. The former has been long destroyed, but the latter, a representation of the Ascension, is still brilliant, and divides the admiration of visitors with the exquisite carvings with which Grinling Gibbons adorned the chapel. His health failing, Berchett gave up mural painting, retired to the then rural district of Marylebone, and filled his time with executing small mythological and bacchanalian pieces. He died at Marylebone in January, 1720.

*BEREDNIKOFF, JAKOFF IVANOVICH, an eminent Russian archaeologist, was born in 1802. Having completed the usual studies, and shown a talent for antiquarian pursuits, he was in 1830 entrusted with the arrangement of the materials collected by M. Ströjff during an archaeological journey in Western Russia. The success with which he executed this task caused him to be commissioned to accompany M. Ströjff in a visit of inquiry through Eastern Russia. From this journey he returned laden with a rich treasure of historical documents, of which four volumes, 4to, have been since published under his superintendence as part of a complete collection of the Russian Chronicles. In 1840 he edited and annotated a curious account of the empire written by a priest in the 16th century, under the title of 'Russia under the Czar Alexei Michailowitz.' Berednikoff contributed largely to the great Slavonic Dictionary of the Petersburg Academy, published in 4 vols. 4to, 1847, &c.

BERGENROTH, GUSTAVE ADOLPH, a German architect and writer, was born on February 26th, 1813, at Oletzko, or Marggrabowa, a small town on the Russian boundary of East Prussia, of which his father was chief magistrate. His school education was completed at the University of Königsberg, where he distinguished himself less by progress in studies than as a leader in the sports, and the most accomplished duellist of the university. In 1836 he was appointed auscultator to the Königsberg tribunal; in 1839 refendary in Köslin, in Pomerania; and in 1843 assessor to the court at Cologne. Here he remained till 1845, when he obtained leave to travel, and having made a journey through Italy, returned to Berlin, to fill the post of assessor to the high court. He now busied himself in examining and registering a collection of treaties at the Foreign Office, apparently without any very definite purpose; wrote papers on statistics and commercial economics; and made a rather prolonged stay in France, where he had gone to make

inquiries for the Berlin Board of Statistics. He was, however, in an unsettled state of mind, and on the breaking out of the insurrection in Berlin in March, 1848, he joined the insurgents. On its suppression, he escaped to France, but in March, 1849, was informed that he might return, he having been transferred as assessor from Berlin to the lower court at Wittstock. Refusing to submit to this degradation, he threw up his office; wrote a democratic pamphlet, and became more than ever an object of suspicion to the authorities. Finding that it would be unsafe to remain in Prussia, Bergenroth agreed to proceed to California as agent for a body of his countrymen, to inquire into the practicability of establishing a democratic colony there. He reached San Francisco in September, 1850, knocked about the country in very vagrant fashion for several months, and got back to Bonn towards the end of 1851, only to find that the enthusiasts of the previous year had grown faint-hearted, and that the projected democratic colony was already regarded as a vision. Bergenroth quitted Germany in disgust. For four or five years he wandered about Europe, how employed and how maintained is not very clear, though for a part of the time at least he seems to have acted as tutor in a German family. But recognising the necessity for a fixed occupation, he determined to settle for a while in England with a view to the composition of a history of the Tudor period, as a preliminary to which he sought to make a thorough investigation of the English records. From 1857 to 1860 he accordingly resided in London, steadily prosecuting his inquiries, and occasionally writing a paper in an English or a German periodical. Having, however, by this time, convinced himself that his labours would be incomplete without a like examination of the Spanish records, he in the summer of 1860 proceeded to Spain, armed with the proper introductions, and with some difficulty obtained permission to search the national archives deposited in the Castle of Simancas, "for historical documents concerning the history of England during the reigns of the kings and queens of the House of Tudor." Of the extent of the collections, the difficulty of deciphering the more important despatches, and the obstacles interposed by the ignorance and jealousy of the officials in charge, Mr. Bergenroth gave an interesting account in a series of letters published from time to time in the 'Athenæum,' and which have been reprinted in Mr. Cartwright's Memoir. These letters attracted the notice of the Master of the Rolls, who had already been in quest of a person qualified to compose a Calendar of State Papers in Simancas, relating to English history and, having satisfied himself that Bergenroth possessed the necessary qualifications, he offered him the commission, which Bergenroth gladly accepted. From March, 1861, to the close of his life he laboured incessantly at the accomplishment of what proved to be a task beyond the strength of a single man. Except rapid visits to Madrid, Barcelona, Paris, and London—all connected with his undertaking—the whole of his time was spent in examining and copying the records at Simancas, in deciphering them in his comfortless lodgings, and in calendaring them for publication, and there can be little doubt that the excessive labour in that unhealthy locality undermined his naturally strong constitution, and prepared the way for his premature death. In the autumn of 1868 malignant fever prevailed at Simancas. Bergenroth was taken ill in December, as he thought merely from a cold, but growing worse, he resolved to try the effect of a journey to Madrid. The fatigue increased the malady, which proved to be gastric fever, and he died at Madrid on the 13th of February, 1869.

The results of Mr. Bergenroth's assiduity appeared in three volumes, published under the direction of the Master of the Rolls, entitled 'Calendar of Letters, Despatches, and State Papers, relating to the Negotiations between England and Spain, preserved in the Archives of Simancas, and elsewhere,' 8vo, 1862—68. The first volume contains the Spanish papers of the reign of Henry VII. (from 1485 to 1509); the second volume those of the first sixteen years of the reign of Henry VIII. (1509—25); whilst a supplementary volume includes a mass of information collected from the Simancas and Madrid Archives, relating to the private life of Queen Katharine, the first wife of Henry VIII., and to the projected marriage of Henry VII. with Queen Juana, widow of Philip of Castile, and mother of the Emperor Charles V. Of the immense value of these documents in the hands of a competent and well disciplined historical student there can be no question, and Mr. Bergenroth deserves all honour for the zeal and industry with which he rendered them available. But, as was not unnatural in a discoverer, he overrated their value, or rather perhaps took

an undue estimate of their quality. Naturally of an impetuous temperament, and unaccustomed to a judicial consideration of evidence and the bearings of great historical questions, he seemed to have almost persuaded himself that all modern history ought to be re-written by the light of secret despatches. Alike in reference to the course of public occurrences, and to the conduct and character of individuals, he appeared to be willing to throw aside as worthless the broad accepted verdict of historians and the general voice of contemporaries and countrymen, in order to adopt the statements and opinions of men ignorant for the most part alike of the people, the language, and the customs of the country respecting which they wrote; men who dwelt in an atmosphere of deceit, receiving their information from dissatisfied persons who played on their credulity; from rumour and gossip they or their servants picked up in conversation and commonly misunderstood; often either directly, or through agents, from astute ministers who knew what they were seeking after, and took care to furnish that which would most effectually mislead them: whilst the writers of the despatches, there can be little doubt, were more anxious to send what should satisfy their employers, or further their own purposes, than to state the simple truth. In the documents themselves Bergenroth has given simply what he found, though in some instances, from the haste with which he worked, or from an imperfect acquaintance with the subject, he may possibly have misunderstood and unintentionally misrendered. It is in the Introductions to the several volumes that he has enunciated his peculiar views. The more novel and startling of these—especially those relating to the private character of Queen Katharine; the denial of the reputed insanity of Queen Juana and the account of the cruelties inflicted on her at the instance of her father and her son; and the judicial murder of Don Carlos by his father—have been vigorously opposed by foreign as well as English scholars, and will be accepted by no one probably without further inquiry; but respecting less prominent personages and events the novel views set forth in these volumes may possibly for a while somewhat colour the statements of historians and biographers. But though Bergenroth put forth his views with unusual emphasis, he was always ready to retract them when satisfied that they were erroneous. The supplementary volume was published to refute the opinions he had published in the two previous volumes, and as new documents came to light new supplements would have been required to correct or to contradict what now seemed to him irrefragable. We cannot profess to regret that Mr. Bergenroth did not write either of the histories he contemplated. The discoveries he made at Simancas early caused him to dismiss his purpose of writing a history of the Tudors as too narrow, and to resolve to write instead "that of Charles V., as a subject of truly comprehensive range, embracing naturally a cosmopolitan survey of the politics of Europe." But like its predecessor, it was never written, perhaps never really commenced. His literary monument is the Calendar, and, after all abatements are made, it is a worthy one.

(Cartwright, *Gustave Bergenroth: a Memorial Sketch.*)

BERGERAC, SAVINIEN CYRANO DE, a witty French writer of the 17th century, was born about the year 1620, at the Château de Bergerac, Périgord. After an irregular course of study, under a poor country priest, he went to Paris, and entered as cadet in the regiment of Guards. He acquired a reputation for reckless bravery, fought many duels, acted as second in many more, and challenged any one who watched too closely a deformity which affected his nose. He received two severe wounds in war, and retired from the army. Deciding upon the cultivation of letters, he entered the service of the Duc d'Arpajon, after declining that of the Maréchal de Gassion. In a tragedy written by him, called 'Agrippina,' he placed in the mouth of one of the characters, Sejan, sentiments which brought upon the author a suspicion of atheism—one being to the effect that men are not made by gods, but gods by men, from the blood of burnt offerings. He wrote a comedy in prose, 'Le Pédant Joué,' in which a peasant speaks in his own jargon or country patois: Molière is believed to have derived some of his ideas from this work. Two other works by Bergerac, 'Voyage dans la Lune,' and 'l'Histoire Comique des États et Empires du Soleil,' in like manner furnished hints to later writers—Fontenelle, in the 'Pluralité des Mondes,' Voltaire in 'Micromégas,' and Swift in 'Gulliver's Travels.' Boileau also expressed a kind of relish for Bergerac's burlesque audacities. Amid the extravagance of these two works, Bergerac nevertheless exhibited a pretty good acquaintance with the philosophy of Descartes. He died in 1666. His works were published in Paris, 1677; Amsterdam,

Paris, and Trévoux, 1699, 2 vols. 12mo; and Paris, 1741, 3 vols. 12mo.

* BERKELEY, REV. MILES JOSEPH, a botanist who has acquired a considerable reputation for his knowledge of the lower forms of plant life, more especially the mosses, mushrooms, and other cryptogams. He was born at Oundle in 1803, and after going through the ordinary course of education at Rugby and at Christ's College, Cambridge, which terminated in his graduation in 1825, he became a curate at Margate. In 1833 he was appointed incumbent of two small parishes near Wansford, Northamptonshire, and also a rural dean. He is a fellow of the Linnæan Society, and a member of several foreign scientific bodies. Judging from his works, he seems to have discharged his clerical duties most assiduously, and to have occupied his leisure time in studying those subjects which could be pursued without staying much from his home. His earliest papers, for instance, which were published from 1828 to 1834, relate to various annelids and mollusks which were found at or near Margate; while his work entitled 'Gleanings of British Algae,' 1833, was to a certain extent the consequence of his seaside residence, and at the same time the forerunner of a series of works in the same branch of natural history. There is, however, one paper of this period which is an exception to the above remarks, viz., that entitled 'Observations upon the *Dentalium tubulatum* of Deshayes,' published in the 'Zoological Journal,' vol. v.; in which he indicated that the species lived both off Ireland and near Madeira, and really belonged to the annelidan genus *Ditrupa*, not to the molluscan genus *Dentalium* [DITRUPA, E. O., NAT. HIST. DIV., vol. ii. col. 364]. In 1836 he announced the discovery of *Dreissena polymorpha* in Northamptonshire; but after this date all his papers relate to cryptogams; and are for the most part descriptive of those of his district, of those which were sent to him from other parts of the British Isles and of the world, and of those which he could examine in the Hookerian, British Museum, and other herbaria. These were published in Jardine's 'Magazine of Zoology and Botany,' 'Annals of Natural History,' Hooker's 'Journal of Botany,' Hooker's 'London Journal of Botany,' 'Transactions of the Linnæan Society,' 'Journal of the Horticultural Society,' 'Gardener's Chronicle,' and 'Intellectual Observer.' He has given attention to the fungoid growths which occur in various diseased culinary vegetables, such as the potato, onion, cabbage, as also in the pear, vine, and hop. He has written several separate publications, the most noteworthy of which are his 'Introduction to Cryptogamic Botany,' which is a standard work; the 'Outlines of British Fungology,' and the 'Handbook of British Mosses.' He also contributed most of the articles on cryptogams in Lindley and Moore's 'Treasury of Botany,' 1866.

BERLIOZ, HECTOR, [E. C. vol. i. col. 668]. After the publication of the memoir of M. Berlioz, in the E. C., he produced two operas, 'Beatrice et Benedick,' 1862, and 'Les Troyens à Carthage,' 1864, which failed at Paris, but was successful at Moscow. He also published some more of his musical criticisms, under the title of 'Les Grotesques de la Musique,' 1859, and 'A Travers Chant,' 1862. He died on the 11th of March, 1869.

* BERNARD, CLAUDE, an eminent French physiologist, was born July 12th, 1813, at St. Julien, near Villafraanche, Rhone Department. His early medical education was received in the Parisian hospitals, and in the course of it he became Magendie's assistant or prosecutor in 1841, doctor of medicine in 1843, and doctor of science in 1853. In 1847, he was appointed assistant professor to Magendie; in 1854, he was called to the chair of general physiology, which was then founded by the Faculty of Science of Paris, and, also in this year, he was elected to succeed Roux in the Academy of Science. In 1855, he succeeded Magendie as professor of experimental physiology in the College of France. In 1861, he was elected a member of the Academy of Medicine, and in 1862, an officer of the Legion of Honour.

Associated with Magendie for upwards of ten years, he has been thoroughly imbued with the same principles of action and method of working, and may be considered to be carrying on the work which his master left unfinished. In his opening address, in 1854, he insists upon the necessity of the experimental method of inquiry in collecting physiological facts, and of testing the value of every statement and conclusion, which has been arrived at by pure reasoning, by a direct appeal to nature. The experimental method did not originate with Magendie and Bernard, but before their time it was rarely resorted to by physiologists, while mainly in consequence of their exertions, it has become generally employed. The advantage of

the method is abundantly manifested in the works of Bernard, which contain many original views and discoveries, but although these are of the highest importance, perhaps the benefits he has conferred upon physiology have arisen, not so much from his enunciation of them, as from the impetus he has given to the science by showing the best way of collecting and testing facts.

He has been a diligent writer, as will be seen from the list of his papers in the Royal Society's 'Catalogue of Scientific Papers,' which numbers sixty-five items, the first being dated 1843, and the last 1862; so that on the average he writes about three papers every year. In addition he has written several separate works, and as these embody most of the facts he has published in the scientific journals, we shall refer mainly to them in the following summary of his principal discoveries. His first important separate work is a 'Précis iconographique de Médecine opératoire et d'Anatomie chirurgicale,' which was written in conjunction with M. Huet. The publication commenced in 1846, and spread over several subsequent years. American and German editions of this work have also appeared. In 1855 was published the first volume of his 'Leçons de Physiologie expérimentale appliquée à la Médecine.' It contains the course of lectures he had delivered in 1854, and is the first of a long series of volumes which comprise the lectures of subsequent courses. It is a most elaborate treatise on sugar considered in its physiological aspect. At one time it was believed that starch and sugar were found in plants only, but Dr. Schmidt demonstrated the presence of the former in some animals; and in 1848, Bernard ascertained that sugar is found in animals; in 1850 he demonstrated that it was generated in the liver, not derived from the plant tissue; and in papers published in subsequent years, he has thrown new light on the subject. Sugar is found in animals belonging to all the orders, and is about equally abundant in those which feed on vegetables as in those whose diet is exclusively flesh. Experiment showed that its formation persisted in man and herbivores even when food containing no sugar or starch was resorted to; that it is formed most abundantly just after ingestion, gradually decreasing for some hours, when the bile flows in full stream, the secretion of the two substances alternating with each other; that in the period of diminished action the blood flowing to the liver is wholly devoid of sugar, while that which flows from it contains it in considerable quantities; that the proportion gradually diminishes in the passage of the blood towards the lungs where it entirely disappears. When, however, the formation of sugar is going on most rapidly, and more especially when the maximum rate is abnormally great, the sugar passes through the lungs into various other tissues, and into the urine, forming one of the symptoms of a diabetic constitution. In diabetes the lungs and skin are nearly always out of order, and hence the lungs cannot consume the sugar so rapidly as formed, while the extra activity of the circulation of certain liquids carries the sugar more rapidly through the body. Connected with this subject may be mentioned Bernard's discovery of glycogen or animal starch, although this did not occur until about 1858. Having experimentally ascertained that when a liver had been thoroughly cleansed with water, and was again filled by injection, a fresh supply of sugar was obtained, this fact indicated that the sugar was capable of being formed independently of life, and that it was probably formed from the metamorphosis of some substance pre-existing in the tissue. On searching he found (almost simultaneously with Hensen and Pavy,) glycogen, a substance having the same chemical composition as starch, but differing from it in its physical properties. This substance is constantly present in the liver in considerable quantities, and according to Bernard and others, is transformed into sugar. In the development of animals the formation of glycogen precedes that of sugar. Thus, in very young fetuses glycogen is abundant, while sugar first appears at a more advanced stage of intra-uterine life; in the case of the calf, not before the fourth month. The transformation is effected, or at any rate influenced, through the agency of certain nerves; for Bernard brought about so abundant a generation of sugar as to induce a temporary attack of artificial diabetes by pricking the floor of the fourth ventricle; and he suddenly checked its production by dividing the spinal cord just below the origin of the phrenic nerves. In 1859 he detected the presence of glycogen in the placenta.

In the second volume of the work above cited he treats of the salivary glands and of the pancreas. His investigations on the salivary glands is an admirable example of how experimental physiology supplements physiological anatomy. These glands

present two types of structure in animals; but in the same individual all are structurally identical. Experiment shows that there are three quite distinct salivary organs, one for gustation, one for mastication, and one for deglutition, and that the saliva from each has its own special characters. Hence it seems that identity of structure does not necessarily imply identity of function. His principal discovery in connection with the pancreas is, that it is the essential, though not sole, organ for digesting fatty bodies, and that it aids in the conversion of albumen into peptone like bodies. His 'Mémoire sur le Pancréas, etc.,' 1856, excited much attention at the time, and established his reputation as a sound physiologist more than anything he had previously written. In the same year his 'Mémoire sur la Chaleur Animale' was published.

In 1857 appeared his 'Leçons sur les Effets des Substances Toxiques,' in which he treats of oxygen, carbonic oxide, and other poisonous gases; as also of curare, the poison of the viper, strychnia, and nicotine. His 'Leçons sur la Physiologie et le Pathologie du Système Nerveux,' 2 vols., 1858, is an excellent work of its kind, but does not call for special comment here. In the following year we have, 'Leçons sur les Propriétés Physiologiques et les Altérations Pathologiques de Liquides de l'Organisme,' in two volumes. The first volume, comprising upwards of 500 pages, is devoted entirely to the blood, of which it is an almost exhaustive monograph. The second volume is devoted to the urine, sweat, bile, saliva, as well as to the pancreatic and gastric juices. In 1865 was published the 'Introduction à l'Étude de la Médecine Expérimentale,' in which he gives a full account of the method of experimental inquiry, more especially as it concerns animal functions. He points out that the conditions prevailing in a living animal modify or mask the effects produced by substances on each other when in atmospheric air; and that this is so not on account of any vital principle, but because the conditions (essentially physical in nature) are not the same. For instance, when he injected the yellow prussiate of potash and an iron salt by separate veins so as to insure their meeting in the blood, and out of contact with air, no Prussian blue is formed; but as soon as the substances find their way into the bladder or the stomach, the combination takes place. This was followed by the 'Principes de Médecine Expérimentale,' 2 vols. 8vo, 1866.

BERNARD, SIR THOMAS, the originator of a large number of philanthropic institutions, was born at Lincoln, on the 27th of April, 1750. He received a collegiate education at Harvard University, his father being, at the time, governor of one of the New England settlements; and during the later portion of his stay in America, he acted as private secretary to his father. Returning to England in 1769, the father was made a baronet as Sir Francis Bernard, in recognition of his services. After some years' study of the law, Mr. Thomas Bernard became, in 1780, one of the benchers of the Middle Temple. Practising as a conveyancer, he realised a competency in about fifteen years, and devoted the remaining twenty-three years of his life to benevolent pursuits. In 1795, when treasurer of the Foundling Hospital, he introduced Count Rumford's plan of warming and ventilating, by which he lessened the expenses and increased the comfort and healthiness of that establishment. He was next instrumental in causing similar improvements to be introduced into Marylebone Workhouse. In 1796, he published the outlines of a plan for a 'Society for bettering the condition and increasing the comforts of the Poor.' Adopting the golden maxim, that "If the manner in which relief is given is not a spur to industry, it becomes in effect a premium to sloth and profligacy," he drew up the scheme accordingly. The objects were—to collect information concerning the poor; to circulate printed reports on this subject throughout the kingdom; to facilitate the admission of children into useful occupations; and to apply new inventions and discoveries to the benefit of the poor, in regard to dwellings, gardens, fuel, cooking, furniture, &c. These tracts, or reports, which began to be issued in 1797, wrought many good effects. As chairman of Petty Sessions, at Stoke, in Bucks, Mr. Bernard wrote and published concise useful instructions for the guidance of overseers and poor law officials, and improved in many ways the workhouse at Iwer. About the same time he introduced the Rumford system of warming at Christ's Hospital; and published a tract on the frugal use of garden allotments. In 1798, he encouraged great improvements in the Foundling Hospital at Dublin; established temporary soup-houses in various places during a time of scarcity; and aided the founding of various provincial societies for bettering the condition of the poor. In 1799, he was instrumental in

forming the Royal Institution; in 1800, the School for the Indigent Blind, a society for the protection of climbing boys or chimney sweepers, and a free church in the purlieus of Seven Dials; in 1802, city missions and district visiting societies; soon after this, the Cancer Institution, the Fever Institution, and the Jennerian or Small Pox Institution; and the passing of an Act for the protection of children in cotton and woollen mills. In 1805, he took part in the founding of the British Institution, the Naval and Military Bible Society, the Patriotic Fund, and the African Institution. Among other useful projects of his, was the establishing of the Alfred Club in 1809, distinct alike from the drinking clubs, gambling clubs, and party clubs; the furtherance of Dr. Bell's national system of education; the relief of the poor in the manufacturing districts, in 1812; the increased supply of fish to busy towns, in 1813; and the lessening of the salt duties, in 1816. Mr. Bernard (who became Sir Thomas Bernard on the death of his father in 1810) closed his honourable and useful life on the 1st of July, 1819. Sir Thomas Bernard was the author of 'The Comforts of Old Age,' a work which ran through several editions, and of a valuable work on salt duties. His labours in getting up evidence and arguments to lay before a committee of the House of Commons, appointed to consider these duties, with a view to their repeal, is said to have brought on the illness which proved fatal. He also edited 'The Political Life of William Wildman, Viscount Barrington,' for his friend Shute Barrington, Bishop of Durham, whose name it bears. A memoir of him, by the Rev. James Baker, was published in 1819.

BERNARDES, DIOGO, an eminent Portuguese poet, called by his countrymen "the prince of pastoral poets," was born at Ponte de Barca, in the second quarter of the 16th century. He was the friend of the poet Caminha, the disciple of Ferreira, the Horace of Portugal, and an imitator, as some affirmed, a plagiarist, of Camoens. He was secretary to Pedro de Alcaçova Carneiro, in his embassy to the court of Spain. Afterwards he accompanied King Sebastian in his Quixotic expedition into Africa, and was made prisoner at the battle of Alcacer, at which Sebastian was killed. Bernardes, after a time, recovered his liberty, and returned to Lisbon, where, in the enjoyment of a pension granted him at the instance of Cardinal Albert of Austria, he continued to reside till his death, in 1596. Bernardes' poems have the collective title of 'O Lymas,' from the river which he celebrated, and by which most of them were composed. They are mainly pastoral; very melodious in versification, but full of conceits, beyond the toleration of a more northern taste. By his countrymen he is, however, still held in high esteem. The following are the principal editions of his works. 'Varias rimas ao bom Jesus e a Virgem gloriosa, sua Mãe, e Santos particulares,' 4to, Lisbon, 1594; 'O Lyma; em o qual se contem as suas Eglogas, e Cartas,' 4to, Lisbon, 1596; and 'Flores do Lyma,' 8vo, Lisbon, 1597.

BERND, CHRISTIAN SAMUEL THEODOR, a learned German writer on heraldry, was born at Meseritz, April 12th, 1775; passed from the Gotha Gymnasium to the University of Jena; became tutor in a family, but pursued his philological studies, and produced, with Campe, a 'Wörterbuch der Deutschen Sprache'; went to Brunswick in 1811 as assistant in the library; in 1813, was appointed teacher in the Gymnasium at Posen; in 1818, was nominated secretary to the newly founded University of Bonn; and in 1822, professor of diplomatics, sphragistics, and heraldry. He died on the 14th of September, 1854. Besides a large number of papers in reviews and journals, Bernd wrote several philological works, including an essay on the Posen dialect of the German language, 'Die deutsche Sprache im Grossherzogthum Posen,' Bonn, 1820; on the affinities of the Slavonic and German languages, 'Der Verwandtschaft der slavischen und germanischen Sprachen,' Bonn, 1822; a work that was followed some time afterwards by an essay on the double forms of German verbs, 'Die doppelformigen Zeitwörter der deutschen Sprache,' Aachen, 1837. His first publication on the subject with which his name is now chiefly associated, was one on the general knowledge of inscriptions in heraldry, 'Allgemeine Schriftenkunde der gesammten Wappenwissenschaft,' 3 vols. Bonn, 1830—35; with supplement, 1841; the heraldry of the Prussian Rhine province, 'Wappenbuch der preussischen Rheinprovinz,' 2 vols. 1835; with a supplement, 1842; the chief points of the science of heraldry, 'Die Hauptstücke der Wappenwissenschaft,' the most generally valuable of all Bernd's writings, 2 vols. Bonn, 1841—49; and a handbook of heraldry, 'Handbuch der Wappenwissenschaft,' also a very useful work, Leipzig, 1856.

BERNOULLI, CHRISTOPH, belonging to the remarkable

family of that name [E. C. vol. vi. col. 972], and himself a distinguished authority on economical and technical science, was born at Basel on the 15th of May, 1782. After studying under his father, Daniel Bernoulli, who was professor of elocution in that city, he went to the French college at Neuchâtel to finish his education. He soon afterwards filled a municipal office at Lucerne in 1799, and then one at Basel. After prosecuting a course of study in the natural sciences in 1801, he became in 1802 titular professor at the primary school of Halle. He travelled in Prussia and in France; and on his return opened a school at Basel in 1806, which he maintained for eleven years. In 1817 he accepted the appointment with which his services are chiefly associated—that of professor of natural history in the university of Basel. As a writer he raised technology to the rank of a science by improved methods of treatment. The following are the principal works from his pen:—An essay on the light of the sea, 'Über das Leuchten des Meers,' Göttingen, 1802; 'Physische Anthropologie,' 2 vols. Halle, 1804; introductions to physics and mineralogy, 'Leitfaden für Physik,' and 'Leitfaden für Mineralogie,' Halle, 1811; on the injurious influence of trade guilds on industry, 'Über den nachtheiligen Einfluss der Zunftverfassung auf die Industrie,' Basel, 1822; first principles in the theory of the steam-engine, 'Anfangsgründe der Dampfmaschinenlehre,' 1824; observations on the cotton manufacture, 'Betrachtungen über die Baumwollen Fabrikation,' 1825; 'Handbuch der Technologie,' 2 vols. 1833—34, 2nd edition, 1840; 'Handbuch der Dampfmaschinenlehre,' Stuttgart, 1833, 2nd edition 1847; 'Handbuch der industriellen Physik, Mechanik, und Hydraulik,' 2 vols. Stuttgart, 1834—36; a history of the English cotton manufacture (based on Baines), 'Geschichte des britannischen Baumwollen Fabrikation,' Stutt. 1836; 'Handbuch des Populationistik,' Ulm, 1840; 'Technologische Handencyclopädie,' Stutt. 1850. Bernoulli, who also edited several volumes of Swiss official statistics, died at Basel on the 6th of February, 1863, having resigned his professorship two years before.

BERNSTEIN, GEORG HEINRICH, a distinguished German Orientalist, was born at Kospeda, near Jena, on the 12th of January, 1783. The son of a Protestant clergyman, he was educated at the Orphan House, Halle, and studied theology and the Oriental languages at the University, Jena, where he was admitted professor in 1810. He afterwards went to Göttingen and Leipzig Universities, where he read courses of lectures on language, and then became adjunct professor at Berlin. For a couple of years, 1813—14, his studies were interrupted by the war, during which he served in the volunteer cavalry. Peace proclaimed, he taught for a time at Jena; then proceeded, aided by the Prussian Government, to Leyden, Oxford, Cambridge, and London, to make collections for a Syriac Lexicon, and whilst in London he entered upon the study of Sanskrit. On his return to Berlin in 1819 he was appointed professor of the oriental languages, and the duties of his office, the investigation of his special department of philology, the preparation of a great Syriac lexicon, which, however, he did not live to complete, the writing of occasional papers, diversified only by journeys to explore the libraries of Italy, and by a second visit to Oxford, amply occupied the remainder of his life. He died on the 7th of April, 1860. His principal works are 'De Initii et Originibus Religionum in Oriente dispersarum,' 8vo, Berlin, 1817; 'Arabische Grammatik und Chrestomathie,' Göttingen, 1817; a dissertation on some recent translations of the New Testament; editions of the 'Hitopadasha' in Sanskrit; of some Arab texts; the Syriac vocabularies 'Bar-Bahleel' (1842); 'Gregorii Bar-Hebraei Chronici Syriaci' (1846); and numerous papers in journals, or contributed to the learned societies of Germany. A work on which he expended much labour was G. W. Kirsch's 'Chrestomathia Syriaca cum Lexico,' 2 vols. 8vo, Leipzig, 1832—41, the lexicon being mainly Bernstein's work; his own great Syriac lexicon, as we have said, he did not live to finish.

BERRY, CAROLINE-FERDINAND-LOUIS, DUCHESSE DE [E. C. vol. i. col. 675]. The Duchesse de Berry died of paralysis of the brain on Sunday, the 17th of April, 1870, at her residence in Upper Styria, where she had lived in privacy since the death of her husband in 1864.

BERRY, MARY AND AGNES, known from their long and close friendship with Horace Walpole, were born at Kirkbridge, Yorkshire, Mary on the 16th of March, 1763, Agnes on the 29th of May, 1794. Their father, a member of a wealthy Scotch family, was disappointed in the inheritance he expected, and being of an indolent, unsettled disposition, was for some time in straitened circumstances, but a younger brother to whom the

bulk of the property was bequeathed settled on him an annuity of 1000*l.*, and he was enabled to give his daughters an elegant education and carry them into society, where, being accomplished and of attractive manners, they were much noticed. From May, 1783, to June, 1785, they travelled about Holland, Germany, Italy, and France, and the Diary of Miss Berry gives evidence of an unusually observant, intelligent, and appreciative spirit. In the autumn of 1788 they first made the acquaintance of Horace Walpole. No longer young, he was yet fascinated by the elder sister almost at first. He had heard of their cleverness, and the first night he met them he would not venture near, as he "concluded they would be all pretension." But, he writes, "the second time, in a very small company, I sat next to Mary, and found her an angel, both inside and out." In the same letter (of Oct. 11, 1788, apparently only a few days after the meeting) he says, "They are the best informed and the most perfect creatures I ever saw at their age. They are exceedingly sensible, entirely natural and unaffected, frank, and being qualified to talk on any subject, nothing is so easy and agreeable as their conversation, nor more apposite than their answers and observations. The eldest, I discovered by chance, understands Latin, and is a perfect Frenchwoman in her language. The younger draws charmingly. . . . They are of pleasing figures," and so forth. The acquaintance thus happily commenced soon ripened into friendship. The father took a cottage at Kew, and henceforth they were never long separated. The old wit after a time became almost wholly dependent upon them for his happiness. When they were absent from him, as frequently happened, on the Continent, visiting friends in the country, or when by his removal into London, they were separated though but for a few days, he kept up a constant stream of letters, filled with news, gossip, anecdotes, criticism, which coming at a time when the correspondence with his older friends had slackened, are not only full of interest and charm for the matter and style, but will be invaluable for the historian and student of the period. It was for the amusement of the Miss Berrys, too, that Walpole first narrated and afterwards wrote his caustic 'Reminiscences of the Courts of George the First and Second.' In 1791 Walpole was able to offer his friends Little Strawberry Hill (or as he called it Cliveden, it having been Mrs. Catherine Clive's dwelling), and thus secure their residence near him. When by the death of his nephew he became Lord Orford, he is understood to have made her the more important offer of his hand, but feeling the possibility of misconstruction of her motives if she accepted it, she gave a firm refusal, and he acquiesced in the propriety of her decision. Their friendship and intimacy continued unabated till his death, when he left the sisters his unpublished MSS. and made them a modest provision. Both the Miss Berrys survived to an unusual age. During their latter years their house in Curzon-street was the favourite resort of all shades of distinguished persons who had acquired the right of *entrée*, happy in the opportunity of conversing with ladies who to unvarying cheerfulness and good nature added a singular charm of manners; one of whom, "born in the third year after the accession of George III. lived to be privately presented to Queen Victoria," and who had both "lived constantly in society both at home and abroad; had seen Marie Antoinette in all her pride and beauty, and lived to regret the fall of Louis Philippe, for whose prudence and ability Miss Berry had for many years conceived a high respect, and with whom she was personally acquainted," and who, in consequence of their great age and unusual opportunities, were the possessors of an unfailing store of anecdotes and reminiscences. Agnes Berry died on the 29th of January, 1852; Mary followed her on the 20th of September in the same year: they were interred in the same grave in Petersham church-yard.

Mary Berry was the real editor of the MSS. bequeathed by Horace Walpole to Mr. Berry and his daughters, and published, ostensibly under the editorship of Mr. Berry, in 5 vols. 4to, 1798. In 1802 a comedy in five acts, written by her, was brought out at Drury Lane Theatre, but it was only performed three nights: it was afterwards published in her works, with her own explanation of the cause of its failure on the stage. In 1810 she edited the 'Letters of Madame du Deffand' (4 vols. 12mo), bequeathed to Walpole, and prefixed to them a remarkably well written preface. Her next publication was the 'Letters of Lady Rachel Russell,' selected from the originals in the possession of the Duke of Devonshire, to which she added a brief but excellent memoir of Lady Russell. Her most elaborate original work appeared under the title of 'A Comparative View of the Social Life of England and France, from the Restoration of Charles II. to the Present Time,' in 2 vols. 8vo, 1828—31, a

book more praised than read, but which will still repay the perusal. Walpole's 'Letters, addressed to the Misses Berry,' were first published in Bentley's 'Collected Edition of the Letters of Horace Walpole, Earl of Orford,' with a preface by Miss Berry, which is a spirited defence of Walpole against the severe criticism of Macaulay contained in his famous article in the 'Edinburgh Review' on Walpole's 'Letters to Sir Horace Mann,' and reprinted in his 'Works.' A complete edition of Miss Berry's printed works appeared in 1844; but she will be longest remembered by Walpole's letters to her and by 'Extracts of the Journals and Correspondence of Miss Berry from the year 1783 to 1852,' in 3 vols. 8vo, London, 1865, 2nd ed., 1866, a work of exceeding interest and value, very gracefully edited by Lady Theresa Lewis.

BERRYER, PIERRE-ANTOINE [E. C. vol. i. col. 676]. For a dozen years after the *coup d'état* of December, 1851, M. Berryer refrained from taking any ostensible part in political affairs. He was known to have lent his best services in endeavouring to bring about a formal reconciliation and arrangement between the two branches of the House of Bourbon; but the first public announcement of his willingness again to share in political discussions was the offering himself as a candidate along with M. Thiers for the representation of Bouches-du-Rhône in the Corps Législatif at the election of 1863. From this time he was constant in his attendance in the Legislative Chamber, and rendered important aid to the opposition. He was no longer physically capable of those remarkable displays which had secured for him the reputation of being the greatest living orator of France; but his breadth of view and clearness of expression, vigour, brilliancy, and occasional withering sarcasm, were always effective. His last great legal orations, that in defence of M. de Montalembert in 1858, and those in the action of M. Patterson against the ex-King Jerome Bonaparte, 1860—61, were amongst the most eloquent and effective he ever delivered. In the autumn of 1865 M. Berryer paid a visit to England, where he received the almost unexampled compliment of an invitation to a dinner given in his honour, in the name of the English bar, by the Benchers of the Temple and of Lincoln's Inn. A like honour awaited him from the bars of Besançon and Bordeaux on his return to France. Three or four days before his death, M. Berryer, feeling that his end was approaching, begged to be carried to his villa of Argenville, as he was unwilling to die in Paris. His request was complied with, and, surrounded by his family, he died at Argenville, on the morning of the 29th of November, 1868.

BERTANI, GIOVANNI BATTISTA, Italian painter and architect, was born about 1568, at Mantua; and was a scholar of Giulio Romano, whom he accompanied to Rome. On the death of Giulio, Bertani was made head of the Academy at Mantua, and became a marked favourite with the Duke Vincenzo, who employed him in painting several of the apartments of his palace, and in other ways. In executing these commissions, Bertani trusted much to scholars and assistants, at the head of whom was his brother Domenico: Giovanni made the designs, but seldom touched the pencils. Besides the palace, Bertani painted in this way a Martyrdom of St. Agatha, and many other pieces for churches in Mantua. He also found employment as an architect. The church of St. Barbara, the Carmelite convent, his own house, and other buildings, remain in attestation of his skill. Bertani wrote 'Gli oscuri e difficili parti dell' opera Ionica di Vitruvio, di latino in volgari tradotti,' fol. Mantua, 1558.

BERTHAULT, LOUIS, French architect and landscape gardener, was born at Paris about 1771, and learnt his profession under an uncle. He was well employed as an architect, but his celebrity is due to his having been the most successful designer of what was called "les jardins Anglais," and the founder of the present style of French garden arrangement. For the Empress Josephine, he laid out the gardens at Malmaison, which were exceedingly admired. Napoleon I. made him architect of Compiègne, where he restored the palace with much elegance. The Emperor also commissioned him to design a large and costly palace and grounds at Rome, as a royal residence for his son, but the design remained unaccomplished. The embellishments made around some of the ancient monuments, by order of Pius VII., were the only works carried out at Rome from his designs. Many of the finest gardens in France were designed or remodelled by Berthault, among others those of Pontchartain, Château-Margaux, Saint-Leu, Arminvilliers, Raincy, Baille, Condé, &c. M. Berthault died in August, 1823.

* **BERTHIER, JEAN FERDINAND**, one among the few deaf and dumb persons who have acquired distinction as teachers, and who have written excellent books for the benefit of their fellow-sufferers, was born about the year 1805, and for several years has been professor in the Institution des Sourds-Muets, at Paris. M. Berthier has especially endeavoured to elucidate and extend the methods of teaching deaf-mutes devised by the Abbé de l'Épée and the Abbé Sicard. In 1823, in the names of himself and other inmates of the institution, he produced 'Adieux gesticulés,' on the tomb of Sicard. In 1839 appeared his 'Notice sur la vie et les Ouvrages d'Auguste Bebian, Censeur des Etudes à l'Institut des Sourds-Muets.' His treatise 'Les Sourds-Muets avant et depuis l'Abbé de l'Épée,' Paris, 1840, obtained for him the gold medal of the Society of Moral Sciences of Seine-et-Oise. Berthier's next work was 'L'Abbé de l'Épée, sa vie, son apostolat, ses travaux, sa lutte, et ses procès, avec l'histoire des Monuments élevés à sa Mémoire,' 8vo, Paris, 1840. Some years later he addressed to the Academy of Medicine, and to that of the Moral and Political Sciences, a refutation of certain opinions expressed by the late Dr. Itard, 'Sur l'Opinion de feu le Docteur Itard, relative aux facultés intellectuelles et aux qualités morales des Sourds-Muets,' 8vo, Paris, 1852. In 1853 he published 'Observations sur la Mimique considérée dans les rapports avec l'enseignement des Sourds-Muets.' M. Berthier received the decoration of the Legion of Honour in 1849.

BERTHIER, PIERRE, mineralogist and metallurgist, was born on July 3, 1782, at Nemours, in the department of Seine-et-Marne. His early education was received at the École Polytechnique and was completed in the Corps des Mines, which he joined in 1801. In 1816 he was appointed professor of assaying in the School of Mines, at Paris, which post, as also an inspector-generalship of mines, he retained till 1845. He was elected member of the Academy in 1827, and died in August, 1861. His best known work is his 'Traité des Essais par la voie sèche ou des propriétés de la composition et l'essai des substances métalliques et des combustibles,' 2 vols, 1833. He has also written upwards of one hundred papers in scientific journals, principally in the 'Journal de Mines,' and its continuation the 'Annales des Mines,' and the 'Annales de Chimie.' A full list of them will be found in the Royal Society's 'Catalogue of Scientific Papers.'

BERTHOLD, ARNOLD ADOLF, zoologist and physiologist, was born Feb. 26, 1803, at Soest, in Westphalia, and was connected for the greater portion of his life with the university of Göttingen. It was there he passed through his course of medical study, and from it he received his degree of doctor when only twenty-one years of age. A few months were then spent in extending his knowledge by visiting the medical educational institutions at Berlin and Paris. In 1825 he settled down at Göttingen, where he was occupied for several years in practising his profession. From the last-mentioned date onwards he was also engaged in lecturing on zoology, physiology, and comparative anatomy; first as an occasional substitute for the ordinary professor; then as assistant; and after 1836 as professor. He died on January 3, 1861. His writings comprise about fifty papers contributed to Oken's 'Isis,' 'Nova Acta Acad. Cæs. Leopold. Nat. Cur.,' 'Müller's Archiv,' the 'Abhandlungen' of the Royal Scientific Society of Göttingen; the 'Nachrichten' issued by this society in conjunction with the university; and one or two other periodicals. These in their various ways added to the current stock of knowledge, but none possesses any special mark of merit. The more important are those on the anatomy of rabbits and hares ('Einleitung in die Zergliederung des Hasen und des Caninchens,' Isis for 1825; on *Gordius aquaticus* in vol. i. of the Göttingen 'Abhandlungen'; on new or little known reptiles in vols. i. and iii. of the same work; and on the duration of pregnancy in various animals, but chiefly the human species, in vol. ii. The other subjects on which he has written are the anatomy of *Picus viridis*; the skull of the otter; the structure and growth of eggs; the anatomy of *Apus cancriformis*; the nerves of *Mollusca*; hybernation; on the occurrence of living reptiles in the human body; on the dentition of the narwhal; and several more. He is best known by his 'Lehrbuch der Zoologie,' 1st edition, 1829; 2nd edition, 1837; and his 'Lehrbuch der Physiologie des Menschen und der Thiere,' 1845, which were at one time much used as class-books in some parts of Germany.

BERTHOLD VON REGENSBURG, one of the greatest preachers of the middle ages, who exercised on the 13th century the same kind of influence as St. Bernard had exercised on the 12th, was born at Regensburg, or Ratisbon, in Bavaria, in some

unascertained year between 1210 and 1220. He became a minor friar of the order of St. Francis, and entered upon his career as a preacher in 1250. He itinerated in various parts of Austria, Moravia, Thuringia, and Bohemia, preaching in the open air, in the fields, and in the woods, to congregations which are said to have frequently ranged from 60,000 to 100,000 in number. He died on the 13th of December, 1272, and was buried in a church attached to a house of his order at his native place of Regensburg.

There is extant in the library of Heidelberg, a manuscript copy of some of the sermons of Berthold, which was executed in 1370, by command of the Princess Elizabeth; whilst in other libraries of Germany there exist his 'Sermones de Tempore et de Sanctis,' and 'Sermones Rusticani.' One of the groups of Seasonable Sermons, 'Predigt am Michaelisfeste,' occurs in R. Nesselmann's 'Buch der Predigten, oder 100 Predigten und Reden aus den verschiedenen Zeiten, Ländern und Confessionen,' &c., 8vo, Elbing, 1858. Other sermons of Berthold have been published, without date, at Paris, by Jean Gourmont, with the title of 'Fratris Bertholdi Teutonis Horologium devotionis circa Vitam Christi'; and an octavo collection of German Sermons of Berthold the Franciscan, &c., with a preface by Neander, was published at Berlin, in 1824, by Christian Friedrich Kling, with the title of 'Berthold des Franciskaners deutsche Predigten, aus der Zweiten Hälfte des dreizehnten Jahrhunderts, theils vollständig, theils in Auszügen. Herausgegeben von C. F. Kling. Mit einem Vorwort von Dr. A. Neander.' The Berthold literature may be completed with the mention of F. Pfeiffer's 'Berthold von Regensburg, vollständige Ausgabe seiner Predigten mit Anmerkungen und Wörterbuch,' 8vo, Vienna, 1862, &c.

BERTON, the name of three generations of French musicians, composers, and musical writers, who acquired considerable distinction.

PIERRE-MOUTAN BERTON, was born at Paris in 1727. When only twelve years old, he composed motetts which were sung at the cathedral of Senlis; and in 1744, when about seventeen, he became chorister in a church, and a singer in operas. His first regular appointments were those of church organist and orchestral director at Marseille. Between 1755 and 1780, he was successively chef d'orchestre at the Paris opera, director of spectacles, director of the opera, and chef d'orchestre at the Chapelle du Roi. Berton composed many operas, and the music for a still larger number of ballets and spectacles; but his chief services were as a director and conductor, in which capacities he raised orchestral performances to a degree of excellence which they had not before attained in France. It was under his direction that the operas of Glück and Piccini were chiefly produced. He died May 7th, 1780. **HENRI-MOUTAN BERTON**, son of Pierre-Moutan, was born at Paris, 17th September, 1767. In his fifteenth year he played the violin at the Paris opera. Then he studied composition under Sacchini. In 1786, a sacred cantata by him was played at Paris, and in 1787 appeared his first opera, 'Promesses de Mariage.' After many other compositions, the first which gained him notoriety was the opera 'Les Rigueurs du Cloître,' marked by new characteristics of style. In 1795, he was appointed professor of harmony at the Conservatoire de Musique; and in 1807, director of music at the Opéra Italien. In 1815, he was chosen one of the six members of the musical section at the Institute of France; and in 1816, professor of composition at the Conservatoire. He filled several other musical posts during the remaining twenty-eight years of his life. Henri-Moutan Berton composed five oratorios and sacred cantatas, nearly fifty operas and musical pieces for the stage, and many canons, romances, and smaller compositions. His best works were the operas 'Les Rigueurs du Cloître,' 'Montano et Stéphanie,' 'Le Délire,' and 'Aline, Reine de Golconde.' His literary works comprised a voluminous 'Système Générale d'Harmonie' (1815, 4 vols. 4to), many musical articles in journals and cyclopedias, and essays read before societies and institutions. He died 22nd of April, 1844. A notice of his life and works was published in the same year, by Raoul-Rochette. **FRANÇOIS BERTON**, natural son of Henri-Moutan, was born at Paris, on the 3rd of May, 1784. After studying, from 1796 to 1804, at the Conservatoire de Musique, he became, for a time, teacher of singing, and composed several minor pieces for the voice and pianoforte. Next appeared his operas 'Monsieur Desbosquets' (1810), 'Jeune et Vieille' (1811), 'Ninette à la Cour' (same year), and 'Les Caquets' (1821). In 1821, he was appointed professor of vocalisation at the Conservatoire. In 1827, he brought out an opera, 'Une heure d'Absence.' François Berton died of cholera in July, 1832. A

notice of his life and works was published by Raoul-Rochette soon afterwards.

BERTRAM, or BERTRAND DE BORN, Comte de Haute-ford, a renowned French troubadour, was born at the Château de Haute-ford, in Perigord, about the middle of the 12th century. The earliest mention of him is in the year 1185. The sons of Henry II. were referring their claim to the sovereignty of Aquitaine to the decision of the sword, when Bertram, taking sides with the younger brother, Prince Henry, addressed a fervid *sirvente* (or martial song) to the feudal lords of Aquitaine, calling upon them to form a league against the Comte de Poitou (Richard, afterwards Cœur-de-Lion). The energy of Richard was, however, too much for the confederates, who, finding matters proceeding adversely, broke up the league and left Bertram to his fate. Richard laid siege to the Castle of Haute-ford, which, after a brief defence, capitulated. Bertram, however, full of resources, was not dismayed. In an interview he easily succeeded in reconciling himself to the conqueror. His castle and lands were restored to him, and he expressed his gratitude, and vowed service and fidelity, pure as refined silver, to his new lord, in a fresh *sirvente*, full of adroit flattery of Richard, and bitter denunciation of the faithless allies who had sworn to combat to the end, but on the first emergency had left him to carry on the struggle single-handed. When the brothers shortly after joined their arms in rebellion against their father, Bertram was foremost in inciting them forward, and played a prominent part in the unnatural strife. The death of Prince Henry threw the rebellious forces into disorder, and Bertram was again a prisoner. But once more his good fortune prevailed. Summoned before the king, Henry expressed surprise that a man who so vaunted himself on his intelligence, should have acted as he had done. "I might have thus boasted once," was Bertram's answer, "but in losing your son, Sire, I have lost all the intelligence and ability I ever possessed." The king had dearly loved his eldest boy, and his resentment at his unfilial conduct had been softened by the message sent by the penitent prince from his death-bed. The broken-hearted man could not refrain from tears: "I know that you loved my son," he said, "and was loved by him. Go: I restore you your castle and territories," and, knowing that he had been impoverished by the war, he ordered 500 marks to be given him to defray his expenses. Bertram wrote a *sirvente* on the death of Prince Henry, which is considered to be the most touching and beautiful of all his compositions.

Henry II. died shortly after, July, 6th, 1189, and Richard ascended the throne. The next year he set out, with Philip of France, on the third great crusade. According to all feudal obligations, Bertram should have accompanied them. He preferred to stay at home; but he published another vigorous *sirvente*, inciting others to the enterprise he declined, and mocking, by name, the prudent warriors who followed his own example. When Richard returned, unsuccessful and weakened, Bertram, faithful to his old tactics, wrote *sirvente* after *sirvente*, in order to arouse the lords of Aquitaine to form a new league against the English king, and to incite the King of France to break the treaty he had concluded with him; and when war was decided on, Bertram wrote a jubilant address to Philip, urging him to begin the war with fire and with sword, and not to cling to peace like a monk. Bertram was now in his proper element, but the unexpected death of Richard put an early end to the strife. Of Bertram we hear little more. His occupation gone, and finding age creeping on him, he retired to the monastery of Cîteaux, and, it is said, became a monk, and ended his days in penitent austerity. The year of his death is uncertain: it is supposed to have occurred before 1212, as in that year the sons of Bertram did homage to the King of France for the lordship of Haute-ford; though this might well have happened if the father had been living, and a monk of Cîteaux.

Bertram de Born is regarded by most recent critics, as the ablest and most characteristic of the warlike troubadours of his time. His poems are full of life and energy, and passages of great beauty as well as power occur in them. The malevolence, however, predominates greatly over the tenderness; and seemingly he was as ready to carry on fratricidal strife in person, as to urge it upon the young princes. In one of his *sirventes*, he savagely warns his brother, who had urged him to cede him a portion of his territory, to beware how he meddles with him, for he would tear out the eyes of any one who should seek to take anything from him. "Peace I abhor, war only delights me." His conduct and sentiments have been defended, or palliated, as being in accordance with the spirit of the age. But this does

not agree with early opinion. Dante, emphatic in condemnation, has placed Bertram in the lowest regions of hell; wandering—thing he might fear to tell of, but that conscience makes him strong—a headless trunk, and bearing pendant by the hair, as though it were a lantern, the severed member. This "grievous torment," explains the unhappy sufferer (who asks "can any other be terrible as this,") is inflicted on him because on earth he "set father and son at mutual war;" so "for parting those thus closely knit, my brain I carry parted from its source that in this trunk inhabits. Thus in me the law of retribution fiercely works." (*Inferno*, canto xxviii.) Raynouard has printed the best of the *sirventes* of Bertram de Born, in the fifth volume of his 'Choix des Poesies des Troubadours.'

BERTRAND DE DOUE, JACQUES MATHIEU, was born Oct. 23, 1776, at Le Puy Cantal. His life was principally occupied in commercial pursuits, and in fulfilling the duties of many public offices in his native town. He is best known to science by his 'Description géognostique du Puy en Velay,' which was published in 1823, and of which the author was preparing a second edition at the time of his death. A 'Notice préliminaire' to this edition was inserted in the 'Annales de la Société d'Agriculture, etc. du Puy,' xxiv. p. 275—340, 1861. He contributed several other papers to the same society, mostly relating to the meteorology of his district, of which he was a diligent observer. He noticed a constant relation between the direction of the lower and upper currents of the atmosphere, which he announced as the "law of interversion." At one time he was president of the Society of Agriculture, Sciences, Arts, and Commerce of Puy. He died in 1862, when eighty-six years of age.

BÉRULLE, PIERRE DE, a cardinal, and founder of the French Congregation of the Oratory, was born on the 4th of February, 1575, at the Chateau de Sérilly, near Troyes, in Champagne. His father, Claude de Bérulle, was the descendant of a noble family of Champagne, and a counsellor or judge in the parliament of Paris. Pierre received his education successively amongst the Jesuits, and at the University of Paris. He was early distinguished for his piety, learning, and sweetness of temper and disposition. At the age of eighteen, he is said to have written an excellent book on self-denial. In 1599, after forty days spent in assiduous prayer, and great austerities, in a convent of Capuchins, he was admitted to holy orders; and the next year distinguished himself at the conference of Fontainebleau, held by order of Henri IV., in which Cardinal du Perron combated the views of Du Plessis-Mornay. Bérulle, who had been appointed almoner to Henri IV., was, in 1603, sent by that prince to Spain, for the purpose of inducing some of the Teresian or Carmelite nuns to settle at Paris; and with considerable difficulty, and after encountering much opposition, succeeded in establishing that order in France. But he is chiefly remarkable for his completion of a task at once of greater difficulty and of greater interest, to which he was incited by the strong persuasions of St. Francis de Sales, César de Bus, and F. Coton, and by the repeated commands of Cardinal de Retz, his diocesan. This undertaking, in which he had to encounter the most lively and jealous opposition of the Jesuits, was the foundation of a French Congregation of Priests of the Oratory, a society of seculars which owed its establishment in Italy to St. Philip Neri, in 1564. The French Oratorians, whose differences from their Italian brethren are great enough to justify them in being considered as an independent congregation, are a society of priests who live in voluntary poverty and obedience, without the obligation or sanction of a vow. The connection of individuals with the congregation, which was confirmed by a bull of Paul V., in 1613, is therefore terminable at their own discretion.

Bérulle was frequently called upon to take part in public affairs, and amongst other useful and honourable services, he effected the first reconciliation of Louis XIII. with his mother, Mary de Medicis. Shortly after this difficult and delicate service, he was sent as ambassador to Spain, where he negotiated a peace favourable to his own country. When the marriage of the Princess Henrietta Maria with the Prince of Wales, afterwards Charles I., was concluded, Louis XIII., who had unbounded confidence in Bérulle, sent him to Rome, in 1624, to procure a dispensation on account of the difference of religion. In this mission, the difficulties of which were much increased by the intrigues of the Spanish ambassador, he was finally successful; and when he conducted the princess to England, he gained, during his short stay in this country, great commendation for his discretion and amiability.

In early life, Bérulle had made a vow not to accept any

ecclesiastical dignity, and he refused, therefore, the offered bishoprics of Laon and Nantes, and other appointments pressed upon him by Henri IV. and Louis XIII. When the latter monarch threatened to apply to the Pope to compel Bérulle to break his vow, he replied that "if the king continued to press him, he should be obliged to quit the kingdom." Notwithstanding this, when Pope Urban VIII., who, after various conversations with M. Bérulle, said of him that he was "not a man, but an angel," sent him, in 1627, a cardinal's hat, with an express command to accept it, he reluctantly did so, along with two abbacies, which were forced upon him to enable him to sustain the dignity of the cardinalate. His elevation to this high rank excited the jealousy of the French bishops, as his promotion to be minister of state gave umbrage to Richelieu, whom some authors have not scrupled to charge with having occasioned Bérulle's death by poison. Certainly the latter was smitten suddenly with apoplexy, whilst engaged in saying mass, on the 2nd of October, 1629, and expired on the same day. He was buried in the church of the Oratorians, in the Rue St. Honoré, Paris; and a marble statue, representing him on his knees at prayer before the altar, was placed in the chapel of St. Mary Magdalene, in the church of the Carmelite nuns, of which society he was superior-general in France. Cardinal Bérulle added to his other claims to distinction, that of being throughout his life the friend and patron of men of letters; and especially he encouraged Lejay in the enterprise of his 'Bible Polyglotte,' and smoothed the obstacles, which arose at Rome, to its being printed, and was one of the first to favour and appreciate Descartes and his philosophy. He found time to compose various works of piety and religion; and in particular to produce treatises on the points in controversy between the Catholics and Protestants. Some of these he published himself; and they achieved considerable popularity. His 'Controversial and Spiritual Works' were published after his death, under the care of Fathers Bourgoing and Gibieuf, in 2 vols. folio, 1646. His 'Life' has been frequently written, by Bourgoing, Doni d'Attichy, Hubert de Cerisy, Caraccioli, and others.

* BESCHERELLE, LOUIS-NICOLAS, French grammarian and lexicographer, was born at Paris on the 10th of June, 1802. His education was completed at the Collège Bourbon; in 1825 he was appointed to a post at the Archives du Conseil d'État, and three years later nominated librarian of the Louvre. Besides a great number of articles in 'Le France Littéraire,' and the 'Revue Encyclopédique,' and several excellent elementary books for the young, M. Bescherelle has written some valuable dissertations on the French language, and is the joint author with M. Lamotte of 'La Grammaire de l'Académie,' with MM. Braconnier and C. Martin of a 'Cours pratique de Cosmographie et de Géographie, appliqué surtout à l'étude de la France,' and with M. Devars of a 'Grand Dictionnaire de Géographie Universelle,' 4 vols. 4to, 1856—58. His principal independent works are the 'Grammaire Nationale,' 2 vols. large 8vo, Paris, 1834—38; 'Dictionnaire grammatical et usuel des Participes Français,' 2 vols. 8vo, double columns, 1842—43; and 'Dictionnaire National, ou Grand Dictionnaire Critique de la Langue Française,' 2 vols. large 4to, treble cols. Paris, 1843—46. This last is by far the most valuable of M. Bescherelle's works. It does not pretend to be exhaustive, like M. Littré's great dictionary, but it is sufficient for all ordinary purposes, is well arranged, clear and precise in definition, and ample in illustration: altogether one of the best dictionaries of a modern language extant.

* BESSEMER, HENRY, inventor of a new process for the manufacture of steel, was born in Hertfordshire, in 1813. Associating himself chiefly with mechanical engineering, he invented or improved various machines; but his more important labours relate to metallurgy. In October, 1855, he took out a patent for improvements in the manufacture of steel; by "forcing currents of air or of steam into and among the particles of molten crude iron, or of re-melted pig or refined iron, until the metal so treated is thereby rendered malleable, and has acquired other properties common to cast steel, and still retaining the fluid state of such metal, and pouring and removing the same into suitable moulds." Two months later he obtained another patent, for "the refinement of pig or cast iron by a single process, and casting the same into ingots suitable for rolling at once into bars or rods." In February, 1856, a third patent related to the conversion of crude iron into steel, or into malleable iron, without the use of fuel for reheating; the conversion being effected by forcing into the molten mass currents of air, which give up their oxygen to support the combustion of the carbon contained in the iron. A fourth patent was taken out in March,

1856; and others have been obtained since. The title of a paper read by Mr. Bessemer, at the Cheltenham Meeting of the British Association for the Advancement of Science, in 1856, 'On the Manufacture of Iron and Steel without Fuel,' led to a misconception of his meaning, and a distrust of his method by steel manufacturers. After a long course of further experiments and improvements, works were established at Sheffield by Mr. Bessemer, for the manufacture of iron and steel on his new plan; and from that time the success of the scheme was ensured. The metallurgists of the continent viewed the Bessemer process more favourably than those of Great Britain; and at the present time there are more Bessemer steel works abroad than at home. The estimate in 1869 was 52 converters (large egg-shaped vessels, in which the conversion of crude iron into steel takes place) in Great Britain, 12 in France, 24 in Prussia, 14 in Austria, 15 in Sweden, 2 in Belgium, 2 in Russia, and 2 in Italy. In these converters, and in some in the United States, it is roughly estimated that 200,000 tons of Bessemer iron and steel were made in the year 1869. The expiration of the original patents, however, appears likely to stimulate the application of the Bessemer process very considerably in this country. Irrespective of advantages in regard to price, the new process has this peculiarity—that by checking the extent of conversion, any intermediate quality of metal may be obtained, from mere iron, through all the intermediate stages, up to absolute steel. Papers by Mr. Bessemer, relating to this invention, have been read before the Institution of Civil Engineers, and other scientific bodies. The Bessemer process has been described at length by many continental metallurgists—Vicaire, Kohn, Boman, Tunner, Grüner, Hingenau, Fréimly, Wedding, Kerl, Chenot, &c. The description is full and complete in the 'Metallurgy' of Crookes and Röhrig, London, 1869.

BETTINA [ARNIM, ELIZABETH VON, E. C. S. col. 113].

BEUGNOT, ARTHUR-AUGUSTE, COMTE, an eminent French writer and publicist, was the eldest son of Jacques-Claude, Comte Beugnot (b. 1761, d. 1835), minister of state under Napoleon I. and Louis XVIII. He was born on the 25th of March, 1797, at Bar-sur-Aube; completed his school training at the Lycée Bonaparte; and was called to the bar in 1819, but soon definitely abandoned law for literature. He first acquired notice by a work for which he divided with M. Mignet the prize of the Institute, 'L'État du Gouvernement et de la Législation en France à l'époque de l'avènement de Saint Louis et des Institutions de ce Prince.' M. Beugnot seemed to have a faculty for these academic prize essays, he having carried off successively those of Paris, Strasburg, and Ghent by his works on 'Les Juifs d'Occident, ou Recherches sur l'État Civil, le Commerce, et la Littérature des Juifs en France, en Espagne et en Italie, pendant la durée du Moyen Âge,' 8vo, Paris, 1824; 'Conquêtes de Philippe Auguste,' 8vo, 1824; 'Des Moyens de Civiliser les Populations Israélites de l'Alsace,' 8vo, 1825; 'Des Banques Publiques, des prêts sur gages, et de leurs inconvénients,' 8vo, 1829; and 'Histoire de la Destruction du Paganisme en Occident,' 2 vols. 8vo, 1835—a work of more research and ability than some of its predecessors, but which, though the author was a good Catholic, fell under the censure at Rome for the freedom of some of its remarks on the state of the early pontificate. M. Beugnot now occupied himself for some time in searching the archives bearing on the proceedings of the early parliaments, the ancient jurisprudence, the guilds and the municipal governments of France, drew up some Reports for presentation to the chambers, and began an elaborate historical survey, which, however, was, we believe, never completed. Partly in consequence of these investigations he was requested by the Minister of Public Instruction, M. Cousin, to edit the 'Olim, ou Registres des Arrêts rendus par le Cour du Roi, sous les règnes de Saint Louis jusqu'à Philippe le Long,' 4 vols. 4to, 1840—48, forming part of the 'Collections des Documents Inédits sur l'Histoire de France.' M. Beugnot also prepared an account of the ' Coutumes du Beauvoisis,' preceded by a notice of Philippe de Beaumanoir, 2 vols. 8vo, 1842; and an edition of 'Assizes de Jérusalem, ou Recueil des Ouvrages de Jurisprudence composée pendant la Treizième Siècle dans les royaumes de Jérusalem et de Chypre,' 2 vols. folio, 1841—49.

In 1832 M. Beugnot was elected to succeed M. Thurot as member of the Institute. On the 25th of December, 1841, he was named peer of France. In the upper chamber he united himself with M. de Montalembert in demanding in the interest of the clergy what was called the liberty of teaching; and later he argued with warmth against the proposal for the expulsion of the Jesuits. Returned after the revolution of 1848 to the Legis-

lative Assembly as representative for Haute-Marne, he distinguished himself as the advocate and reporter of the Loi sur l'Instruction Publique of March 15, 1849, by which, under the pretext of allowing liberty of teaching, public instruction was handed over to the almost exclusive control of the priesthood. The coup-d'état of the 2nd of December relegated Beugnot to private life and to literature; but he published nothing more of any value, and died March, 1865.

* BEULÉ, CHARLES-ERNEST, a distinguished French archaeologist and author, was born at Saumur on the 29th of June, 1826; completed his educational course at the Ecole Normale, 1845—48; and somewhat later was nominated professor of rhetoric at Moulins. Sent to the Ecole Française at Athens, he engaged actively in the exhumations at the Acropolis and in various investigations in Hellenic archaeology, his proceedings tending considerably to raise the character of the school. He returned to France in 1853, and the following year published his first work of any consequence, his previous publications having been academical dissertations and articles in journals: 'L'Acropole d'Athènes,' 2 vols. 8vo, 2nd ed. 1863. This was followed by 'Etudes sur le Péloponèse,' 8vo, 1855, published, like the preceding, by direction of the Minister of Public Instruction. Other works on Greek antiquity were 'Les Temples de Syracuse,' 8vo, 1856; and 'Les Monnaies d'Athènes,' 4to, 1858. The 'Histoire de la Sculpture avant Phidias,' 8vo, 1864, though archaeological in subject, was treated rather from an artistic point of view. M. Beulé has also written an éloge of Horace Vernet, 1863; one of Hippolyte Flandrin, 1864; 'Meyerbeer,' 1865; 'Cours d'Archéologie,' 1860; 'Causeries sur l'Art,' 1867; 'Tibère et l'Héritage d'Auguste,' 1868; 'Le Sang de Germanicus,' 1869; and numerous reviews and essays for the Revue des Deux Mondes, the Gazette des Beaux-Arts, and other journals. 'Phidias, drame antique,' appeared in 1863. About 1860 M. Beulé directed extensive exhumations at Carthage, and obtained some interesting results, which he communicated to the public in various papers. M. Beulé received the doctorate, succeeded M. Raoul-Rochette as professor of archaeology at the Bibliothèque Impériale, and was decorated with the order of the Legion of Honour, in 1854. In 1860 he was elected member of the Académie des Inscriptions, in succession to M. Charles de Lenormant; and in April, 1862, he was chosen permanent secretary of the Académie des Beaux-Arts.

* BEUST, FRIEDRICH FERDINAND, FREIHERR VON, a German statesman, was born at Dresden on the 13th of January, 1809. His education was conducted privately until his 13th year; after which he was for some time (1822—1826) a pupil of the Kreuzschule of his native city. Subsequently he studied at the universities of Göttingen and Leipzig, at the latter of which he graduated, whilst at both he developed an inclination for a political and diplomatic career. Returning to Dresden in 1831, he received an appointment in the Foreign Office; and after having held the post of assessor of land-survey (lands-direction) in 1832, devoted two or three years to travelling in Switzerland, France, and England. In 1836 he became secretary of the Saxon legation at Berlin, and in 1838 was appointed to fill the same position at Paris. He quitted the latter city in 1841, in order to proceed as chargé d'affaires to Munich, where he married the daughter of Lieutenant-General von Jordan. In 1846 he was diplomatically resident in London, and was appointed ambassador to the court of Berlin in 1848. He accepted office in the Held cabinet on the 24th of February, 1849, as Minister for Foreign Affairs; with which, in the following May, as a member of the anti-constitutional cabinet of Zschinsky, he conjoined the duties of Minister of Agriculture. He took a prominent part in the discussions preceding the treaty of 1852, and in 1853 became Minister of the Interior. On the breaking out of the Danish war in 1863 Baron von Beust distinguished himself by his loyalty to federal interests, and by a rebuke he administered to Lord John Russell, in answer to a despatch from the latter. He represented the Germanic Diet at the London Conference of 1864, during the continuance of which he twice visited Paris to confer with the Emperor Napoleon, whose guest he afterwards was at Fontainebleau. After the conclusion of the struggle between Austria and Prussia, Baron von Beust was appointed, October 30th, 1866, to be Minister of Foreign Affairs of the Austrian monarchy; Minister of the Household, November 14th, 1866; and on the 4th of February, 1867, on the retirement of Count Belcredi, President of the Council of Ministers. On the 1st of July following, he was invested, by a decree of the emperor, with the title of Reichskanzler, or Chancellor of the Empire. As an Austrian minister, the guiding policy of Count von Beust has been that of conciliation towards Hungary, to

which country the emperor, acting upon his advice, has made considerable and graceful concessions. The later career of Count von Beust is the principal theme of a recent volume entitled 'The Austro-Hungarian Empire and the Policy of Count Beust,' 8vo, London, 1870, a political sketch of men and events from 1866 to 1870, which, divided into 3 parts, treats of "(1) The New Constitution; (2) Foreign Policy; and (3) Question of the Nationalities; Electoral Reform; the late Ministerial Crisis." The author adopts the cryptonym of "an Englishman."

* BEUST, FRIEDRICH KONSTANTIN, BARON VON, elder brother of the Austrian minister, was born at Dresden, April 13, 1806. He studied mathematics and the natural sciences at Freiburg, and law at Leipzig and Göttingen. He then devoted himself to the mining industry, and ultimately rose to be the general-superintendent (Oberberghauptmann) of the Freiberg mining district. He has written several papers and pamphlets relating to the minerals: some of these bear upon the distribution and mode of occurrence of various ores, while others deal with several schemes for making the mineral deposits contribute to the finances of the State, and for developing new lines of railway. In one of his pamphlets he criticises Werner's theory of mineral veins. ('Kritische Beleuchtung der Werner'schen gangtheorie aus den gegenwärtiger Standpunkte der Geognosie,' 1840.) Another pamphlet relates to the masses of porphyry near Freiberg, and is entitled 'Geognostische Skizze der wichtigsten Porphyrgebilde zwischen Freiberg, Frauenstein, Tharand und Nossen,' 1835. The 'Berg- und hüttenmännisches Zeitung' for 1859 and subsequent years, contains several papers by him on rocks, minerals, and mineral veins.

BEVERLAND, ADRIAN, a learned but licentious Dutch writer, was born about 1653 at Middelburg in Zeeland. He was a pupil of Vossius; is said by Wood to have been at Oxford University in 1672; studied law, obtained the doctorate, and practised as an advocate at the Hague. But his addiction to erotic literature interfered with his legal pursuits; and he was brought into trouble with the authorities by the publication of his treatise on Original Sin, 'Peccatum Originale, κατ' ἐξοχήν sic nuncupatum, philologicæ, ὁρολογητικῆς elucubratum a Themidis alumno,' sm. 8vo, having at the end "Eleutheropoli in horto Hesperidum typis Adami Evae filii," 1678; 2nd ed. Leyden, 1679. A free translation into French, by J. Bernard, appeared at Paris in 1714, and numerous editions, altered and added to, down to 1740. For publishing this book Beverland was imprisoned and his book burned by the public executioner, but he was released on the payment of a fine, and promising that he would not write again on any such subject. He deemed it, however, prudent to leave the city, and he withdrew to Utrecht, where his dissolute conduct and freedom of speech are said to have caused so much scandal that the magistrates privately ordered him to remove elsewhere. At Leyden, where he went next, he was equally unlucky, for he soon brought himself into difficulties by publishing an obscene work, 'De Stolate Virginitatis jure Lucubratio Academica,' sm. 8vo, Leyden, 1680, and circulating in MS. a libel on the magistrates, entitled 'Vox Clamantis in Deserto,' of which an edition without date is still extant, though very rare. Driven from Leyden, he took refuge in England, where Isaac Vossius, moved by the poverty to which he was reduced, and admiring his undoubted erudition and ability, procured him a small pension. Even this he is said to have wasted by buying books and medals of all kinds which illustrated the class of subjects in which his perverted intellect delighted to revel; but he at any rate professed regret for the pain he had caused to purer minds by his libidinous writings and conversation, and as a proof of the reality of his penitence and the rectitude of his intentions, issued a work, 'De Fornicatio Cavenda admonitio, sive adhortio ad Pudicitiam et castitatem,' sm. 8vo, London, 1698; another edition of which, with a German imprint, followed in the same year. But the honesty of his recantation was generally doubted, and the book itself was regarded as anything but a chaste exhortation to purity of conduct. The decease of Vossius deprived Beverland of a portion of his resources, and he fell into a state of great misery. He had probably from opening manhood been in a condition of incipient insanity, and at length his mind entirely gave way. The last that is known of him is that he was wandering about the country destitute, and haunted by the belief that he was pursued by a band of two hundred men who had entered into a league to assassinate him. He is believed to have died in 1712.

BEYERLINCK, LAURENT, a Flemish divine and writer, was the son of an apothecary at Antwerp, where he was born in April, 1578. He studied in the college of the Jesuits at Louvain;

became professor of rhetoric and poetry at Ghent; and was afterwards director of the seminary, librarian, and canon of the cathedral of his native city. He died at Antwerp on the 7th (or according to some authorities on the 22nd) of June, 1627. A man of considerable learning and a most industrious compiler, he published a surprising number of volumes, considering their bulk and range of their contents and his comparatively short life and various occupations. His great work is the 'Magnum Theatrum Vitæ Humanæ: hoc est Rerum Divinarum Humanarumque Syntagma Catholicum, Philosophicum, Historicum, Dogmaticum, Alphabetica serie Polyanthæ Universalis instar,' a vast cyclopædia of information on every variety of subject, as the title implies, arranged alphabetically, in 7 large folio volumes, Antwerp, 1631; reprinted in 8 fol. volumes, Ant. 1678, and Venice, 1707. Of little positive value now for the information it gives on any particular branch of knowledge, it is still useful as a convenient book of reference for the views held on any matter by intelligent and well-informed persons in the early part of the 17th century. The book, it should be stated, is not wholly Beyerlinck's, but an extension and recasting of a work compiled by C. Wolffhart (Lycosthenes) and his son-in-law, Th. Zwinger. Another heavy work of Beyerlinck's is his 'Biblia Sacra variarum translationum,' 3 vols. fol. Antwerp, 1618: others are 'Apophtegmata Christianorum,' 8vo, 1608; 'Opus Chronologicum ab anno 1570 usque ad an. 1612,' fol. 1612; 'Promptuarium Morale super Evangelia Festorum anni totius,' 3 vols. 8vo, 1613, and more than once reprinted; 'Martyrologium Sanctorum Virginum,' &c., fol., with plates by T. de Leu, 1615. Beyerlinck also published some theological tracts; several funeral orations; lives, in Flemish, of 'the three Apostles of Antwerp,' &c.

BEYLE, MARIE HENRI, a popular French writer, better known by the name of STENDHAL, was born at Paris on the 23rd of January, 1783. His habit of adopting various pseudonyms led, not merely to the popular use of the name *Stendahl*, but to a curious diversity in the Christian name or names by which he was known. Thus, Quérard ('La France Littéraire') called him *Louis Alexandre César*; Colomb des Battus ('Catalogue des Dauphinois dignes de Mémoire'), *Arthur Louis Alexandre César*; Quérard, in a later work ('La Littérature Contemporaine'), *Henri*; and 'La Nouvelle Biographie Générale,' *Marie Henri*. Fétis, to whom he was personally known, gave him ('Biographie Universelle des Musiciens') the same name as Quérard's first version; but in a later edition followed the authority of the 'Nouvelle Biographie.' Throughout the greater part of his life, Beyle was constantly shifting from one profession or avocation to another. After receiving his early education in the Central School at Grenoble, he went to Paris when sixteen years old, and studied first the military sciences at l'École Polytechnique, then the law under one of his own relations, and then painting under Regnault. Serving for a time in a regiment of French cavalry in Italy, he returned to Grenoble in 1802. With the hope of giving him a taste for some definite pursuit, his friends in 1805 placed him in the counting-house of M. Raybaud, a merchant at Marseille. Wearying of this in a few months, he went in 1806 to Germany with a member of the family, M. Daru, and was appointed intendant of the domains of the Emperor in Brunswick. In 1807 he joined the Commissariat. In 1810 there fell to him the office of auditor to the Council of State, and financial inspector of crown lands and buildings. His next move was to join as an amateur the Grand Army in the invasion of Russia in 1812. In 1815, while filling some civil post at Grenoble, he gave umbrage to the Allies who entered Paris, and found it prudent to live at Milan until 1821. He resided at Paris from this last-named year till 1830, with occasional journeys to Germany, England, and Italy. He then turned to diplomacy, and filled for a time the post of French Consul at Civita Vecchia, after being objected to in the same post at Trieste by Prince Metternich. He died at Paris, 23rd of March, 1842. Beyle wrote a prodigious number of books and essays. The following may be mentioned as among the more important:—'Lettres écrites de Vienne en Autriche sur Haydn; suivies d'une vie de Mozart, et de Considérations sur Métastase,' 8vo, Paris, 1814 (little more than an unacknowledged translation from the Italian); 'Histoire de la Peinture en Italie,' 2 vols. 8vo, 1817; reprinted with some change of title in 1824 and 1831; 'Rome, Naples, et Florence en 1817,' 8vo, 1817; 'De l'Amour,' 2 vols. 12mo, 1822; 'Vie de Rossini,' 2 vols. 8vo, 1824; 'Racine et Shakspeare,' 1823—25, 8vo; 'Promenade dans Rome,' 2 vols. 8vo, 1829; 'La Rouge et le Noir, chronique de dix-neuvième siècle,' 2 vols. 8vo, 1831; 'Mémoires d'un Touriste,' 2 vols. 8vo, 1838; 'Le Chartreuse

de Parme,' 2 vols. 8vo, 1839; besides numerous articles in the 'Journal de Paris,' the 'Courrier Français,' the 'Temps,' the 'National,' the 'Globe,' the 'Revue de Paris,' and the 'Revue des Deux Mondes.'

BIANCHI-GIOVINI, ANGELO AURELIO, an eminent Italian author and publicist, was born at Como on the 25th or November, 1799. Of poor parentage, he had received but an imperfect education, when at the age of nine he was placed in a commercial establishment at Milan. His employment led him to travel, and he devoted all his leisure to study, so that in early manhood he was unusually well-informed and enterprising. Taking the earliest opportunity which offered to enter upon a more congenial pursuit than that in which he had been occupied, he, in 1830, accepted an engagement in a publishing house at Capolazo, in Ticino, of which after a time he became the manager. Whilst here he for some months in 1835 edited a journal, 'L'Ancora,' and translated Daru's 'Histoire de Venise.' In 1835 he removed to Lugano, where he conducted 'Il Repubblicano della Svizzera Italiana,' but, differing in policy with the extreme liberals, of whom it was the organ, at the end of a couple of years he resigned the editorship. In 1836 appeared his 'Biografia di Fra Paolo Sarpi,' Zurich, 2 vols. 8vo, of which a French translation was published at Brussels in 1863. This work, though too uniformly eulogistic, is the best biography extant of the famous friar. Compelled to leave Ticino on account of his political opinions, Bianchi took refuge in Zurich, where he published some pamphlets on the condition of Ticino, which attracted considerable notice. Permitted by the amnesty granted by the Emperor Ferdinand I. of Austria on his coronation to return to Milan, he remained there from 1840 to 1847, diligently occupied in historical studies, but taking part as occasion offered in Italian national politics. During these years he published his 'History of the Hebrews,' 'Storia degli Ebrei e delle loro sette e dottrine religiose durante il secondo tempo,' 1 vol. 8vo, Milan, 1844, which fell under the censure of Rome, but was translated into German; a Topographical Dictionary of Lombardy, 'Dizionario Corografico della Lombardia,' 1 vol. large 8vo, Milan, 1844, which passed into a second edition, but to which the Austrian authorities would not allow the author to affix his name; a Dictionary of the Bible, 'Dizionario Storico-filologico della Bibbia,' 4 vols. 8vo, Milan, 1845, &c.; an essay on the fable of Pope Joan, 'Esame Critico degli Atti e Documenti relativi alla Favola della Papessa Giovanna,' Milan, 1845, a work that had a great success; 'Thoughts on the Decline of the Roman Empire in the West,' 'Idee sulla Decadenza dell' Impero Romano in Occidente,' 3 vols. 8vo, Milan, 1846. These works were produced far too rapidly to allow of such important subjects being adequately treated, but it should be remarked that several of them were more or less closely connected with the History of the Popes, for which he had been already some years collecting and digesting the materials. In January, 1848, Bianchi was called to Turin to enter upon a new occupation. Italy was seething with impatient expectation of the moment when the blow was to be struck for the expulsion of the foreigner, and General Durando, about to join the Army of Independence, desired to entrust to Bianchi the direction of his journal, 'L'Opinione,' that was intended to lead and inform the public mind. Under Bianchi's editorship 'L'Opinione' advocated frankly the fusion of Italy under the leadership of Carlo-Alberto, the expulsion of the Austrians, and the limitation of the papal power. The Italians were defeated in their first great struggle, and Austria in granting peace stipulated for the expulsion of Bianchi, who again retired to Switzerland. But his exile was not of long duration. Cavour, on becoming minister, insisted on the recall of Bianchi, who resumed the direction of 'L'Opinione.' The journal had, however, passed into the hands of fresh proprietors, who were opposed to the government, and Bianchi withdrew from it and started a new journal, 'L'Unione,' in which he laboured unceasingly to keep alive the animosity of his countrymen against Austrian rule in Italy, to protest against the doctrines of Mazzini, and to urge resistance to the encroachments of Rome. He continued his journal almost till his death, which occurred on the 16th of May, 1862. But during all these last years he had been working with equal earnestness on his 'Storia dei Papi,' of which the first volume appeared at Capolazo in 1852, and of which in all ten volumes have been published, the later volumes at Turin. Besides the works already mentioned, Bianchi wrote a popular summary of his Hebrew History under the title of 'Storia Biblica,' 1 vol. Turin, 1851; 'Critica degli Evangelii,' Turin, 1853; and 'L'Austria in Italia,' 2 vols. 8vo, Turin, 1853, translated into French by Madame Camille Lebrun, Paris, 1854; as

well as several pamphlets and occasional pieces. He also commenced a History of the Longobards, of which only one volume was published, 'Storia del Longobardi,' 8vo, 1848. On the decease of Bianchi the government of Victor Emmanuel granted his family a pension of about 80*l.* a year in recognition of his services to Italy.

* BIDDER, GEORGE PARKER, civil engineer, was born June 14, 1806, at Moreton Hampstead, in Devonshire, where his father was a mason. At an early age he developed so remarkable a talent for mental calculation as to attract much attention from mathematicians, by whom he was known as the "calculating boy." The solution of very intricate questions was with him an affair of a few minutes, often only a few seconds: the result being announced by him long before able mathematicians could work it out on paper. His name was associated with the names of Jedediah Buxton and Zerah Colburn, as the possessor of powers not easily comprehended by other persons. In this case, however, the boy-calculator lived to give in later years a subtle analysis of the powers in question, which will be found in the 15th volume of the 'Minutes of Proceedings of the Institution of Civil Engineers.' The kindness of a friend enabled young Bidder to acquire a solid education at the University of Edinburgh, where he formed an acquaintance with the late Robert Stephenson, which influenced the whole of his subsequent career. After a short engagement at an insurance office, distasteful to himself, he was employed for a time upon the Ordnance Survey. The experience which he acquired here enabled him to fill the post of assistant engineer to Mr. H. R. Palmer, who was engaged in the construction of the Eastern Dock at the London Docks. Mr. Bidder's next engagement was with Messrs. Walker and Burgess, in superintending the construction of the Brunswick Wharf at Blackwall—noteworthy for the first use of cast-iron piles in river-walls. When Robert Stephenson, about 1831, planned the London and Birmingham Railway (now forming part of the London and North-Western system), Mr. Bidder joined him as assistant; and during a long series of years he took part in many works on which the two Stephensons were engaged—including the earlier portions of the South-Eastern Railway, the North Kent, the London and Blackwall, the Norwich and Yarmouth, the Northampton and Peterborough, the Trent Valley, the North Staffordshire, and numerous other lines. He took an active part in the obstinate parliamentary contests concerning atmospheric railways and the 'battle of the gauges.' Mr. Bidder was afterwards sole engineer of the Norwegian Trunk Railway, and with Mr. George Robert Stephenson, was engineer of the Royal Danish Railway. He has long been consulting engineer for the system of railways in the North-west of India, including the Delhi, the Punjab, and the Scinde lines, as well as the Indus Steam Flotilla. Mr. Bidder constructed Lowestoft Harbour. As engineer of the Victoria (London) Docks, he introduced many novel features of construction. In connection with Mr. Jennings, he enlarged the Surrey Canal Docks. At an early period in the introduction of the electric telegraph system Mr. Bidder recognised its importance in connection with railways, especially in working single lines; and he introduced it on the Blackwall and the Norwich and Yarmouth lines. He was one of the founders of the original Electric Telegraph Company, and has been a constant adviser to the board down to the recent (1870) transfer of the company's wires and rights to the Government—a transfer which he assisted in completing. Mr. Bidder became member of the Institution of Civil Engineers in 1825, and is now one of the oldest of the body in that capacity. He was for many years a member of the council, and was president in 1860 and 1861. The paper already adverted to, relating to his calculating powers, was the result of two oral lectures given by Mr. Bidder at the Institution, under the presidency of Mr. Robert Stephenson. Mr. Bidder was president of the section on Engineering and Mechanics at the Norwich meeting of the British Association for the Advancement of Science, in 1868; and president at the meeting of the Western Association at Dartmouth in 1869. He is lieutenant-colonel commanding of the Engineer and Railway Volunteer Staff Corps. It may be well to mention here as the corps is very little known to the general public, that its officers are chiefly civil engineers, railway managers, and great contractors, and that it corresponds directly, and in a confidential way, with the War Office. The corps has been constituted for the purpose of directing the application of skilled labour, and of railway-transport, to the purposes of national defence; and for preparing, in time of peace, the system on which such duties shall be conducted.

BILLAULT, AUGUSTE ADOLPHE MARIE, a French

lawyer and statesman, was born at Vannes, on the 12th of November, 1805. He studied law at Rennes, where he was admitted as an advocate in 1825. In November of the same year, he went to Nantes for the exercise of his profession, and became presently one of the most distinguished and busy members of the bar of that city. After the Revolution of July, 1830, he began to take a prominent part in public affairs, being named a member of the Municipal Council of Nantes, and in 1833, a member of the council-general of the department of the Loire-Inférieure. He wrote upon various important questions of the day; and especially published a pamphlet entitled 'De l'Education en France, et de ce qu'elle devrait être pour satisfaire aux besoins du pays,' 8vo, Nantes, 1835. In 1837 M. Billault was returned to the Chamber of Deputies by three electoral colleges of the department—Nantes, Paimbœuf, and Ancenis, the last being the constituency he chose to represent. In the chamber he joined the party of the left centre, of which M. Thiers was chief; and when Thiers became president of the council, Billault was made under-secretary of state for agriculture and commerce, March 3rd, 1840. He vacated office on the fall of the Thiers ministry, October 29th, 1840; and during his short experience of public business, effectively co-operated in bringing about a treaty of commerce with Holland, so as to gain the order of the Lion of the Netherlands, and the decoration of the Legion of Honour. In the last he became commandeur, grand officier, and grand'croix, respectively on the 8th of December, 1852, 30th of December, 1855, and 15th of August, 1857. Relieved from the pressure of public functions, M. Billault was admitted, in 1841, an advocate of the Cour Royale of Paris; and his fame, both as a forensic and a parliamentary orator, increased from day to day. At the elections of 1846, M. Billault was returned for the third arrondissement of Paris; but he preferred to remain faithful to his old constituency of Ancenis, which had re-elected him. At the approach of the Revolution of 1848, although he had loudly denounced in the chamber "the corruption, which, covering the whole of France, threatened to swallow up representative institutions," he took no part in the organization of the Reform banquets. After the Revolution of February, M. Billault was elected as representative to the Constituante, and joined the ranks of the moderate democratic party, voting on all occasions with the right, except when he recorded his vote, with the left, for the banishment of the Orleans family. Gradually, however, he leaned to the left, especially upon questions of foreign policy; and his attitude in this respect gave so little satisfaction, that he failed of re-election to the Legislative Assembly. Once more the bar engrossed the energies of M. Billault, who, remaining faithful to his democratic principles, particularly opposed himself to the law of the 31st of May, 1850. After the coup d'état of the 2nd of December, 1851, he was named deputy of Saint Girons (Ariège), and was chosen as the first president of the new Corps Législatif, which position he held until the re-establishment of the Empire. On the 23rd of July, 1854, M. Billault succeeded M. de Persigny as Minister of the Interior, and was called to the Senate on the 4th of December. On the 8th of February, 1858, he was required to yield his portfolio to General Espinasse; but was recalled to office on the 1st of November, 1859, in the place of the Duc de Padoue. By a decree of the 23rd of June, 1863, M. Billault was placed in the ministry of state, in succession to M. Walewski; a few months after which he died, October 13th, 1863, at his château de la Goulaine, near Nantes, and was honoured with a magnificent funeral at Paris, at the public expense. M. Billault, in addition to the honours already mentioned, enjoyed the membership of the Academic Society of Nantes, and of the Industrial Society of Angers. He is, *inter alia*, the author of pamphlets on the 'Question Italienne'; Discours prononcé au Sénat dans la Séance du 3rd Mars, 1862, 8vo, Paris, 1862; and 'La Question Polonaise'; Discours, &c., 8vo, Paris, 1863.

BILLINGTON, ELIZABETH, a very celebrated English singer, was born in London, in 1760. The daughter of a clever violinist named Weichsel, the remarkable taste for music she displayed was carefully fostered, and under the instruction of her father, and of another German musician named Schröter, she made such astonishing progress, as, when only seven years old, to play a concerto on the pianoforte at the Haymarket Theatre, with great applause. Singing she probably learned of her mother, who had been the favourite pupil of J. Ch. Bach, and who was at this time the leading vocalist at Vauxhall. When eleven years old, she wrote and published some musical compositions, but they were said to have been rather freely borrowed. In her fifteenth year she made a clandestine match with

Mr. James Billington, a member of the orchestra at Drury Lane Theatre, who had been one of her musical instructors. Billington carried her off to Dublin, where she obtained an engagement to sing at the theatre. The exquisite beauty and freshness of her voice, and the ease and charm of her style, entranced the audience, and her success was unbounded. She returned to England at the end of 1785, and was at once engaged at Covent Garden Theatre, at a salary of 1000*l.* for the remainder of the season, a sum unprecedentedly large for a debutant. In London her reception was no less enthusiastic than in Dublin. Her performance of Rosina, in 'Love in a Village,' was the topic of the season. Michael Kelly, who witnessed it, "thought her an angel in beauty and the Saint Cecilia of song." (Reminiscences, i. 297.) But friends counselled further training, and at the end of the season she went to Paris and placed herself under the tuition of Sacchini, nor did she return to London till his death, in October, 1786. In 1793-4, she made a tour through the principal towns of France and Italy, accompanied by her husband, and by her brother, a distinguished violinist, and everywhere she carried away her audience by storm. At Naples she was introduced by Sir William and Lady Hamilton, to the King and Queen of Naples, and greatly fêted. But the tour was not throughout so favourable. Her free and careless manner already gave occasion to the voice of scandal; her husband died suddenly at Naples, in May, 1794; and finally, a sum of 20,000 sequins, a large part of the profits of her tour, which she had deposited in the Bank of Venice, was seized by the French. After many vain efforts to recover her money, she married a M. Felessent, a commissary of the French army, who had assisted her applications, and retired with him to a villa she purchased with a portion of her savings, in the neighbourhood of Venice. After staying here for a couple of years, she returned alone to England, and reappeared at Covent Garden Theatre, October 3rd, 1801, in Dr. Arne's opera of 'Artaxerxes.' She was received, as Michael Kelly records, "with rapturous applause, and on each night drew crowded houses." So great was the desire to hear her, that the lessees of the two theatres came to an agreement that she should sing the part on different nights at Covent Garden and Drury Lane, her income for the season exceeding 10,000*l.*, a sum then unparalleled as the payment for an English singer. Henceforth, for sixteen years, she reigned undisputed queen of English song. She continued to receive a very large income, lived in great style at Hammersmith, the most distinguished personages resorting to her fêtes and parties, yet, though exceedingly liberal to all who had any claim upon her, she acquired considerable wealth. In 1817, the repeal of the Alien Act permitted M. Felessent to come to England; his wife returned with him to the continent, and she died at St. Arrien, her Venice villa, on the 25th of August, 1818. Mrs. Billington is, by general consent, considered as the first of English singers. She was an excellent musician, and her voice, of unusual range, brilliancy, and power, was remarkable also for its richness of tone, sweetness, and the fascination it exercised over the listener. Her morals were, unhappily, less pure than her voice and taste, but a book that is sometimes met with, purporting to be 'Memoirs of Mrs. Billington, from her birth,' &c. (8vo, London, 1792), is an obscene libel, compiled, as is frankly avowed in the "Advertisement" and "Prefatory Address," for the purpose of extorting money.

BILSON, THOMAS, an Anglican prelate and divine, was born in 1536, at Winchester; and, after being fitted for the University at William of Wykeham's school in that city, became a member and perpetual fellow of New College, Oxford, where he graduated in arts, entered holy orders, and acquired a reputation for the solidity and consistency of his preaching. He became a master in Winchester College, of which he was subsequently appointed warden. On the 12th of January, 1576, he was installed in the eighth stall of Winchester Cathedral; and, having completed his degrees in divinity, was elected Bishop of Worcester on the 20th of April, 1596, to which he was confirmed on the 11th of June, consecrated at Lambeth on the 13th, the temporalities being restored to him on the 27th of July. He was translated to Winchester, April 29th, 1597, his confirmation to this see taking place on the 13th of May following. About this time Bishop Bilson gave great offence to the Puritans, by opposing, in sermons delivered at St. Paul's Cross, the Calvinistic doctrine of particular election, and by asserting that the descent into hell of the Creed was to be understood as an actual descent into the place of torment. An account of the controversy in which the preacher became involved in consequence may be found in Strype's 'Life of Archbishop Whitgift,' its literary results, so far

as Bilson was concerned, being chiefly represented by a work entitled, 'The Effect of certain Sermons, touching the full Redemption of Mankind by the Death and Blood of Christ Jesus; wherein besides the Merit of Christ's Sufferings, the Manner of his Offering, the Power of his Death, the Comfort of his Cross, the Glory of his Resurrection, are handled,' &c., London, 1599; 'The clearing of certain objections made against the aforesaid Doctrine;' and 'A Survey of Christ's Sufferings and Descent into Hell,' folio, London, 1604. In this work the author maintained that Christ descended into hell, not to suffer, not to preach, and not to liberate any, but to take possession and to triumph. Bishop Bilson preached the coronation sermon on the accession of King James I., and it was published as a 'Sermon at Westminster before the King and Queen at their Coronation, on St. James's Day, 28th July, 1603.' He was called upon next year to be one of the managers of the conference at Hampton Court; and took part especially in the discussions on lay baptism, to deny the validity of which, he held, would be to cross all antiquity; and on the Apocrypha, in the course of which he insisted upon the distinction of St. Jerome:—"Canonici sunt ad informandos mores, non ad confirmandam fidem." It was to Bishop Bilson, conjointly with Dr. Smith, Bishop of Gloucester, that King James committed the final revision of that translation of the Bible known as the authorized version. Bilson died on the 18th of June, 1616, and was buried, say some, on the south side of Westminster Abbey, near the monument of King Richard II., or, according to the register, near the entrance into St. Edmund's Chapel.

Bilson left several volumes in MS., containing 'Orationes,' 'Carmina Varia,' 'Vulgaria,' &c.; in addition to which his principal published works still remaining to be noticed are:— 'Of the True Difference between Christian Subjection and Unchristian Rebellion, wherein the Prince's lawful Power to command and bear the sword are defended against the Pope's censure, and Jesuits' Sophisms in their Apology and Defence of English Catholics. Also a Demonstration that the things reformed in the Church of England by the Laws of this Realm are truly Catholic, against the late Rhemish Testament,' 4to, Oxford, 1585. This work, which owed its inspiration to Queen Elizabeth, was intended on the one hand to confute the Romish party who were plotting against her throne; and on the other to defend her interference to save the Protestants of the Low Countries from sinking under the power of their old master, the King of Spain. It is still valuable as representing the *via media* of 16th century Anglicanism; but its results, although it served the present turn of Elizabeth, were disastrous to her successor, Charles I., inasmuch as no book was so constantly quoted by that unfortunate monarch's opponents when they wished to justify their antagonism to his power. Besides the 'Young Man's Help,' &c., which in 1704 had been printed five times, Bilson produced his great work, which enjoys the reputation of being one of the most able and complete treatises ever written in defence of the apostolic succession and the doctrine of episcopacy. Its full title will sufficiently describe its method and its contents:—'Of the Perpetual Government of Christ, his Church; wherein are handled the fatherly superiority which God first established in the Patriarchs for the Guiding of His Church, and after continued in the tribe of Levi and the Prophets; and lastlie confirmed in the New Testament to the Apostles and their successors. As also the Points in Question at this day, touching the Jewish Synedrion; the true Kingdome of Christ; the Apostles' Commission; the Laie Presbiterie; the distinction of Bishops from Presbyters; and their succession from the Apostles' Times and Hands; the calling and moderating of Provincial Synodes by Primates and Metropolitans; the allotting of Dioceses, and the popular electing of such as must feed and watch the Flocke; and divers other points concerning the Pastorall Regiment of the House of God,' London, 1593; 4to, London, 1610; in Latin, 4to, London, 1611. An edition of this work was published at the Oxford University Press in 1842.

BINET, CLAUDE, a French poet, who flourished in the last half of the 16th century. He was a native of Beauvais; was an advocate, and held an official appointment. He wrote and published eclogues, court pastorals, and occasional pieces, but his poems, so far from preserving his memory, would themselves hardly have been remembered, but for his connection with Ronsard, who charged him with the posthumous publication of his complete works, and of whose life he has preserved some interesting particulars. These are contained in what he called a 'Discours de la Vie de P. de Ronsard, Prince des Poëtes Fran-

çois ; avec une Eclogue représentée en ses obsèques, par Claude Binet. Plus les vers composez par le dict Ronsard peu avant sa mort : ensemble son tombeau recueilli de plusieurs excellens personages,' 4to, Paris, 1586. The funeral obsequies here referred to were performed three months after the death of Ronsard, when, after a sermon preached in honour of the deceased poet by Duperron, bishop of Evreux, and afterwards cardinal, the ceremony was terminated by the recitation of Binet's allegorical eclogue. Binet's 'Vie de P. de Ronsard,' is printed in the 'Archives Curieuses de l'Histoire de France,' 1ère serie, tom. 10, 8vo, 1834. Binet's verses include an "Ode sur la Naissance et sur le Baptême de Marie Elisabeth de Valois, fille unique de France," 1572 ; 'Adieu de la France au Roi de Pologne, et l'Adieu du Roi de Pologne à la France,' 1573 ; 'Rencontre merveilleuse sur les noms tournés du Roi et de la Roïne,' 1574 ; 'Les Daulphins, ou le Retour du Roi, avec le chant des sereines, qui est une Épithalame sur le mariage du Roi, Henri III.,' 1575 ; 'Adonis, ou le Trepas du Roi Charles IX.,' 1583. Several of his poems were published by Binet, at the end of the 'Œuvres de Jean B. Laperuse.' Besides his original poems, Binet published a metrical translation of Jean Dorat's Latin version of the Oracles of the Twelve Sibyls ; and a discourse 'Ad Deum Opt. Max. Oratio pestilentia tempore,' 4to 1581.

BINNEY, AMOS, an American conchologist, who carried on the line of pursuit which had been commenced by Say, viz. the investigation of the terrestrial and fluviatile gasteropods of North America. Possessed of ample means, he devoted much leisure time and money to the acquisition of shells and conchological works ; and gradually collected a library which at the time of his death was probably the best of its kind in the United States. He wrote several papers for the 'Proceedings' and 'Journal' of the Boston Society of Natural History, of which society he was one of the founders and presidents. His principal paper is 'A Monograph of the *Helices* inhabiting the United States,' which extends over upwards of 100 pages in vols. i. and iii. of the above-mentioned 'Journal.' This was one result of the more extended inquiries which he pursued for many of the later years of his life, and which culminated in the magnificent work which will always be associated with his name as one of the pioneer conchologists of his country, viz. his 'Terrestrial Mollusks of the United States.' He himself did not live to complete it, but in his will he provided for its continuation and publication. This task devolved upon Dr. A. A. Gould, who issued the first two volumes in 1851, and the third in 1859, at a cost of 2500l. The work is very rare, as only 400 copies were printed. His son,

WILLIAM G. BINNEY has also attained eminence as a conchologist. He has followed the same branch of the study as his father, and has contributed a supplement to the 'Terrestrial Mollusks,' forming vol. iv. of that work. He has written several papers for the 'Proceedings of the Academy of Nat. Science' at Philadelphia from 1857 onwards ; but his principal work has been done in connection with the Smithsonian Institution, for which he has drawn up check lists and descriptions of the terrestrial and fluviatile gasteropods of the United States ; and 'Bibliography of North American Conchology previous to the year 1860,' Pt. I. 1864, which is a most valuable work of reference on the subject it pertains to.

* BINNEY, THOMAS, an eminent Congregational divine, was born at Newcastle-on-Tyne about the year 1798. His parents were in rather humble circumstances, and for a period of seven years he was engaged in a bookseller's shop. Whilst so occupied he nevertheless found it possible, by a strict economy of his spare moments, to acquire a considerable acquaintance with Latin and Greek, and a great facility in English composition. He received his professional education at Wyndley College ; and after presiding over a congregation at Bedford, removed to Newport in the Isle of Wight, where he was ordained to the ministry. In 1829 he migrated to London, in order to undertake the pastorate of the "King's Weigh-House Chapel," at that time situated in Eastcheap. The new King's Weigh-House Chapel, Fish-street Hill, was commenced in 1834 ; and on the occasion of the laying of the first stone of this building, December 12th, Mr. Binney delivered an address which attracted much attention and gave rise to considerable discussion. He soon afterwards published a sermon preached at the Poultry Chapel, London, entitled 'Dissent not Schism,' in which, as well as in other vigorous productions, he explained and vindicated the position of Congregational dissenters. One of the best known of these is his 'Conscientious Clerical Nonconformity,' 1839, of which a fifth edition was issued in 1860. Mr. Binney's life has been diversified by two important

journeys. In 1845 he travelled in America and the Canadas ; and in 1857 he set out on a tour through the Australian colonies, to which he was attracted in part by the settlement of his sons there. Here he continued for about two years, preaching and lecturing to large audiences. As an instance of the favour with which he was received, it may be mentioned that the clergy of the Episcopal Church wished to welcome him to their pulpits. This led to an important correspondence between Mr. Binney and the Bishop of Adelaide, which excited much attention when it appeared in the English and Australian journals. During his stay in Australia, Mr. Binney published a work on 'The Bishop of Adelaide's Idea of the Church of the Future,' which was afterwards published, with additions, in London, with the title 'Lights and Shadows of Church Life in Australia, including Thoughts on some Things at Home,' 1860. On his return to England Mr. Binney resumed his pastorate at the King's Weigh-House Chapel, with which he still continues in close relation, though he has retired from the pastorate. He prefers to use an untitled name, although he has received from the University of Aberdeen the degree of LL.D., and that of D.D. from a university in the United States of America. Especially eminent as a powerful and eloquent preacher, Mr. Binney is scarcely less eminent as a writer. Without seeking to be an author, and without adequate time for authorship in his busy life, he has yet, almost in spite of himself, become an extensive book-producer. His Lectures and Sermons have been asked for in print, and have sometimes on revision grown into books. Notably was this the case with two of his 'Lectures to Young Men,' which grew under his hand into two small volumes—one on Sir Thomas Fowell Buxton, and the other entitled 'Is it Possible to make the Best of Both Worlds?' Others of Mr. Binney's numerous productions are :—'Life of the Rev. Stephen Morrell,' 1826 ; a discourse on the 'Ultimate Design of the Christian Ministry,' 1827 ; pamphlets discussing religious questions, and signed 'Fiat Justitia,' about 1830 ; 'The Practical Power of Faith,' 1830, a series of discourses on the eleventh chapter of Hebrews, regarded by its author as one of his principal works, and which has reached a third edition ; the 'Service of Song in the House of the Lord,' 1848 ; and the 'Closet and the Church,' 1849. Mr. Binney's later works include 'Money : a Popular Exposition in Rough Notes,' 1864, which reached a fourth edition in 1866 ; 'St. Paul, his Life and Ministry,' second edition, 1866 ; a work on Ritualism, entitled 'Micah, the Priestmaker,' 1867, which immediately went into a second edition ; and 'From Seventeen to Thirty, the Town Life of a Youth from the Country : Lessons from the History of Joseph,' 1868. A few hymns of considerable merit vindicate Mr. Binney's claim to the title of being a sacred poet.

BIOT, JEAN BAPTISTE. [E. C. vol. i. col. 699—701.] M. Biot died on the 2nd of February, 1862, within two months of completing his 88th year. Four years before his decease, he had collected and published his less strictly scientific writings, under the title of 'Mélanges Scientifiques et Littéraires,' 3 vols. 8vo, Paris, 1858.

* BIRCH, SAMUEL, a distinguished Egyptologist and antiquary, keeper of the department of Oriental and British antiquities in the British Museum, was born in London, November the 3rd, 1813. The son of the Rev. Samuel Birch, D.D., rector of St. Mary Woolnoth, London, and vicar of Little Marlow, Buckinghamshire, he was educated in private schools under his father's eye, till he was transferred to Merchant Taylors' School, where he completed his academic training. After occupying a post under the Record Commissioners, Mr. Birch was in 1836 appointed an assistant in the department of antiquities in the British Museum. In this department he has ever since continued, rising step by step, till at the rearrangement of offices in 1861 he was placed at the head of the section of Oriental, Mediæval, and British Antiquities and of the Ethnographical Collections, with the title of keeper. In this important and responsible office Mr. Birch has of course had to perform a vast amount of merely routine labour, but beyond that the selection, purchase, and rearrangement of the great collections have entailed immense toil. Yet withal Mr. Birch has found time to pursue original investigation in Egyptian archaeology, philology, numismatics, the ceramic arts, and general antiquities, and to enrich our literature with one or two works of standard value, besides contributing a very large number of papers to learned societies, and to antiquarian and scientific journals.

Egyptian antiquities in the broadest sense of the term formed almost from his youth Mr. Birch's leading subject of study. As early as 1838 he published a 'Sketch of a Hieroglyphical Dic-

tionary,' 4to, and from that time his dissertations on special subjects have been very numerous. From among them a few may be cited by way of illustration:—'On an Egyptian Tomb in the British Museum,' 'Upon an Historical Tablet of Rameses II. of the 19th dynasty, relating to the Gold Mines of Æthiopia,' and several others in the 'Archæologia'; 'Observations upon the Hieratical Canon of Egyptian Kings at Turin,' 'Upon the newly-discovered fragment of the Statistical Tablet of Karnak,' 1862, and several others in the 'Transactions of the Royal Society of Literature'; 'Lettres à M. Letronne' in the 'Revue Archéologique,' Paris, 1847—48; 'Sur l'Expression Hiéroglyphique du mot Egyptien *Calasiris*,' 'Sur la Famille de Psammetichus dans la 26^e Dynastie,' 'Sur le Cartouche Egyptien, trouvé par M. Layard dans les ruines de Nimroud,' 'Sur l'Expression Hiéroglyphique de deux noms propres Egyptiens,' 'Sur quelques Groupes Hiéroglyphiques à propos d'un ouvrage de l'Abbé Lanci,' and 'Sur un Papyrus Magique du Musée Britannique,' 1859; 'Observations on an Egyptian Calendar of the reign of Philip Aridæus,' 'Notes upon a Mummy of the age of the 26th Egyptian dynasty,' 'On a remarkable object of the reign of Amenophis III.,' 'On Gold Jewelled Ornaments found near Thebes in 1859,' and several others in the 'Archæological Journal'; 'Researches relative to the Connection of the Deities represented upon the Coins of Egyptian Nomes with the Egyptian Pantheon,' and several others in the 'Numismatic Chronicle'; 'Notes upon Obelisks,' in the 2nd vol. of the 'Museum of Classical Antiquities,' and various papers elsewhere. Some of his most elaborate descriptions are those of an official or semi-official character, as 'Descriptions of the Papyrus of Nas-Khem, Priest of Amen-Ra, discovered in an excavation made by direction of H.R.H. the Prince of Wales . . . in a tomb near Gournal, at Thebes,' 4to, 1863; 'Fac-similes of the Egyptian Relics discovered at Thebes in the Tomb of Queen Aah-Hotep (circa B.C. 1800), exhibited at the International Exhibition of 1862,' obl. 4to, 1863; 'Fac-similes of two Papyri found in a Tomb at Thebes. With a Translation by S. B.,' obl. fol. 1863; 'Inscriptions in the Hieratic and Demotic Character, from the Collections in the British Museum,' folio, 1868. On subjects of a somewhat similar class we have 'Inscriptions in the Himyaritic Character, discovered chiefly in Southern Arabia, and now in the British Museum,' 4to, 1863; some translations from the Chinese in the 'Asiatic Journal,' and papers in the 'Archæologische Zeitung.' Mr. Birch's Egyptian studies brought him into close intimacy with the late Baron Bunsen, whose laborious investigations in early history he for many years greatly assisted, and by Bunsen's particular request the revision of his great work, 'Egypt's Place in Universal History,' was undertaken by Mr. Birch, who made important additions to the fifth and concluding volume, and revised and enlarged the new edition of the first volume. In numismatics, and particularly in reference to Greek and Oriental coins, Mr. Birch has largely augmented our information by descriptions of particular coins and catalogues of inedited specimens published in the 'Numismatic Chronicle' from 1839 to nearly the present time. His chief substantive work, however, is his 'History of Ancient Pottery,' 2 vols. 8vo, 1858, by far the most complete, and generally accepted as the standard, work on the subject. The 'Catalogue of Greek and Etruscan Vases in the British Museum' was written by Mr. Birch in conjunction with Mr. Newton. He also wrote the descriptive and historical notices in 'The Gallery of Antiquities, selected from the British Museum,' by F. Arundale and J. Bonomi, 4to, 1842; 'Views on the Nile, by Owen Jones and Jules Goury,' folio, 1843; also the 'Introduction to the Study of Egyptian Hieroglyphics' prefixed to Sir Gardner Wilkinson's Crystal Palace hand-book, 'Egypt in the time of the Pharaohs.' To the Arts and Sciences division of the English Cyclopædia Mr. Birch contributed, among others, the articles Hieroglyphics, Mummy, Pyramid, Serapeum, Papyrus, Seal, Numismatics, Pottery, and Vases. The honorary degree of LL.D. was conferred upon Mr. Birch by the University of St. Andrews in 1839, and he is a member and director of the Archæological Institute of Rome, a member of the Académie des Inscriptions and of the Oriental Society of France (1861), of the Berlin Academy, of the Ethnological Society of America, and of other foreign learned societies, a fellow of the Society of Antiquaries, and an honorary member of the Royal Society of Literature.

BIRKENHEAD, BERKENHEADE, or BIRKENHOUT, SIR JOHN, a noted Royalist writer, was born at Rudheath, Cheshire, about 1615; and in 1632, was entered as a servitor at Oriel College, Oxford. On leaving college he was, on the recommendation of his tutor, Humphrey Lloyd, afterwards

BIOG. DIV.—SUP.

Bishop of Bangor, appointed Secretary to Archbishop Laud, who in 1639 created him master of arts, by diploma, and secured his election in 1640, as Fellow of All Souls' College, Oxford, where he went into residence. When Charles I. was at Oxford, Birkenhead was recommended as well qualified to write the broadsheet which it was proposed to set up in support of the court. Birkenhead accordingly brought out his 'Mercurius Aulicus,' and carried it on regularly and with abundant vigour and scurrility from 1642 till towards the end of 1645, after which its appearance was only occasional. The 'Mercurius Aulicus' was the favourite newspaper of the Royalists, and was long held up as a model of wit and satire. Its satire, at least its invective, was sufficiently keen and trenchant, but its wit would now be thought very coarse buffoonery, and it probably did more harm than good to the royal cause. The king did not think so, however, and when about to leave Oxford he showed his sense of Birkenhead's service by procuring his election as reader in moral philosophy. This office Birkenhead retained till 1648, when he was expelled by the parliamentary visitors. Removing to London, he studied civil law, and employed his pen in composing various satires, Hudibrastic ballads, and political lampoons, which were freely circulated in MS. It was about this time that he wrote his once famous 'Assembly Man,' though it was first printed in 1662: it was reprinted in 1682, 1704, and in the 'Harleian Miscellany.' 'Paul's Church Yard,' in two parts, or centuries, also belongs to this time; the first editions are quartos of eight pages each, without dates; the reprint entitled 'Two Centuries of Paul's Church Yard,' was a thin 12mo volume, having at the end Birkenhead's 'Bibliotheca Parliamenti'—all are unsparing satires on republicans and parliament men. 'News from Pembroke and Montgomery; or Oxford Manchestered,' 1649, is another satirical pamphlet, in the form of a pretended speech, delivered by Philip Earl of Pembroke and Montgomery, on being sent by the Parliament to new-model the University of Oxford, as the Earl of Manchester, the Parliamentary chancellor, had remodelled Cambridge. Birkenhead's loyalty caused him to be suspected, and brought him more than once within the walls of a prison: but he escaped without material hurt, and at the Restoration received his reward. In pursuance of the royal letters he was created D.C.L. at Oxford, on the 6th of April, 1661; was elected the same year M.P. for Wilton; was knighted November 14, 1662, and appointed Master of the Faculty Office and of the Court of Requests. He continued a favourite at court, though his prosperity excited some envy and enmity. He died on the 4th of December, 1679, and was buried in the church of St. Martin-in-the-Fields. Sir John Birkenhead was one of the early Fellows of the Royal Society.

* **BIRNBAUM, JOHANN MICHAEL FRANZ**, an eminent German jurist, was born at Bamberg, in Bavaria, on the 19th of September, 1792; studied successively at Erlangen, at Landshutt, and at Wurzburg, where he was admitted D.C.L. in 1815. For two years he dwelt at Frankfurt as tutor to the sons of the Count von Westphalen, filling his leisure with the composition of a trilogy called 'Adalbert von Babenberg,' and a drama entitled 'Alberade,' both of which were produced on the stage with a certain measure of success. But he soon satisfied himself of the incompatibility of poetry with law, and determined to concentrate his energies on the latter pursuit. In 1817 he obtained the appointment of professor of law in the newly-restored University of Louvain. His learning, lucidity of exposition, and the depth and breadth of his teaching gave his chair a great reputation, which steadily increased till the Revolution of 1830, when Birnbaum and the other foreign professors were discharged from their posts by a vote of the Provisional Government of Belgium. Birnbaum retired to Bonn, where he gave lectures. Removing to Freiburg, he was named Councillor of the Court and Professor of Civil and Criminal Law. In 1833 he went as professor to Utrecht, but removed by invitation, in 1840, to Giessen, where, in addition to his professorship, he was in 1847 nominated Chancellor of the University. Whilst at Louvain, he founded the 'Bibliothèque du Jurisconsulte,' to which he contributed some valuable papers: it was afterwards merged in the Parisian 'Themis.' His separate works are—1. 'Deduction der Rechte des Herzogs von Loos-Corswarem auf das Fürstenthum Rheina-Wolbeck,' Aix-la-Chapelle, 1830, a work which though dealing primarily with local rights, was so treated as to be of more than local value. 2. 'Die Rechtliche Natur der Zehnten,' Bonn, 1831, a work on the Legal Character of Tithes, considered by German lawyers the ablest that had been produced on the subject. 3. 'Commentatio de Hugonis Grotii

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in definiendo jure naturali vera mente,' Bonn, 1835, also an important and standard work. The great treatise on the principles of criminal law which had for many years been looked for from Herr Birnbaum he appears never to have found leisure to complete.

* BISCHOF, CARL GUSTAV CHRISTOPH, an eminent German chemist and physical geologist, was born January 18, 1792, at Nürnberg, Bavaria, and received his education at the University of Erlangen, where he first gave attention to mathematics and astronomy; but afterwards abandoned these for chemistry, upon which subject Hildebrandt was then the lecturer. From 1819 onward he frequently assisted the professor of chemistry and technology at Bonn; and he himself took the chair in 1822, since which time he has performed the duties connected therewith uninterruptedly at the university of Bonn. He has written numerous papers (106 being cited in the Royal Society's 'Catalogue of Scientific Papers'); they relate to chemistry and physics more especially as applied to natural phenomena. One paper, mostly by him, is apparently omitted in the above-mentioned Catalogue. It gives the details of an inquiry upon the phosphorescent qualities of subterranean rhizomorph plants, which he undertook in co-operation with Nees von Esenbeck and others. It is, however, entered under Bischoff, G. W. He has also written several works, of which the most important are 'Die vulkanischen Mineralquellen Deutschlands und Frankreichs,' 8vo, 1826; 'Die Wärmelehre des Innern unseres Erdkörpers,' 8vo, 1837; and 'Lehrbuch der chemischen und physikalischen Geologie,' 3 vols. 8vo, 1847—1854, of which a second edition appeared in 1863—64. His reputation and fame mainly rest upon the last-mentioned work, which is well known to English geologists in the translated, rearranged, and condensed form issued by the Cavendish Society. This work is a storehouse of valuable facts; but its main purpose is to show that a large number of eminent geologists had assigned to heat a share in the formation and alteration of minerals and rocks far greater than observable facts warrant. This he does by demonstrating what laws of combination prevail amongst minerals; the conditions under which pseudomorphoses and metamorphoses occur; and by describing the composition, distribution, and alternative action of waters and native gases. He has done excellent service to geology by his experiments and reasonings indicating what water can do, or has done. His enthusiasm for his own views seems, however, to have led him, in many instances, to depreciate the true influence which heat has had in altering rocks, and to misconceive the precise views held by plutonists. On the whole, then, his conclusions, though not entirely safe or satisfactory, seem to be more right than wrong.

BISCHOFF, GOTTLIEB WILHELM, botanist, was born at Durckheim, in 1797. In his early manhood he acquired considerable skill in painting and drawing, the result of his attendance at the Academy of Art at Munich. In 1821 he went to Erlangen, and there he zealously devoted himself to the study of botany under the instructions of Koch and Martius. These studies were prosecuted for nearly three years. It was during this period that he produced what seems to be his earliest botanical work. It is entitled, 'Die botanische Kunstsprache,' 1822, which is a dictionary of the technical terms used in botany, illustrated by upwards of 500 lithographed figures, all of which are drawn by himself. To this period also belongs his article in 'Flora,' vol. vi., on a 'Botanische Alpenreise durch Salzburg und einen Theil von Kärnten und Tyrol, im Juni und Juli, 1822.' In the autumn of the following year he returned to his native town, and stayed with his father for a few months, after which he proceeded to Erlangen, and in 1824 commenced his career as a teacher of botany. In the following year his 'De plantarum præsertim cryptogamicarum transitu et analogia' was published, which led to his undertaking a more elaborate work on the same subject. Of this the first part was issued in 1828, under the title of 'Die Kryptogamische Gewächse,' and soon after a second part appeared; but the work does not seem to have been completed. The first part comprises the *Characeæ* and *Equisetaceæ*; and the second the *Rhizocarpeæ* and *Lycopodiaceæ*. They give an excellent and well-arranged epitome of all that was then known respecting the groups named. There are thirteen plates, the figures on which are drawn from nature by the author. The work promised to be, when finished, his most important production. In 1831 he published his 'Grundriss der Medicinischen Botanik,' which is a general outline of botany for the use of medical students, and was the forerunner of his 'Medicinische-pharmaceutische Botanik,' which covers the same ground; but the matter is handled in a better way and on

a different plan. From 1830 to 1844 his time was, however, mostly occupied in compiling the work with which his name is usually associated, viz., the 'Handbuch der botanischen Terminologie und Systemkunde,' forming three thick quarto volumes, and which is intended as a substitute for a second edition of his earlier work of 1822. The terms are arranged according to a method; but the search for any particular word is rendered easy by an elaborate alphabetical index, which extends over 350 pages. In his earlier works the full merit of his original drawings is not perceived as rendered by the lithographer; but in the present his skill and taste, as well as his accuracy, are exceedingly well rendered by Prestele and Schach. There are 3911 cuts, all, or at any rate nearly all, of which are drawn from nature, and it is upon these that his reputation as a skilful draughtsman has been based. While engaged on this work he was appointed, first, in 1833, extraordinary, and next, in 1839, ordinary professor of botany, which latter post he retained till he was carried off by a fit of apoplexy on September 1, 1854. In addition to the above-mentioned works, he wrote several papers for the scientific journals, most of them relating to cryptogams. The most important of them is 'Bemerkungen über die Lebermoose, vorzüglich aus der Gruppen der Marchantien und Riccieen, nebst Beschreibung mehreren theils kritischer, theils neuer Arten,' in the 'Nova Acta phys. med. Acad. Cæs. Leop. Carol. Nat. Curiosorum,' xvii. p. 909—1088 (1835), which may be regarded as a third instalment of his work on cryptogams. It is accompanied by five plates of cuts drawn by himself, which are equal to the best in his 'Handbuch.'

* BISCHOFF, THEODOR LUDWIG WILHELM, physiologist and anatomist, was born on October 28, 1807, at Hanover. His father, Christophe Heinrich Bischoff, was a professor in the university of Bonn, and superintended the studies of his son at Düsseldorf, Bonn, and Heidelberg, who, after gaining the doctorates of philosophy in 1829, and of medicine in 1832, was appointed an assistant physician at the lying-in hospital connected with the university of Berlin. Here he became acquainted with Müller and Ehrenberg, and commenced the line of study to which a large portion of his subsequent life has been devoted. Thus in 1833 the treatise he wrote as a proof of his qualifications to be a teacher was entitled, 'Beiträge zur Lehre von der Eihüllen der Menschlichen Fötus,' but it was not published till the following year. In 1834 he first gave his attention to the development of the egg in the rabbit, which inquiry hung on his hands for several years. In 1835 he commenced, at Heidelberg, a course of lectures on comparative pathological anatomy; in the following year he was appointed extraordinary professor of anatomy, and in 1843 ordinary professor. From the time when he first attained professorial rank his studies, so far as original research are concerned, have been almost exclusively devoted to the development of the egg, and of the embryo, more especially in the *Mammalia*. In 1840, the Prussian Royal Academy of Science proposed a prize for the best memoir on the embryology of some mammal, and this stimulated him to prosecute his researches on rabbits with greater vigour; and his memoir, 'Entwicklungsgeschichte des Kaninchens Eies,' won the first prize, and was published in 1840. Thus encouraged, he pursued his work, and issued similar treatises on the eggs and embryos of the dog (in 1845), the guinea-pig (in 1852), and of the roe-buck (in 1854). These are also illustrated by numerous plates, and have taken rank amongst the best works of this class, and obtained for him a high reputation. While thus occupied, however, various personal events had occurred. Thus in 1843 he moved to Giessen, having been appointed to the chair of physiology there, and in the ten following years he founded and established a physiological institute and an anatomical hall. In 1844 he contributed the seventh volume to the new edition of Sömmerring's work on the Anatomy of Man. It is entitled 'Entwicklungsgeschichte der Säugethiere und der Menschen,' and is a complete digest of what was known at the time respecting the growth and changes of structure undergone by the egg and embryo in the mammalian class. This work exemplifies his power of reading and digesting large masses of literature, and his skill as a reporter is further shown by the series of reports, which he drew up for Müller's 'Archiv,' on the progress of physiology, during the years 1839 to 1846, both inclusive. In 1850 he was a witness in the celebrated Görlitz law case, in which eminent physiologists took up positions both for and against the possibility of death arising from spontaneous combustion of the body. Siebold was a prominent defender, and Bischoff a conspicuous opponent, of the hypothesis of spontaneous combustion. His fame, by this time

had so spread that many universities had asked him to join their professorial staff, but he declined all such offers until in 1854 he was induced to accept the chair of human anatomy and physiology at Munich. Many papers and separate publications have been written by him in addition to those already noticed; a full list of the papers up to 1863 will be found in the Royal Society's 'Catalogue of Scientific Papers;' and we add here his principal productions since that date. In the 'Sitzungsberichte' of the Bavarian Academy of Science for 1865 occur—'Ueber das Vorkommen eines eigenthümlichen Blut und Hæmatoidin enthalten den Beutels an der Placenta der Fischotter (*Lutra vulgaris*);' and 'Ueber die Ei- und Placentabildung des Stein- und Edelmarders, *Mustela foina* und *martes*, und des Wiesels, *Mustela vulgaris*.' In 1867 appeared a work on the influence of recruiting in modifying the development and stature of peoples, and his memoir, 'Ueber die Verscheidenheit in der Schädelbildung des Gorilla, Chimpanse und Orang-outang, vorzüglich nach Geschlecht und Alter, nebst einer Bemerkung ueber die Darwinische Theorie,' which is an important work on the skulls of the apes mentioned. It is fully illustrated and contains a chapter on the Darwinian theory, in which he comes to conclusions opposed to the hypothesis of the descent of man from any of them. In 1868 it was followed by another memoir, which may be regarded as the complement to that of 1867; it is entitled 'Die Grosshirn Windungen des Menschen mit Berücksichtigung ihrer Entwicklung bei den Fœtus und ihrer Anordnung bei dem Affen.' In this year he also published some new observations on the development of the Guinea-pig.

As regards our knowledge of the mammalian egg, Bischoff takes a prominent place among those who established and more fully developed the general facts which had been announced by the pioneers in this line of discovery, viz., Purkinje, Wagner, Baer, Coste, Wharton Jones, and a few others.

BISHOP, GEORGE, F.R.S., a munificent encourager of astronomical science, was born in 1784. His occupation was that of a manufacturer of sweets, or British wines, but his favourite subject of study was astronomy. When, in 1836, he took up his abode at South Bank, Regent's Park, he built a well-designed observatory, and stocked it with the best instruments. This observatory acquired a European reputation, on account of the important discoveries made there. The first regular observer was the Rev. W. R. Dawes, who took charge of the instruments in 1839. To him succeeded Mr. Hind, in 1844. In the hands of this accomplished observer, no fewer than ten planets, or minor planets, were discovered by the great telescope at Mr. Bishop's observatory; the first being *Isis*, discovered on the 13th of August, 1847. Mr. Marth, at the same place, discovered an eleventh planetoid, *Amphitrite*, on the 1st of March, 1855. Three comets were also discovered there. Not only were the instruments of high character, but the system of exploring adopted was very complete. Mr. Bishop was successively secretary, treasurer, and president of the Astronomical Society, in the management of which he took an active part for twenty-five years. He was also a member of the council of University College, and a fellow of the Royal Society. Mr. Bishop published a splendid volume, containing Mr. Dawes's valuable catalogue of measures of double stars; and at his expense was also prepared a series of charts of telescopic stars situated near the Ecliptic, which were guides to the discovery of the planetoids *Iris*, *Flora*, *Victoria*, *Irene*, *Melpomene*, *Fortuna*, *Calliope*, *Thalia*, *Euterpe*, *Urania*, and *Amphitrite*, by Mr. Hind and Mr. Marth. Mr. Bishop died on the 14th of June, 1861. Since his death, the instruments have been removed to Meadow Bank, Twickenham, where Mr. Bishop, jun., has built a larger observatory for them. The Equatorial, by Dollond, is 7 inches aperture, 10½ feet focal length; the altitude and azimuth instrument is by Troughton.

* BISMARCK-SCHÖNHAUSEN, OTTO EDWARD LEOPOLD, GRAF VON, Minister-President of Prussia, and Chancellor of the North German Confederation, was born on the 1st of April, 1815, at Schönhausen, the ancestral estate of his family, in the Alt Mark. But the scene of his earliest years was Kniephof, in Pomerania, a nightly estate, to which, with two others, his parents succeeded on the death of a cousin in 1816. About Easter, 1821, he entered the school of Professor Plamann, at Berlin, where he remained till 1827, when he left it to pursue his more classical studies at the Friedrich Wilhelm Gymnasium. He migrated in 1830 to the Graue Kloster Gymnasium, for the advantage of being an inmate of the house of Professor Prévost, from whom, after a year, he passed to Dr. Bonnell. With the

last-named he continued until, at Easter, 1832, he quitted the Kloster, after his examination, to study law, to which he devoted himself with irregular assiduity, at the universities, first of Göttingen, and afterwards, in the autumn of 1833, of Berlin. About Easter, 1835, he was sworn in as Amscultator, or Examiner, in a magistrate's court at Berlin; but, in 1836, left the department of Justice for that of Administration, in which, as a future diplomatist, it was necessary for him to serve. He accordingly went to Aachen (Aix-la-Chapelle) to the Crown Court, from which, in the autumn of 1837, he found it expedient to be transferred to the Crown-office at Potsdam. In 1838 he entered the Jäger Guard, to fulfil his military duties; and, in the same year, exchanged into the second battalion of Jägers, at Greifswald, hoping to attend the lectures of the Agricultural Academy of Eldena. In the summer of 1839 he entered, jointly with his elder brother Bernhard, on the management of the paternal estates in Pomerania, which were in a very critical condition, and which were granted to them by their father, as the only way in which they could be preserved. In 1841 a division of the estates took place in such a manner that Bernhard von Bismarck retained Külz, whilst Otto received Kniephof and Jarachelin. The latter now succeeded his brother as Landrath of the circle of Naugard, and was chosen representative in the Provincial Pomeranian Diet, the unimportant functions of which, however, he impatiently resigned. His life at Kniephof oscillated between political discussions, studies in history, philosophy, and theology, and eccentricity and dissipation of such a nature as to win for him from the sedater society of Pomerania the sobriquet of "Mad Bismarck." About this time he visited France and England, of the languages of which he had a competent knowledge; and upon his return resumed the position of Referendarius under the Crown at Potsdam. After the death of the elder Bismarck, in November, 1845, the sons so divided the property that the elder retained Külz and received Jarachelin, whilst the younger retained Kniephof and added to it Schönhausen. Thereupon, Otto von Bismarck fixed his residence at Schönhausen, became Dyke Captain there, and afterwards Knights' Deputy in the circle of Jerichow in the Saxon Provincial Diet at Merseburg. In that capacity he attended the first meeting of the United Diets in 1847, on which occasion he first attracted the notice of the public to himself in more extended circles. But before his life becomes more exclusively political, it may be mentioned that, on the 28th of July, 1847, he married Johanna, only daughter of Herr von Puttkammer, of Kartum, and the Lady Luitgarde, born Von Glasenapp of Renfeld. On his wedding tour, Bismarck accidentally met his king, Friedrich Wilhelm IV., at Venice, a circumstance which laid the foundation for the favour with which he was always regarded by that monarch. His marriage has been blessed with three children, a daughter and two sons, born respectively in 1848, at Schönhausen; in 1849, at Berlin; and in 1852, at Frankfurt-on-the-Main. At the first United Diet, which met, in 1847, in the White Saloon of the Royal Palace at Colln-on-the-Spre, Bismarck was impressed with the idea that liberalism might endanger the throne of his feudal lord, the Margrave of Brandenburg, the King of Prussia; and he indulged in bold and unpopular speeches in favour of the royal prerogatives. It is imputed to him that he expressed an opinion that all great cities should be levelled with the ground, as being centres of democracy and constitutionalism. When the first news arrived of the Revolution of February in Paris, Bismarck knew that the signal for a struggle with the Prussian monarchy had there been given; but he neither modified the theories to which he had given utterance, nor abated his preparations for resistance. Against the democratic precipitation of the Second United Diet, which held its first session on the 2nd of April, 1848, he found himself powerless for the moment to do much more than protest. Yet he went on in such a course of action as he found practicable, holding conferences, instituting clubs and patriotic societies, and founding or furthering such journals as the 'New Prussian Gazette' and the 'New Prussian Sunday News.' During that summer, so fraught with weighty events, Bismarck was often called to Sans Souci, and the king took his advice in many affairs of importance. After the publication of the December constitution of 1848, he was, in the same month, elected in Brandenburg the representative of West-Havelland, as a member of the Second Chamber; and was among the first members to repair to the opening of the Diet, on the 26th of February, 1849. In 1849—51 Bismarck occupied a position in the Diet as one of the chief leaders of the conservative party against the democratic; and he entered into the strife with ardour, defending

at every point of attack, whether at Berlin or at Erfurt, the threatened sovereignty of Prussia.

"Our watchword," he wrote, in an album of Dr. Stahl's, at Erfurt, 24th April, 1850, "our watchword, therefore, is not 'a united state at any price,' but 'the independence of the Prussian crown at every price.'" In May, 1851, Bismarck was appointed to the post of First Secretary of the embassy to the Diet of Frankfurt, with the title of privy councillor; and on the 18th of August following, received the rank of ambassador. The duties of this position were, at this time, exceptionally difficult, as the circumstances of Prussia were exceptionally critical. Bismarck expressed the conviction that Austria would strive to retain Prussia in such a state of humiliation as would end in the final destruction of Germany; and in spite of his traditional inclination to the Austrian alliance, he resolved upon opposition. Notwithstanding the antagonism which arose from his claims to achieve for Prussia an equality with Austria at the Diet, Bismarck lived on terms of greater or less friendship and intimacy with a series of three Austrian ambassadors who were his contemporaries at Frankfurt, a circumstance in great part owing to the fact that in his federal policy he went hand in hand with them. In May, 1852, he was intrusted with an important mission to Vienna, on which occasion he followed the imperial court into Hungary; and in the summer of the following year, fulfilled other missions in various parts of Europe. During the summer of 1855, he visited the Exhibition at Paris, and was introduced to the Emperor of the French, with whom, on a subsequent visit to Paris in 1857, he had his first special political conference. He was recalled from his Frankfurt mission in 1859, and sent as Prussian ambassador to the court of St. Petersburg, to which he was accredited on the 1st of April. Here, amongst his other duties, he endeavoured to further the plans he had conceived at Frankfurt, of an alliance between Russia, France, and Prussia, for the purpose of securing to Prussia supremacy in Germany, in the interests of German unity. His residence at St. Petersburg, varied by several absences to different parts of Russia and Germany, extended to 1862, by which time he had gained the esteem and confidence of the Czar, who conferred on him the order of St. Alexander Newski. On the 23rd of May of this year, he was appointed ambassador to Paris, and delivered his credentials to the Emperor, on the 1st of June; at the end of which month he took a short trip to the Exhibition in London, returning to Paris on the 5th of July. His mission to France commenced with the best of omens, but it was of short continuance; for, whilst enjoying an excursion to the Pyrenees, he was summoned by telegraph to Berlin, where he arrived, in September, 1862, to undertake, in extremely critical circumstances, the Premiership and the Ministry of Foreign affairs. It was to be his task to uphold the kingdom of Prussia against the parliamentary spirit, and to accomplish the new organization of the army, on which the future of Prussia and of Germany depended. But he could not overcome the resistance of the Chamber of Deputies to the re-organization of the army, which they opposed as tending to weaken the landwehr, and to strengthen the army, the representative of reaction. On the 29th of September, 1862, he announced the withdrawal of the budget for 1863, "because the government considered it their duty not to allow the obstacles towards a settlement to increase in volume." He then announced his purpose and his aims, as clearly as he dared, and concluded with the expression that "Prussia must hold her power together for the favourable opportunity, which had already been sometimes neglected; the frontiers of Prussia were not favourable to a good state constitution. The great questions of the day were not to be decided by speeches and majorities,—this had been the error of 1848 and 1849—but by iron and blood!" The Chamber responded by arriving at a resolution on the 7th of October, by which all expenditure was declared unconstitutional if declined by the national representatives; and having thus proved itself hopelessly impracticable for Bismarck's purposes, the session of the Diet was closed, on the 13th of October, by a royal message. Immediately after assuming the Ministry, in December, 1862, Bismarck opened negotiations with Austria, with whom he was prepared to enter into coalition, if she could decide upon the dismissal of that enemy of Prussian policy, Schwarzenberg, and give Prussia her proper position in Germany. He expressed his convictions to Count Karolyi, that the relations of Prussia to Austria "must unavoidably change for the better or the worse;" and repeated that it would be for the advantage of Austria herself, to allow to Prussia such a position in the Germanic Confederation, as would render it consonant with the interest of

Prussia to throw all her strength into the common cause. But the overtures of Bismarck, as recapitulated in his famous circular despatch of the 24th of January, 1863, were of little or no avail. To this period belongs the conclusion of the Prusso-Russian treaty, on the common measures to be pursued for the suppression of the Polish insurrection. This convention, by which the friendly relations of Prussia and Russia were confirmed, has, according to the complaints of Bismarck's apologists, been frequently misinterpreted; and it excited so much indignation in London and Paris, that it was at least formally abandoned.

At a moment when war seemed imminent between Prussia and Austria, the world was startled at seeing them ally themselves for the purpose of an aggressive war against Denmark, for the recovery to Germany of Schleswig and Holstein; and the victorious standard of Prussia was planted on the walls of Düppel in April, 1864. On the occasion of a visit which Bismarck now paid to Vienna, he was received with great distinction by the Emperor Franz Joseph, from whom he received the Order of St. Stephen; whilst by his own sovereign he was invested with the Order of the Black Eagle. In the summer of 1865, when it has been assumed that Bismarck already believed that the hour of the great conflict between Prussia and Austria had arrived, the treaty of Gastein was concluded, August 14th, which divided the co-domination of Prussia and Austria in Holstein and Schleswig. On the 13th of September, 1865, Bismarck was raised to the rank of a Prussian Count; and before the year was at an end, had become firmly convinced that Austria had returned to the central state policy, the advocate of which was the Freiherr von Beust. On the 7th of May, 1866, Count Bismarck, who was abroad for the first time after a severe illness, escaped from a determined attempt at assassination, made in open day (five o'clock p.m.), in the centre allée of the Unter den Linden, at Berlin. The preparations for war were complete, and aided by an alliance with Italy, the Prussian columns set out for that sharp, short struggle, which is still in the memory of Europe and the world. On the 18th of June, Prussia formally declared war against Austria; on the 29th the first news of victory arrived at Berlin; on the 30th, Bismarck left the capital, in the suite of the king, for the seat of war; and on the 3rd of July, the Austrians sustained the decisive defeat of Sadowa. In the final days of July, the preliminaries were settled at Count Mensdorff's castle of Nicolauburg, resulting in the peace of Prague, which was probably facilitated by the attitude assumed by the Emperor Napoleon, who, in his speech to the French Chambers, declared that he had arrested the conqueror at the gates of Vienna. On the 4th of August, Bismarck returned with the king to Berlin; and on the next day came the solemn opening of the Diet. Peace treaties with individual states now occupied the Minister-President, together with the consolidation of the conquered provinces, and the formation of that North German Confederation, of which he was appointed Chancellor, on the 14th of July, 1867. In this year, one of the principal things which drew attention to Bismarck, was the question of Luxembourg, and war with France was avoided by a declaration of its neutrality. Since that time, Count Bismarck has been occupied in developing the Prussian system, retiring occasionally for rest and health to his estates in Pomerania. He is tall and athletic, given to field sports, and fully accepting, at intervals, the duties and position of a country gentleman. His countenance is animated, his head large, his forehead capacious, his mouth firm and resolute, and his bearing and conversation those of a soldier. He is fair and somewhat bald, and his brilliant and singularly restless eyes rather take from the otherwise thoroughly German character of his features. "Count Bismarck," says Herr L. Bamberg, author of a work entitled 'Monsieur de Bismarck,' Paris, 1868; 'Graf von Bismarck,' Breslau; 'Count Bismarck,' London, 1869; "Count Bismarck is certainly no orator in the usual sense of the word. In the year 1866, one of his admirers, who had attended a sitting of the reichstag, drew his portrait in the following terms: 'No oratorical ornamentation, no choice of words, nothing which carries the audience away. His voice, although clear and audible, is dry and unsympathetic, the tone monotonous; he interrupts himself and stops frequently; sometimes even he stutters, as if his recalcitrant tongue refused obedience, and as if he had difficulty in finding words in which to express his thoughts. His uneasy movements, somewhat lolling and negligent, in no wise aid the effect of his delivery. Still, the longer he speaks, the more he overcomes these defects; he attains more precision of expression, and often ends with a well-delivered, vigorous—sometimes, as every one is aware, too

vigorous—peroration.” Interesting particulars of his manners, appearance, and conversation, have also been given by M. Villebort, in a recent work entitled ‘L’Œuvre de M. Bismarck, 1863—1866,’ and in a longer life by Herr J. G. L. Heseckiel, ‘Das Buch des Grafen Bismarck,’ translated, with an introduction, explanatory notes, and appendices, by Kenneth R. H. Mackenzie, with the title of ‘The Life of Count Bismarck, Private and Political, with descriptive notes of his Ancestry,’ 8vo, London, 1870. Count Bismarck received the Grand Cross of the Legion of Honour, in 1862, and, in 1866, was appointed by his own sovereign Major-General and Chief of the Seventh Heavy Landwehr Regiment of Horse.

BISSÉN, HERMANN WILHELM, a distinguished Danish sculptor, was born in the neighbourhood of Schleswig, on the 13th of October, 1798. Having studied art in the academy at Copenhagen, he went in 1815 to Rome, where he remained ten years, working under the direction of Thorwaldsen. Returning to Denmark, he received a commission to carve four statues of angels for the Chapel Royal at Christiansborg; was much employed on portrait-busts, that of Oersted being regarded as the most successful, and he also executed some classical statues, among others a ‘Cephalus with a hound,’ and an ‘Atalanta,’ which were much admired. In 1840 he was appointed professor in the Copenhagen Academy, and the next year proceeded to Rome to prepare the designs of a series of 18 colossal statues, from the Greek and Norse mythologies, for the decoration of the royal palace. Whilst at Rome he occupied himself also in executing some statues of Venus, Cupid, and other classical divinities. On his return to Copenhagen, Bissen executed for the palace an immense frieze representing the classical version of the Creation, and statues of Apollo and Minerva for the great hall of the University. His later works include a colossal statue of a Danish soldier, for the national monument commemorating the success at Flensburg; a statue of Tycho Brahe for the University Observatory; classical statues of Achilles, Orestes, Flora, &c., and many busts, among them one of Garibaldi. At his death Thorwaldsen bequeathed to Bissen the duty of completing his unfinished works. Bissen was elected President of the Copenhagen Academy in 1850, and received the appointment of Director of the Museum. He died at Copenhagen on the 10th of March, 1868. By his countrymen he is ranked as their next greatest sculptor to Thorwaldsen, but he had less natural genius, whilst he suffered from the same pseudo-classical propensity.

BISSOLO, PIER FRANCESCO, a celebrated Venetian painter, was a scholar of Giovanni Bellini, whose manner he imitated. Nothing certain is known of his life. He painted between 1500 and 1530. Lanzi refers to his altar-pieces at Murano and in the cathedral of Treviso as among his distinctive works. The former, perhaps his finest production, is now in the Academy of Venice—‘Christ exchanging St. Catherine of Siena’s Crown of Thorns for a Crown of Gold.’ His easel-pictures, which are rarely met with, are usually small, and remarkable for their fine colour, delicacy of expression, and refinement of execution, rather than for original power. In the National Gallery is a very sweetly painted ‘Portrait of a Lady’ (No. 631) by him.

* BIXIO, JACQUES-ALEXANDRE, French politician, man of science, and writer, was born at Chiavari, department of the Apennines, on the 20th of November, 1808. On completing his collegiate course at Sainte Barbe in 1830, he commenced the study of medicine, and in due course received the degree of M.D. Since then his life may be divided into three periods of very different length, but in each of which he has effected something of service to his country. In the years preceding the revolution of 1848 M. Bixio was known chiefly by his connection with literature. With M. Buloz he assisted in founding the ‘Revue des Deux-Mondes;’ in 1837 he founded the ‘Journal d’Agriculture pratique,’ and continued to direct it till 1848; aided by M. Ysabeau, he published in 1844 ‘La Maison Rustique du dix-neuvième siècle,’ still regarded throughout France as one of the safest manuals of agriculture and horticulture; and in 1844 and following years he established the ‘Annuaire de l’horticulteur,’ ‘Almanach du Jardinier,’ and ‘Almanach du Cultivateur et du Vigneron.’

Though taking as yet no prominent public part in political matters, M. Bixio was among those who were watching with intense interest the development of events. A strong democrat, one of the editors of the ‘National,’ and intimately connected with the leading journalists, M. Bixio came to the front when the opposition to Louis Philippe assumed the character of a revolution. He was president of the committee of the electors

of the 10th arrondissement; declared at first for a regency, and at the meeting of the 24th of February urgently opposed the publication of the decree which proclaimed the republic. But the republic being proclaimed, M. Bixio cast in his lot with it, and accepted the post of chief of the cabinet under the Provisional Government. Shortly after he was selected to represent France at the court of Turin. Elected representative of the département du Doubs, he resigned his diplomatic functions, but only reached Paris in time to witness the disorders in the capital which culminated in the terrible scenes of the 24th of June. On the evening of that day, when General Bedeau fell wounded in the Rue St. Jacques, Bixio, who was by him, charged with a message from the Assembly, attempted to rally the soldiers, but was shot in the chest. On his recovery M. Bixio was received with enthusiasm by his legislative colleagues, and immediately elected Vice-president of the Assembly—an election several times renewed. When Prince Louis Napoleon was chosen President of the Republic, he appointed M. Bixio Minister of Agriculture and Commerce in his first cabinet (December 20, 1848), but eight days later Bixio resigned. In the discussions of the Legislative Assembly he, however, continued to take an active share. A moderate Liberal, the freedom with which he criticized their speeches and manners offended both parties, and some remarks which were construed as personal led to a duel with Thiers. On the evening of the *coup d’état* M. Bixio was arrested, but after a month’s captivity he was set at liberty.

He now retired into private life and to his scientific pursuits. With M. Barral he has made some remarkable aeronautic ascents, ample accounts of which have been published. He is proprietor and conductor of important agricultural publications, and director of various railway and other industrial enterprises. Separated from politics, his position is one of much influence, and personally he is very generally esteemed.

* BJÖRNSEN, BJÖRNSTJERNE, a popular Norwegian poet and novelist, was born on the 8th of December, 1832, at Kvikne, a lonely parish in the heart of Norway, of which his father was pastor. He was educated at Romsdal, to which district his father had been removed, and in 1852 proceeded to the University of Christiania. A visit to the theatre incited him to write a play, though he had never read one. It was offered at the theatre and accepted, but never acted. After wasting some time and raising some enmity, by writing a series of sharp theatrical and literary criticisms, for which he was as yet wholly unqualified, he went to Copenhagen, and there printed the first of his Norwegian tales. They were well received in Copenhagen, and soon became popular throughout Denmark, but his countrymen were slow to admit their merit. Bjørnson, however, kept on his way. For two years he was manager of a theatre at Bergen; then he founded a semi-political journal in Christiania; visited Rome, where he wrote his drama of Sigurd, and dreamed of regenerating the Norwegian stage, and founding a national drama. Later he was at Hamburg, and then returned to Copenhagen.

Bjørnson’s writings are eminently individual, yet thoroughly imbued with Norwegian character and spirit. His poems, mostly short lyrical pieces, are few in number, simple in texture, but singularly sweet, strange, and powerful. With the exception of a few short religious and patriotic pieces, they are mostly based on some Norse legend or old Norwegian ballad or tradition; wild, weird, mystical, dreamy, sombre, often melancholy, but always musical. His most recent poem is ‘The Song of the Viking.’ His stories are generally little idylls of ordinary Norwegian peasant life, whence he has been called the Norwegian Auerbach. The chief are ‘Arne,’ the hero of which is a solitary youthful mountaineer, grave of manner, a dreamer, and unconsciously to himself a poet; ‘The Fisherman’s Daughter;’ ‘The Cheerful Companion;’ and ‘Synnøve Solbakken,’ by many esteemed the happiest picture yet sketched of Norwegian country life and manners. A German translation of these was published at Berlin, in 3 vols. 8vo, 1861—62, under the title of ‘Aus Norwegens Hochlanden,’ from the Norwegian Highlands. Bjørnson’s dramas, all intensely national in character, and founded on Norwegian sagas, are:—‘Halte Hulda,’ 1858; ‘Kong Sverre,’ and ‘Sigurd Slembe,’ 1863.

BJÖRNSTERNA, MAGNUS FRIEDRICH FERDINAND, COUNT, a distinguished Swedish statesman and writer, was born on the 10th of October, 1779, at Dresden, where his father was secretary of the Swedish legation. Till the age of 14 he remained in Germany; he was then taken to Sweden, entered the army, served in the war in Finland, when he attained the rank of major; and in 1809 was charged with a mission to

Napoleon immediately before the battle of Ecmühl. In 1812 he negotiated in London the sale of Guadeloupe; the next year served with the Swedish army in Germany; was wounded at Dessau, but fought at Leipzig; concluded with Lallemand the surrender of Lübeck and of Mastricht; was with the Swedish army in Norway, and settled with Prince Christian Frederick of Denmark the Convention of Moss, which terminated the war between Sweden and Norway. He had now secured the confidence of his sovereign, who had formed a high estimate of his tact and ability. He was created adjutant-general in 1820 and count in 1826, and in 1828 he was sent as minister plenipotentiary to the court of Great Britain. This post he held with great credit to himself and his country till 1846, when he returned to Stockholm, where he died on the 6th of October, 1847. Count Björnsterne wrote several works, the general tendency of which was to ameliorate the political institutions and improve the financial policy of his country, as well as others of more general interest. Among the more important of the latter class were—'Hindu Theology, Philosophy, and Cosmogony,' published both in Swedish and German, Stockholm, 1843; and 'Anteckningar,' 2 vols., Stockholm, 1851, a work of historical value as containing his notes and observations on the Napoleonic war.

* BLACKIE, JOHN STUART, Professor of Greek in the University of Edinburgh, and the son of Alexander Blackie, Esq., a banker in Aberdeen, was born at Glasgow in July, 1809, and educated at Aberdeen and Edinburgh. He afterwards had the advantage of a two years' sojourn abroad, in the course of which he resided successively at Göttingen, Berlin, and Rome, and devoted himself to the study of German, Italian, and classical philology. In 1834 he became a member of the Scottish bar; and in the course of the same year published Goethe's 'Faust: a Tragedy.' Translated into English verse, with notes, and preliminary remarks. In 1841 he was appointed to the chair of the Latin Language and Literature in Marischal College, Aberdeen, and fulfilled the duties of this office for eleven years, during which his activity was great and varied. In 1843 he published a treatise 'On Subscription to Articles of Faith: a plea for the liberties of the Scottish Universities;' and was otherwise closely connected with the movement which resulted in the abolition of the Test Act, which required the professors of the Scottish Universities to be members of the Established Church. He likewise took up a very decided position, both with tongue and pen, in the agitation for university reform in Scotland, which led, in 1858, to the appointment of a Parliamentary Commission, by which some important changes were effected in the higher branches of education in that country. Professor Blackie declared himself as a defender of Scottish nationality; and was a frequent contributor of articles, chiefly in German and classical literature, to various Encyclopædias, reviews, and magazines. In 1850 he published 'The Lyrical Dramas of Æschylus; translated into English verse,' 2 vols. 8vo, London; in 1852 produced a Philological Inquiry into 'The Pronunciation of Greek: Accent and Quantity;' and in the course of the same year was appointed Professor of Greek in the University of Edinburgh. In 1853 he travelled in Greece, and on his return home warmly advocated the study of modern Greek. Professor Blackie continues to vary the discharge of his professional functions by authorship, and by lectures and discussions on questions in politics, philology, and education. His principal works, in addition to those already enumerated, are 'A Discourse on Beauty: with an Exposition of the Theory of Beauty according to Plato appended,' 8vo, 1858; 'Lays and Legends of Ancient Greece, with other Poems,' 8vo, 1857; 'Lyrical Poems,' 8vo, 1860; and a work in four volumes on 'Homer and the Iliad,' 1866, of which the first two are occupied with a translation of the Iliad in ballad measure; a third with Critical Dissertations, and a fourth with notes Philological and Archæological. The work is the result of twelve years of Homeric study, and is a valuable contribution to Homeric literature.

BLACKWELL, GEORGE, an English divine of the Romish Church, was born in 1545, in Middlesex, and on the 27th of May, 1562, was entered a scholar of Trinity College, Oxford, of which, in 1565, when B.A., he became a probationer. The next year he became an actual fellow; and on the 21st of April, 1567, was admitted to the M.A. degree. He was, however, already becoming inclined to the Church of Rome, and vacating his fellowship, he retired for a time, first to Gloucester Hall, now Worcester College—a house which was under suspicion of sympathy with the old religion, and several of whose sojourners

privately belonged to that communion—and afterwards, in 1574, to Douay. In 1575 he received priest's orders; and resided for some time at Rome, where by his learning and good conduct he conciliated the friendship of Cardinal Bellarmine, Father Parsons, and other eminent persons. In 1576 he returned to England as a missionary, and from this time his history becomes blended with the general history of the country.

Shortly after the accession of Queen Elizabeth, ten of the dioceses had become vacant by death, so that there were only sixteen bishops remaining in the Church. Of these, Kitchin of Llandaff was the only one who acknowledged the Queen's supremacy; the other fifteen refused to take the oath, and were deprived. All quietly submitted to the sentence passed upon them, and took no steps to continue their succession, which therefore ended, so far as they were concerned, with Watson, the deprived Bishop of Lincoln, who died in Wisbeach Castle, in September, 1584. Even with Watson's death, the want of a Romish Episcopacy was not greatly felt. William Allen, or Allan, made Cardinal in 1587, was considered as the Cardinal of England; and being resident in the Low Countries, where he had founded the famous College or Seminary of Douay, he was sufficiently within reach of any appeal from his native country. But after his death, October 6th, 1594, the English Romanists found themselves entirely without a leader; and their secular clergy unanimously resolved to present a supplication to Pope Clement VIII., praying him for a restoration of an ecclesiastical hierarchy in the government of bishops, "which bishops should be elected by the common consent of the clergy, and appointed by them to different districts." This took place about the year 1597. Meanwhile before the supplication could be presented, Father Parsons, the Jesuit, fearing a loss to the influence of his order, whose constitutions exclude its members from the mitre, if an Episcopal jurisdiction were set up in England, intrigued so successfully as to obtain the papal nomination of Blackwell to the office of Archpriest and Superior of the Clergy in England. Cardinal Cajetan, "Angliæ Protector," "Protector of the English nation at Rome," accordingly sent letters to Blackwell, dated March 7th, 1598, investing him with this office and authority; privately forbidding him, however, with the twelve assistants who were allowed him, from determining any matter of importance without advising with Garnet, the Superior of the Jesuits, and some others of the order. When the new Archpriest entered upon his functions, a violent spirit of resistance to him arose amongst the secular priests, who looked upon him as a mere creature of the Jesuits, and who objected to his credentials, as bearing the authority of an individual Cardinal only, and as having been procured by misrepresentation. The malcontent clergy, quickened into opposition by the intemperance of Blackwell's proceedings, determined upon an appeal to the Pope, and two of their body, Dr. Bishop and Mr. Charnock, delegated by the rest, arrived at Rome about the beginning of 1599. Here they were offensively received by Cardinals Cajetan and Borghese, and, after several examinations, were committed to prison, where they remained until a fortnight after the issue of a brief, dated April 6th, 1599, in which the Pope had confirmed whatever Cardinal Cajetan had enacted, and sanctioned the appointment and the conduct of the Archpriest. This brief restored tranquillity for a season; but the clergy would not endure to have their concerns subjected to the Jesuits, nor could they thus submit to the harsh conduct of the Archpriest, who was wont to exert a power beyond the limits of his commission. The result was another appeal to the Pope against the oppression and maladministration of their Superior, November 17th, 1600; which produced a brief, dated August 17th, 1601, and addressed to Blackwell and the Catholic clergy and laity of England, containing forcible exhortations to peace and charity. The clergy, however, found it necessary to make a third appeal to Rome; and this time with such success as to procure the issue of a brief, October 5th, 1602, in which the Archpriest was admonished to use his power discreetly, and not exceed his commission. He was forbidden, also, in transacting the duties of his charge, to communicate or treat with the Provincial of the Jesuits, or any member of that society; and thus the instructions of the late Cardinal Protector about that matter were cancelled. The brief proceeded to condemn all books written against the Society, or against any persons of either party, and closed with a suitable exhortation to brotherly charity and unity. Thus was the contention terminated; and all the clergy were unanimous in their obedience to the Archpriest and Prothonotary Apostolical, so long as that economy continued.

But Blackwell was afterwards more seriously embroiled with the Holy See. In order to give the Roman Catholics an opportunity of displaying their loyalty after the Gunpowder Plot, November 5th, 1605, an Oath of Allegiance was framed in the following year, to which it was thought every Romanist would cheerfully submit who did not believe that the Bishop of Rome had power to depose kings and to give away their kingdoms. This oath was accordingly taken by many, both clergy and laity, "and a ray of returning happiness gleamed around them. But," says Mr. Barrington, "a cloud soon gathered on the Seven Hills; for it could not be that a test, the main object of which was the rejection of the deposing power, should not raise vapours there." The Pope at that time was Paul V., the late Cardinal Borghese, to whom the Oath was presented by Father Parsons. After deliberation the Pope condemned the Oath in a brief addressed to the English Romanists, "as containing many things obviously adverse to faith and salvation." Blackwell had already argued in favour of the Oath; and even after a second papal brief re-asserting its unlawfulness, he persisted in maintaining and defending the opinion he had taken up. Blackwell was apprehended, notwithstanding, on the 24th of June, 1607, apparently for corresponding with Cardinal Bellarmine, without permission from the Government. He was detained in close custody for twelve days, during eight of which he underwent very rigorous examinations at Lambeth, before a board of commissioners. They examined him at great length, and elicited from him a series of judgments adverse to the political pretensions of Rome. The particulars of this examination were immediately published, under the following title:—"The large Examination taken at Lambeth, according to His Majesty's direction, point by point, of Mr. George Blackwell, made Archpriest of England by Clement VIII., upon occasion of an answer of his, without the privy of the State, to a Letter lately sent to him by Cardinal Bellarmine, blaming him for taking the Oath of Allegiance, together with the Cardinal's Letter, and Mr. Blackwell's Letter to the Catholics in England, as well ecclesiastical as lay. Imprinted at London, by Robert Barker, printer to the King's Most Excellent Majesty, 1607." Not only did Blackwell take the oath himself, but several of the clergy and laity of his communion followed his example. Such conduct in the Archpriest gave great umbrage at Rome; and in 1608 Blackwell was "eased of his dignity," in which he was succeeded by George Birket, a clergyman of more pliant conscience and conciliatory manners. Blackwell died suddenly on the 13th of January, 1613.

His works comprise 'A Letter to Cardinal Cajetan, in favour of the English Jesuits,' 1596; 'Answers at Sundry Examinations while he was a Prisoner,' 4to, London, 1607; 'Letters to the English Clergy, touching the Oath of Allegiance,' London, 1607; 'Epistolæ ad Anglos Pontificios,' 4to, London, 1609; 'Epistolæ ad Cardinalem Bellarminum'; 'Several Letters concerning the Appealing Clergy,' 1600; 'An Answer to the Censure of the Paris Divines, concerning his Jurisdiction,' 1600; and a 'Treatise against Lying and Dissimulation,' a manuscript in the Bodleian Library, more truly ascribed to Francis Tresham. Many works were published against Blackwell, chiefly by Dr. Bishop, Mr. Colleton, Mr. Watson, Dr. Champney, and others of the clergy; besides 'Quæstio bipartita de Jurejurando contra Blackwellum,' 4to, London, 1609; 'Examination of George Blackwell,' 4to, London, 1607; and 'Hope of Peace. A Treatise against Blackwell,' 4to, Francof., 1601, by J. B.

BLACKWOOD, ADAM, a Scottish theologian and historian, was born at Dunfermline in 1539. His education was conducted at the Universities of Paris and Toulouse, at the latter of which he especially applied himself to the study of civil law. Through the influence of his patron, James Beaton, the expatriated Archbishop of Glasgow, with Queen Mary and her husband, the Dauphin, Blackwood was chosen a member of the parliament of Poitiers, and afterwards appointed to be professor of civil law at that court. Poitiers was henceforth his constant residence, and the scene of all his literary exertions, which took persistently the direction of partisanship in favour of Queen Mary. He died in 1623; and was splendidly interred in the church of St. Porcharius, at Poitiers, where a marble monument was erected to his memory, charged with a long panegyric epitaph. Blackwood's works are 'Caroli IX., Pompa funebris Versibus Expressa,' Paris, 1574; 'De Vinculo seu Conjunctione Religionis et Imperii, et de Conjuratorum Insidiis Religionis Fuco adumbrata, Libri duo,' 8vo, Paris, 1575; to which a third book was added

in 1612. The object of this work is to show the necessity under which rulers are laid of preserving the true, that is, the Catholic, religion, from the innovations of heretics, as all rebellions arise from that source. His next work developed in a more perfect manner the extreme monarchical and Romish principles of the author. It was entitled 'Adversus Georgii Buchanani Dialogum "de Jure Regni apud Scotos," pro Regibus Apologia,' 4to, Poitiers, 1581, of which a second edition, "per auctorem recognita, aucta, et emendata," appeared in 8vo, Paris, 1588. He next published, in French, a work in which he calls upon all the princes of Europe to avenge the death of his benefactress, Queen Mary:—"Martyre de Marie Stuart, Reine d'Ecosse, douairière de France," &c., 8vo, Edinburgh, 1587, and 8vo, Antwerp, 1588. Blackwood's other works comprise his 'Sanctarum Precationum promissa, seu mavis Ejaculationes animæ ad orandum,' &c., 8vo; 'Augustorum Pictonum (Limoges), 1598, and 12mo, 1608; 'Jacobi I. M. Britanniae, seu Scot-Angliæ et Hiberniæ Regis Inauguratio,' 4to, Paris, 1606, &c.; 'In Psalmum Davidis Quinquagesimum Meditatio,' 12mo, Aug. Pict. 1608. Blackwood's works were published in a collected form under the following title:—"Adami Blackvoodæi, in Curia Pictonum Presidis et Consilarii Regii, Opera Omnia," 4to, Paris, 1644, edited, with a life and eulogium of the author, by Gabriel Naudé; and his 'History of Mary, Queen of Scots, a Fragment,' &c., 4to, Glasgow, 1834, was published by the Maitland Club.

BLAIR, PATRICK, M.D., anatomist and botanist, practised at Dundee. In 1706 an elephant that was exhibited in the place died, and Blair took advantage of the circumstance to acquaint himself with the anatomy of an animal at that time rare in Great Britain. He sent his account to the Royal Society, and it was published in the 27th and 30th vols. of the 'Transactions.' Blair was a nonjuror, and a warm partisan of the Stuarts, which got him into some trouble. He came to London, read several papers before the Royal Society, and became a Fellow in 1712. His paper on the 'Sexes of Plants,' read before the society, was published in an enlarged form in 1720, under the title of 'Botanic Essay.' This work, at the date of its publication, was a valuable contribution to science, "and contains much knowledge, which, even at this time, may appear respectable." Blair settled as a physician at Boston, in Lincolnshire, where he commenced his 'Pharmaco-botanologia; or, an Alphabetical and Classical Dissertation on all the British indigenous and garden Plants of the New Dispensatory.' This was published in 4to, in London, between 1723 and 1728. It was issued in parts, of which only seven, as far as the letter H, appeared. He continued to send papers on botany and anatomy to the Royal Society, several of which will be found in the 30th and 31st vols. of the 'Transactions.'

* BLANC, AUGUSTE - ALEXANDRE - PHILIPPE-CHARLES, French writer on art, is the brother of M. Louis Blanc [E. C. vol. i. col. 717], and was born at Paris on the 15th of November, 1815. Educated as an engraver he early exchanged the burin for the pen; wrote the notices of the 'Salon' and other art-exhibitions for various journals; and in 1841 became editor of the 'Propagateur de l'Aube.' When the revolution of February, 1848, gave his brother a share in the provisional government, M. Charles Blanc was appointed to the important post of director of the fine arts, an office which he retained till 1852. The name of M. Charles Blanc is associated with several valuable works either as author or editor. In 1845 he edited the first volume of a 'Histoire des Peintres Français'; and he was editor and part author of the more pretentious 'Histoire des Peintres de toutes les Écoles,' large 4to, 1840, &c. His most original and valuable work is 'L'Œuvre complet de Rembrandt,' 2 vols. large 8vo, with numerous engravings, Paris, 1859, &c. He has also published a 'Grammaire des Arts du Dessin,' various biographical notices and occasional pieces, and was the founder and from its origin has been editor of the 'Gazette des Beaux Arts.'

* BLANCHARD, AUGUSTE-THOMAS-MARIE, an eminent French engraver, was born at Paris, May the 18th, 1819, and learnt engraving of his father. He is one of the ablest living engravers in line, a rapidly decreasing class, and he has executed many excellent plates, mostly from the works of contemporary painters. But his style is remarkable rather for clearness, neatness, and a species of brilliancy, than for largeness and grandeur. Among his most noteworthy prints are the 'Repose in Egypt,' after Bouchet, 1843; 'Head of the Saviour,' after Paul Delaroche; 'Le Christ Rémunérateur,' 1850, and 'Faust and Marguerite,' 1853, after Ary Scheffer; 'The Smokers' and 'The Chess Players,' after Meissonier; and the Portrait of the Emperor Napoleon III., after Ed. Dubufe.

The largest and one of the most carefully finished of M. Blanchard's plates is 'The Derby Day,' after Frith, with which every one is more or less familiar. One of the few of his engravings from the old masters is the 'Jupiter and Antiope' after Correggio, 1857. M. Blanchard was awarded a medal of the 3rd class (gravure) in 1843; of the 2nd class in 1847, and of the 1st in 1857; and he was decorated with the cross of the Legion of Honour in 1861.

* BLANCHARD, EMILE, a zoologist whose sphere of observation has been mainly amongst the invertebrate animals. He was born March 6, 1819, at Paris. His father was Emile Theophile Blanchard, a surgeon and painter, who directed his son's attention to the study of articulated animals. Thus guided and aided, the subject of our notice imbibed a love for biological knowledge, and that too at a very early age, for in 1835 a paper of his, descriptive of *Mantis chlorophaea*, appeared in the 'Magasin de Zoologie,' and since that time papers and books have issued steadily from his pen. In 1833 he was employed in the Museum d'Histoire Naturelle, and in 1840 was appointed assistant naturalist, soon after which he was several times entrusted with the delivery of lectures forming part of Milne-Edwards' course on entomology. From 1844 to 1857 he took part in several scientific missions to Italy and Sicily. He is a member of many learned societies, was decorated with the cross of the Legion of Honour in 1860, and was elected to the Academy of Science in the place of Isidore Geoffroy St. Hilaire in 1862. His papers are too numerous for mention here; but amongst the most important are 'Recherches sur l'Organisation des Vers,' 1837; 'Histoire naturelle des insectes, orthoptères, nécroptères, hyménoptères, hémiptères, lépidoptères, et diptères' 1837—1840,—illustrated with 72 plates; the 'Histoire des Insectes,' forming vols. 8 and 9 of Comte's 'Traité complet d'Hist. Nat.,' 1844; 'L'Organisation du Règne Animal,' 1859, &c.; and 'Metamorphoses, Mœurs, et Instincts des Insectes,' 1868. Most of his works are especially noticeable on account of their illustrations, which are usually profuse, and frequently coloured. As early as 1827 he wrote the 'Nouvelle Manuel complet du Coloriste' for the Roret series of manuals, and in 1834 he assisted in a similar work, entitled 'Die Illuminir Kunst.' In addition to the work he has performed in elucidating the characters and physiology of the *Scolecida*, insects, spiders, and molluscs, he has written several papers on the osteology of birds, of which that entitled 'Recherches sur les caractères ostéologiques des Oiseaux appliquées à la classification naturelle de ces animaux,' in the 'An. des Sci. Nat.' (Zool.) xi. p. 10—145 (1859) is an exceedingly valuable contribution.

BLARRU (or, less correctly, BLARU,) PIERRE DE, an historical poet of the 15th century, was born on the 6th of April, 1437, at or near Pairis, an abbey of the order of St. Cîteaux, situated in the valley of Orbay, between Alsace and Lorraine; and died canon of St. Diez, in Lorraine, in November or December, 1506. He was blind during several of the latter years of his life, on which sole account a parallel has been instituted between him and Homer. He is the author of a Latin poem, in six books, of posthumous publication, and the work of his life-time, which was published in a small folio volume in 1518, under the care of his friend and brother-canon of St. Diez, Jean Batin de Sandaucourt. This production, though of no great poetical merit, is valuable on account of the historical details with which it abounds; and is prized at present for its great rarity, the beauty of its typography, and of the wood-engravings with which it is illustrated. It has for its title 'Petri de Blarrorivo Parhisiani insigne Nanceidos opus de Bello Nanceiano. Hac primum, exaratura elimatissime nuperrime in lucem emissum.' The immediate subject of this poem is the siege of Nancy by Charles the Rash, Duke of Burgundy, who was killed under the walls of that town in 1476. The first two books of the poem, of which a MS. had found its way into the library of St. Germain-des-Près, were translated into French by Claude Romain, a doctor of civil law, Provost of Pont-a-Mousson. The latest editor and translator of De Blarru is F. Schütz, who published the Latin text with a French translation under the title of 'La Nanceide, ou la Guerre de Nancy, Poème Latin de P. de Blarru, avec la traduction française,' &c., 2 vols. 8vo, Nancy, 1840. Blarru exercised his talents in French verse, but without much success, if his attempts are to be judged by an epitaph composed by himself, and which was copied by Dom Calmet from his monument in the collegiate church of St. Diez. He is also reputed to be the author of a poem in Latin verse on 'La Chasse à la pipée,' a sport which he is said to have much affected.

BLAZE, the surname of a family of French writers, mostly musical.

HENRI SEBASTIEN BLAZE was born at Cavailon, in 1763. A notary by profession, his inclination led him towards musical pursuits. At different times he composed masses with organ accompaniment, masses with full orchestral accompaniment, an opera called 'L'Heritage,' another opera, 'Semiramis,' sonatas for the pianoforte, duets for the pianoforte and harp, and other pieces. He was an intimate acquaintance of Grétry and Méhul, and was elected a member of the Institute. He died May the 11th, 1833.

FRANÇOIS HENRI JOSEPH BLAZE, known in the literary world as CASTIL-BLAZE, was a son of Henri Sebastian. He was born at Cavailon, December 1st, 1784. Like his father, his profession was the law; but after some years' practice, he abandoned the law definitely, and devoted his attention wholly to musical writing. He published a work entitled 'L'Opéra en France,' 2 vols. 8vo, Paris, 1820, in which he was severely critical on the condition of the French opera stage, and made many suggestions for improvements in management and in the cultivation of taste. In 1822 he became rédacteur of the musical department in the 'Journal des Débats,' in which he gave a higher tone to musical criticism. About the same time appeared his 'Dictionnaire de Musique Moderne,' 2 vols. 8vo, of which a new edition was published in 1825, and a Brussels edition in 1825 (incorporated in a larger work by Mées). In 1832 he quitted the 'Journal des Débats,' and began to write in the 'Constitutionnel.' Other periodicals in which he took the musical department were the 'Revue de Paris,' the 'Ménestrel,' the 'Revue et Gazette Musicale de Paris,' and the 'France Musicale.' Some of his essays in these periodicals were collected in several small volumes, published occasionally between 1832 and 1856. He translated and arranged for the French stage the principal operatic works of Mozart, Rossini, Weber, and Beethoven, which were brought out at the Théâtre de l'Odéon on a scale of great completeness. His original compositions comprised quartettes, trios, many minor pieces, and two comic Operas; but he was more distinguished in connection with the literature of music. He died on the 11th of December, 1857.

ANGE HENRI BLAZE, known as BLAZE DE BURY, son of François Henri Joseph, was born at Avignon in 1813. In 1833—34 he became connected with the 'Revue des Deux Mondes,' and the 'Revue de Paris.' After acting as attaché to a foreign embassy, by which he gained the title of Baron, he returned to Paris, and published a considerable number of works; the chief of which were 'Études littéraires sur Beethoven,' 'Musique des Drame de Shakespeare,' 'Poètes et Musiciens de l'Allemagne,' 'De la Musique des Femmes,' 'Lettres sur les Musiciens Français,' 'Vie de Rossini,' and 'Musiciens Contemporains'—mostly as series of articles in periodical publications. He took the affix of Bury from his mother, the Baroness Blaze de Bury, an Englishwoman, herself the authoress of 'Racine and the French Classical Drama,' 12mo, 1845, and 'Molière,' 12mo, 1846, which formed parts of Knight's 'Monthly Volume'; 'Germania, its Courts, Camps, and People,' London, 1850; and a 'Voyage en Autriche,' 12mo, Paris, 1851.

BLES, HENRI DE, a celebrated painter, was born at Bouvines, near Dinant, in 1480. Though a Frenchman by birth, he belongs as a painter to the early Flemish school, he having been the pupil of Patinir, to whose manner he adhered, and a resident the larger part of his life in Flanders. His pictures, like those of his master, are mostly landscapes with figures which represent some scriptural or legendary event. From his habit of introducing an owl in some corner of his landscape the Italians named him *Civetta* (the Owl); by his Dutch compatriots he was called *Henrik met De Bles*, or Henry with the Forelock. He lived at Mechlin in 1521, and he is believed to have died in Liège in 1550. Authentic examples of his works are somewhat rare. The National Gallery possesses two specimens, presented by the Queen in 1863—'Mount Calvary—Christ on the Cross,' No. 718, an excellent work; and 'The Magdalen,' No. 719.

BLETTERIE, JEAN-PHILIPPE-RÉNE DE LA, an eminent French historian, was born at Rennes, on the 25th of February, 1696. He was a member of the Oratory, where he was professor successively of rhetoric and ecclesiastical history; but he withdrew on the promulgation of the rule against wearing perruques. Still he always retained his affection for the order he had quitted, and in an age when scepticism was general preserved and avowed his religious belief, for which he had to bear the sarcasm of Condorcet and Voltaire. On leaving the

Oratory, the abbé went to Paris, where he was appointed professor of eloquence at the Collège Royal. In 1742 he was elected member of the Académie des Inscriptions, and the Académie Française nominated him to a fauteuil, but the king refused to sanction the election on the ground of his having exhibited Jansenist tendencies in a brochure entitled 'Lettres à un Ami, au sujet de la Relation du Quétisme de M. Phélypeaux,' 1733. His exclusion was greatly regretted by the academicians, who were exceedingly anxious to have him among them. But he was generally much esteemed, and Gibbon was proud of being able to number him among his friends. He died on the 2nd of June, 1772. His chief works are 1.—'Histoire de l'Empereur Julien l'Apostat,' 12mo, Paris, 1735; 2nd edition, revised and enlarged, 12mo, 1746. A learned, fair, and succinct work; Voltaire and the Encyclopédistas attacked it with much acrimony: on the other hand, Gibbon found "merit both in the hero and the historian." 2. 'Histoire de l'Empereur Jovien, et traduction des quelques ouvrages de l'Empereur Julien,' 2 vols., 12mo, 1748; 3rd edition, 1776. Of this work Gibbon writes in the *Journal* of his reading (February 25, 1764):—"The History of Jovian, and the translation of some works of Julian, by the Abbé de la Bletterie: admirable, in point of erudition, taste, elegance, and I will add, moderation. Julian was a pagan, but the abbé hates only the Jesuits." In his History, however, Gibbon cannot refrain from one of his ironical touches. "The Abbé de la Bletterie has composed an elaborate history of Jovian's short reign; a work remarkably distinguished by elegance of style, critical disquisition, and religious prejudice." (D. & F. vol. iv. p. 206, n. 103.) 3. 'Œuvres de Tacite, traduits en François,' 6 vols., 12mo, Paris, 1755—68. The translation has the credit of fidelity, but the style was much criticised at the time it appeared, and Voltaire launched keen epigrams against it. The abbé's other works were of merely passing interest.

BLICHER, STEEN STEENSEN, a Danish poet and novelist, was born on the 11th of October, 1782, at Vium, a village in the county of Viborg, and province of Jutland. The extreme delicacy of his health retarded his education, and his university course at Copenhagen was so interrupted that he did not pass his examination till 1809. In 1819 he settled as pastor at Thorning, which he exchanged in 1825 for the more lucrative cure of Spentrup, where he died on the 26th of March, 1848. His marriage was not a congenial one, and his family was large, so that, in spite of his great literary productiveness and popularity, his circumstances were narrow and frequently embarrassed. When the idea of the Scandinavian union was launched, he adopted it with enthusiasm, and travelled much in Denmark and Sweden for the purpose of advocating it. For the dramatic force and skill with which he depicted the past life and characters of Scandinavia, Blicher has been called by the honourable title of the "Danish Walter Scott," which, however, does him rather more than justice. His first literary effort was a translation of the poems of Ossian, 'Ossian's Digte,' 2 vols. 8vo, Copenhagen, 1807—1809. His other principal translation is a Danish version of the *Vicar of Wakefield*, 'Præsten i Wakefield,' 16mo, Copenhagen, 1837. His works comprise 'Sneeklokken,' 1826, a kind of Almanac of the Muses; contributions to a monthly publication called the *Aurora Borealis*, 'Nordlyset,' 1827—1829, in which first appeared his Tales and Poems in the dialect of Jutland, of which, in a collected form, a third edition was issued with the title of 'E Bindstouw, Fortællinger og Digte i jydsk Mundarter,' 8vo, Randers, 1853; 'Johanna Gray. Tragedie i 5 Acter,' 8vo, Copenhagen, 1825; a volume entitled *My Times*, 'Min Tidsalder,' 8vo, Copenhagen, 1843; *Winter Doings* in 1844 and 1845, 'Min Vinterbestilling i 1844 og 1845,' 12mo, Copenhagen, 1845; *Collected Poems*, 'Digte,' 2 vols. 8vo, Copenhagen, 1847; and a collection of his novels, old and new, 'Gamle og nye Noveller,' 7 vols. 8vo, Copenhagen, 1846—1847. Specimens of Blicher's manner have been offered to the English reader in the first and third volumes of Mrs. A. S. Bushby's work, entitled 'The Danes sketched by themselves,' &c., 3 vols., 8vo, London, 1864.

BLOCH, MORITZ (in his own vernacular, BALLAGI MOR), a distinguished philologist, was born of Jewish parents on the 17th of April, 1816, at Tarnoka, in the county of Zemplin, in the North-east of Hungary. He studied the Oriental languages successively at the universities of Pesth and Paris. In 1840 he published a work in favour of the emancipation of the Jews, which he entitled 'A'Zsidókról,' Pesth, 1840; and the same year began to issue a Magyar translation, annotated, of the *Books of Moses and Joshua*, Pesth, 1840—1843. In 1844 he was appointed professor in the lyceum at Szarvas, which he

quitted at the revolution of 1848, in order to undertake the duties of secretary to the Minister of War. He returned in 1851 to his former position at Szarvas, which he left once more for Kecskemet, and finally for an appointment in the Evangelical Reformed Theological Institution at Pesth. His principal works, besides those already mentioned, are a Complete Magyar Grammar, in German, 'Ausführliche theoretisch-praktisch Grammatik der ungarischen Sprache,' 8vo, Pesth, 1841, 3rd edition, 1850, 5th edition, 1861; a Magyar Anthology, which serves as a complement to the Grammar, 'A Magyar nyelv szepségei,' 8vo, Pesth, 1847; a Complete Dictionary of the Hungarian and German Languages, 'Neues vollständiges Taschenwörterbuch der ungarischen und deutschen Sprache,' 2 vols. 8vo, Pesth, 1843—1844, 2nd edition, 1847—1848; 3rd edition, 1862—1863; a Collection of Magyar Proverbs, 'Magyar példabeszédek, Közmondások és Szójárások gyűjtemenge,' 2 vols. 8vo, Pesth, 1850. In ecclesiastical controversy Bloch has produced 'A Protestantismus harca az Ultramontanizmus ellen,' 8vo, Pesth and Kecskemet, 1867; and a work on M. Rénan's 'Vie de Jésus,' entitled 'Renaniana. Irta Ballagi M.,' 8vo, Pesth, 1864.

BLOMFIELD, CHARLES JAMES, Bishop of London [E. C. vol. i. col. 724]. Increasing infirmity at length convinced Bishop Blomfield that he could no longer adequately fulfil the duties of his office. There were found to be many legal and ecclesiastical difficulties in the way of an episcopal resignation, but these were eventually removed, and in July, 1856, a short Act was passed (19 and 20 Vict. cap. 115), providing for the acceptance of the resignation of Charles James Bishop of London, and that he should retain for life the episcopal palace at Fulham, with a pension of 6000*l.* a year. His remaining days were spent in the pleasant retirement of Fulham, where he died on the 5th of August, 1857. 'A Memoir of Charles James Blomfield, D.D., Bishop of London, with Selections from his Correspondence, edited by his son, Alfred Blomfield, M.A.,' was published in 1863, in 2 vols. 8vo.

BLONDEAU, JEAN BAPTISTE ANTOINE HYACINTHE, professor of Roman Law in the University of Paris, was born at Namur on the 20th of August, 1784. He studied philosophy and law successively at Brussels, Antwerp, and Paris; and six months after maintaining his thesis, he was named assistant-professor in the School of Strasbourg, from which he was transferred in 1808 to that of Paris. At each of these schools he encountered opposition on account of the slight degree of respect which he showed for juridical opinions based on mere precedent and tradition. In 1819 he was appointed to the chair of civil law, through the influence of M. Royer-Collard, then president of the commission of public instruction; and in his new capacity Blondeau justified and increased the reputation he had previously acquired. He is an honorary member of the Academy of Moral and Political Sciences, and correspondent of the Academies of Brussels and Turin. His works comprise 'Tableaux Synoptiques du droit romain, suivant la législation de Justinien,' 4to, Paris, 1811, 2nd edition, 1812, which was followed by a supplementary work entitled 'Tableaux Synoptiques du droit privé, offrant l'essai d'une classification et d'une nomenclature nouvelle des droits privés,' 4to, Paris, 1818; 'Esquisse d'un Traité sur les obligations solidaires,' &c., 4to, Paris, 1819; 'Institutes de l'Empereur Justinien, traduites en français, avec les textes juridiques relatifs à l'Histoire externe du droit romain et du droit privé ante-Justinien,' 2 vols. 8vo, Paris, 1839, which, so far as the translation only is concerned is the work of M. Bonjean; 'Chrestomathie, ou Choix des textes pour un cours élémentaire du droit privé des Romains, précédé d'une introduction à l'étude du droit,' Paris, 1830—1833; 'Traité de la séparation des patrimoines, considérée spécialement à l'égard des immeubles,' 8vo, Paris, 1840; 'Mémoire sur l'organisation de l'enseignement du droit en Hollande,' 8vo, Paris, 1846; 'Essais de législation et de jurisprudence,' 8vo, Paris, 1850, which is a collection of articles contributed to the 'Magasin Encyclopédique: la Décade Philosophique,' the 'Bibliothèque du Barreau,' &c. M. Blondeau was also one of the contributors to the 'Annales du Barreau français,' and one of the founders, and the principal editor of 'Themis, ou Bibliothèque du Jurisconsulte,' 10 vols. 8vo, Paris, 1820—1830.

BLONDEL, FRANÇOIS, Sieur des Croisettes, in his day famous as an architect and engineer, was born in 1617 at Ribemont, in Picardie, where his father was professor of mathematics. His ability and attainments as a young man led to his being appointed preceptor of the Comte de Brienne, son of De Lomenie, Secretary of State, and he accompanied him, July, 1652, as governor in a tour of three years through Germany and Italy: a narrative of the journey, in Latin, was published in 1663. The tact and judgment displayed in this service

suggested to the Secretary the idea of employing him to conduct some delicate state negotiations, and in 1659 he was sent as Envoy Extraordinary to Constantinople respecting the detention of the French ambassador. On this occasion he made a visit to Egypt. His success was rewarded with the title of Councillor of State; he was selected to instruct the young Dauphin, son of Louis XIV., in mathematics and polite literature; and he was nominated professor of mathematics at the Collège Royal. Blondel commenced his career as engineer and architect in 1665. The bridge over the Charente, which unites the city of Saintes with the faubourg des Dames, was, owing to the nature of the site and the character of the river, found to be very difficult to construct and more difficult to maintain, and at that time the only communication was by a ferry. The king, to whom the case was presented, thought a mathematician might resolve the problem, and sent Blondel. Blondel built a bridge of massive but novel construction, and across the approach to it from the city erected a triumphal arch, with Corinthian columns, and thus established at a blow his double professional title. Louis XIV., abundantly satisfied, gave Blondel other commissions, and ordained by letters patent that all public works henceforth erected in Paris should be done in accordance with a plan drawn up by Blondel, and deposited by him at the Hôtel de Ville. The proceedings of Louis and his architect at this time were probably in the mind of Wren when he laid his plans for the re-edification of London before Charles II. after the fire of 1666. Blondel's works were after all not very numerous, and of those he executed not many remain. He enlarged and remodelled the gate of St. Antoine, and designed and erected that of St. Bernard. Both these have been destroyed, but his chief work of this class, the well-known Porte St. Denis, survives to serve as evidence of his architectural skill. The extensive rope-houses and forges of the arsenal at Rochefort were among his principal constructive successes. He also designed various fortifications after a system devised by himself, which he described in a treatise entitled 'Une Nouvelle manière de Fortifier les Places,' but which the king would not permit to be published for the information of his enemy; he rewarded Blondel, however, 1675, with the rank of Maréchal de Camp. His architectural labours Louis had already recognised by appointing him director and professor of his Academy of Architecture, founded in 1671; and the lectures which Blondel delivered in this capacity he afterwards remodelled and published under the title of 'Cours d'Architecture, enseigné dans l'Académie Royale,' enriched with numerous good engravings, folio, Paris, 1675, 2nd edition, revised and augmented, 1698. Blondel had previously written 'Résolution des quatre principaux problèmes d'Architecture,' large folio, 1673; reprinted in the 'Recueil de plusieurs Traités de Mathématiques de l'Académie des Sciences,' folio, 1676. Blondel le Grand, as he was called in his later years, died at Paris on the 1st of February, 1686. Besides the works above cited, he wrote a 'Comparaison de Pindaire et d'Horace,' 12mo, Paris, 1673, Latin translation, 8vo, 1704, which, if of no other value, is noteworthy as an illustration of his remarkable versatility; 'L'Art de Jeter les Bombes,' 4to, Paris, 1683; 'Cours de Mathématiques contenant divers traités, composez et enseignez à Monseigneur le Dauphin, où sont l'arithmétique spéculative et l'arithmétique pratique,' 2 vols., 4to, Paris, 1683.

BLONDEL, JACQUES-FRANÇOIS, nephew and pupil of François Blondel, of Rouen (b. 1683, d. 1756), acquired reputation as an architect, but was more esteemed as a writer on architecture. He was born at Rouen on the 7th of January, 1705, and, after practising some time in the provinces, settled in Paris, in 1739, his chief object being to open a school of architecture in which the theoretical principles as well as the practical details should be taught. The school was so successful that, after watching the experiment for several years, the Académie d'Architecture, in 1755, invited Blondel to join their body, and to continue his system as their professor. In this new position Blondel displayed the greatest zeal, and, as the result of his public and private teaching, French architecture, according to D'Argenville, experienced a happy revolution. But Blondel laboured as zealously with his pen as from the professorial chair for the revolution of architectural taste. For the general public he wrote the whole of the articles relating to architecture in the 'Encyclopédie Méthodique,' and 'De la distribution des Maisons de Plaisance, et de la décoration des édifices' (often referred to by its second title), 'Traité d'Architecture dans le goût Moderne,' 2 vols. 4to, Paris, 1737. Addressed more particularly to architectural students were his 'Discours sur la Manière d'étudier l'Architecture,' 4to,

1767; and his great works, 'Architecture Française,' 4 vols. folio, Paris, 1752-56, a work very valuable for the details it gives of buildings of historical celebrity now destroyed or transformed; and 'Cours d'Architecture Civile,' 6 vols. of text and 3 of plates. This last work is in three parts, the first, published in 3 vols. 8vo, in 1771, relates to the artistic character of the exterior of buildings, considered not merely as elevations, but also in connection with their sites and artificial as well as natural surroundings. The second part, also in 3 vols., published in 1773, treats of the ground-plan, distribution of the apartments, and the general internal arrangements of palaces, mansions, and hotels. The third part, left unfinished by Blondel, but completed and published by M. P. Patte in 1777, refers to the construction of buildings. The preparation of these works, and particularly the last, exhausted Blondel's pecuniary resources. His last years were passed in comparative poverty and acute disease, but he never ceased from his labours, and when he found his end approaching he begged that he might be carried to the Louvre and allowed to die in the school where he had for so many years delivered his lessons (D'Argenville, p. 472). He died there on the 9th of January, 1774. Besides the works named above, M. Blondel published 'Discours sur la nécessité de l'étude d'Architecture,' 4to, 1754; 'De l'Utilité de joindre à l'étude de l'Architecture celle des sciences et des arts qui lui sont relatifs,' 8vo, 1771; and one or two treatises of no great value appeared posthumously. Many of the plates in his works were engraved as well as designed by Blondel. The buildings erected by him were chiefly provincial. Among them were the episcopal palace, the entrance to the cathedral, the hôtel-de-ville, barracks, &c., at Metz, and by order of the king he drew up a general plan for the improvement of the city by widening and straightening the old streets and forming new streets and places. He also made designs for the improvement of Strasbourg, and for the erection of a new senate-house and hôtel-de-ville; and he erected an episcopal palace at Cambrai, and some buildings at Chalons.

BLOOTELING, or BLOTELING, ABRAHAM, an eminent Dutch engraver, was born at Amsterdam, in 1634, and was a pupil of Visscher, whose manner he followed. When the French invaded Holland, 1672-3, Blooteling came to England, and was fully employed during the short time he stayed here. Vertue notes that "he received 30 guineas for etching a portrait of the Duke of Norfolk." He engraved many other English portraits in the same manner, and several in mezzotinto. Among those executed with the point may be mentioned—James Duke of Monmouth, Prince Rupert, the Earl of Sandwich, the Earl of Montague, and some others, after Sir Peter Lely; and Sir Thomas More, the Earl of Shaftesbury, Dr. Stillingfleet, Bishop Wilkins, &c.; with the scraper—The Prince of Orange, the Duchess of York, Nell Gwynne, the Earl of Arlington, the Earl of Derby, Titus Oates, and several more: all of them much in request with collectors. His portraits engraved in Holland with the point include Admirals De Wit, Van Tromp, De Fries, Kortenaar, and Ruyter; Ferdinand, Bishop of Paderborn, the Marquis de Mirabelle, &c.; his mezzotints—Erasmus, after Holbein, John De Wit, Cornelius de Wit, the Emperor Leopold, and numerous others. He also engraved some Studies of Lions, and Heads of Children, after Rubens; Six Views of the Environs of Amsterdam, after Ruysdael; and other figure-pieces and landscapes; and etched and published, 1685, Leonardo Augustino's Gems, while several of Blooteling's designs were engraved by other hands. There is some uncertainty about the year of Blooteling's death, but 1685 appears to be the best supported.

BLOUNT, CHARLES, a deistical and political writer of some notoriety in the 17th century, was the second son of Sir Henry Pope Blount (b. 1602, d. 1682, whom Evelyn always mentions as the "famous traveller," and the author of 'A Voyage into the Levant,' 1636, which went through 8 editions). Charles Blount was born at the house of his grandfather in Upper Holloway, near London, on the 27th of April, 1654; was educated under the eye of his father, and as a young man was regarded as unusually accomplished and of promising parts. He was not long in bringing his capacity to the proof. He had already made himself conspicuous as a politician, and he had gained the favour of Dryden by a pamphlet written in defence of his Conquest of Granada, when, in 1679, he published his 'Anima Mundi; or an Historical Narration of the Opinions of the Ancients concerning Man's Soul, according to unenlightened Nature.' This work, which gave great offence to religious people, called forth several replies, and was formally censured

by Compton, Bishop of London. It was followed in 1680 by a still more offensive publication, 'The Two first books of Philostratus, containing the Life of Apollonius Tyanens, written originally in Greek, with philological Notes upon each chapter,' the notes being remarkable, as Macaulay observes, for the "flippant profaneness" with which they attacked the most sacred subjects. Bayle says that these notes were taken for the most part from the manuscripts of the famous Lord Herbert, and Blount, as we shall see, was quite capable of such an appropriation: as Bayle, himself a sceptic, adds, instead of the grave and serious reasoning which such matters require, they are marked "almost always by profane raileries and by trifling subtleties." As might be expected, the book was answered, anathematized, and formally condemned. But Blount seemed to enjoy the annoyance his heresies excited, and continued his irreverent polemics in 'Great is Diana of the Ephesians; or the Original of Idolatry,' 1680; 'Religio Laici,' 1683; and other brochures, which were collected after his death by his disciple Gildon, under the title of 'Oracles of Reason.' His polemics were not, however, confined to religion. He was a Whig, and his pen was as active and virulent as that of the most scurrilous of the opposite party. In a pamphlet on the Popish plot, published under the signature of Junius Brutus, and entitled 'An Appeal from the Country to the City for the Preservation of His Majesty's Person, Liberty, Property, and the Protestant Religion,' he "magnified the virtues and public services of Titus Oates, and exhorted the Protestants to take signal vengeance on the Papists for the Fire of London and for the murder of Godfrey." But even Macaulay, who handles Blount in his severest manner, admits that as a political writer he rendered one important service: "little as either the intellectual or moral character of Blount may seem to deserve respect, it is in a great measure to him that we must attribute the emancipation of the English press." (Hist. of Eng. vol. vi. p. 365). The reference is to a pamphlet entitled 'A Just Vindication of Learning and of the Liberty of the Press: by Philopatris,' which was published without licence, and attracted, as indeed it deserved, very general attention, but what is most remarkable about it is that it "consists chiefly of garbled extracts from the *Areopagitica* of Milton," which noble work was then so little read that neither partizan nor opponent detected the plagiarism. It was followed by a second tract, 'Reasons for the Liberty of Unlicensed Printing,' which was concocted from the second part of the '*Areopagitica*,' as the 'Just Vindication' had been from the first. To this second tract was appended a postscript entitled 'A Just and True Character of Edmund Bohun,' the licenser of printing, written with the utmost bitterness. This second tract is not reprinted among Blount's acknowledged works, but Macaulay "unhesitatingly attributes" it to him, and seemingly with good reason. Bohun had deeply offended him by mutilating some of his pieces before licensing them. Blount's revenge was not satisfied with the 'Just Character.' He wrote a pamphlet with the portentous title 'King William and Queen Mary Conquerors: or a Discourse endeavouring to prove that their Majesties have on their side, against the late King, the principal reasons that make Conquest a Good Title; showing also how this is consistent with that Declaration of Parliament, "King James abdicated the Government, &c.," written with a special regard to such as have hitherto refused the oath, and yet allow of the title of conquest, when consequent to a just war.' Bohun was a Tory, a High Churchman, and an advocate of passive obedience, yet he had taken the oath and obtained his present place. In the pamphlet he had not only a justification of his own conduct, but an argument which he thought would certainly remove the doubts of his friends the non-jurors, and without a moment's hesitation he authorized its publication. The commotion caused by its appearance was extraordinary. Within a week of its publication, January, 1693, the book and the doctrine it set forth were condemned by a vote of both Houses of Parliament; and, as the author was unknown, the licenser was taken into the custody of the Sergeant-at-Arms, examined at the bar of the House of Commons, and remanded to prison, it being at the same time voted that the king be requested to remove him from the office of licenser. It was the feeling aroused by this book of Blount's that led to Bishop Burnet's famous Pastoral Letter, issued in 1690, being laid before the House of Commons as containing a similar doctrine, and to its being condemned, like the 'King William and Queen Mary Conquerors,' to be burned by the common hangman. Macaulay thinks that, "his own opinions being diametrically opposed to those which, on this occasion, he put forward in the

most offensive way. . . . it is therefore impossible to doubt that his object was to ensnare and to ruin Bohun," and probably most who now look into the pamphlet will be of the same opinion. But this was not the opinion of his contemporaries. By none of them does it appear to have been regarded as ironical. Blount's admirers believed that he had been carried too far by the warmth of his regard for King William; Burnet thought that he "had set the doctrine forth with great modesty and judgment;" and Bohun never suspected its sincerity. Blount's end was tragical. After the death of his wife, he wished to marry her sister, a lady of great wit and beauty. Her objection being on the score of affinity, he drew up an elaborate defence of the lawfulness of such marriages, and the case was submitted to the Archbishop of Canterbury. The decision was of course adverse, and the lady regarding this as final, Blount, in a state of phrenzy, shot himself. He lingered a few days, and died, August, 1693, aged 39. This at least is the received, and doubtless the correct, account, though Macaulay says he languished long, adopting the statement of Pope ("who had the very best opportunities of obtaining accurate information") that Blount "being in love with a near kinswoman of his, and rejected, gave himself a stab in the arm, as pretending to kill himself; of the consequence of which he really died." But the contemporary statements are agreed as above given; Pope was only five years old when Blount died, and the Blounts with whom he much later in life became intimate were of a different and not associated branch of the family; and Pope, always careless in such statements, had in this note to a random line ("If Blount despatched himself he played the man") nothing to induce him to unusual precision. Blount's writings were published by Gildon under the title of 'The Miscellaneous Works of Charles Blount, Esq.,' 12mo. 1695, with a meagre Life of the Author prefixed.

BLOUNT, SIR THOMAS POPE, the elder brother of Charles Blount, and like him, a prolific writer, was born at Upper Holloway on the 12th of September, 1649. He received a careful education; was created a baronet in his father's lifetime, 1679; was elected the same year member of parliament for St. Alban's, and was afterwards returned during three sessions member for Hertfordshire; and in 1694 was appointed by the House of Commons commissioner of accounts. He was a Whig in politics, but free from his brother's errors in religion. His writings, much admired in their day, comprise: 'Centuria celebriorum Authorum,' &c., folio, London, 1690, reprinted at Geneva in 1694, and again in 1710 and 1718; 'Natural History; containing many not common Observations, extracted out of the best modern Writers,' 8vo, London, 1693; 'De Re Poetica: or Remarks upon Poetry: with Characters and Censures of the Most Considerable Poets, whether ancient or modern, extracted out of the best and choicest critics,' 4to, 1794—like the preceding, a book of extracts and opinions threaded together in consecutive order; 'Essays,' 8vo, 1697. Chalmers asserts that "these essays are in no way inferior to those of the celebrated Montaigne." This is absurd; they are in every way inferior. They have neither the wit nor the wisdom, the shrewd insight into character, the knowledge of the world, nor the inimitable humour. Their only point of resemblance is in the extent of the quotations; but then the quotations are applied differently. Sir Thomas died at his seat, Tittenhanger, on the 30th of June, 1697, and was interred with his brother in the family vault at the neighbouring church of Ridge, in Hertfordshire.

BLOUNT, THOMAS, a learned writer of the 17th century, was born in 1618 at Bordesley, in Worcestershire. Of a Roman Catholic family, his education was private, but excellent, and he acquired a considerable store of erudition. He was a barrister and a member of the Inner Temple, and seems to have been both prosperous and respected; but the breaking out of the Popish Plot in the beginning of 1679 caused him, as a Roman Catholic, so much alarm and anxiety as to bring on a palsy, and he died on the 26th (his friend Dugdale says the 16th) of December of that year, at his residence, Orleton, in Herefordshire. The following are his principal works:—1. 'The English Academie of Eloquence,' 12mo, London, 1654. 2. 'Glossographia, or a Dictionary interpreting such hard words, whether Hebrew, Greek, Latin, Italian, &c., that are now used in our refined English tongue,' 8vo, London, 1656, and many times reprinted. This is an able and still useful work, but it involved the author in an angry controversy with Edward Phillips, his rival dictionary-maker, whose book he attacked in a pamphlet entitled 'A World of Errors discovered in the New World of Words,' &c., published in folio (1673) so that it might be bound with his rival's book.

3. 'The Lamps of the Law and the Light of the Gospel: or the Titles of some late spiritual, polemical, and metaphysical new books,' 8vo, 1658; 4. 'Boscobel, or the compleat History of his sacred Majesties most miraculous Preservation after the Battle of Worcester, September the third, 1651,' 8vo, 1660, 3rd ed. 1680; 5. 'A Law Dictionary, interpreting such difficult and obscure words and terms as are found either in our common or statute, ancient or modern laws,' folio, London, 1671, 3rd ed. with additions, 1717; 6. 'Journey to Jerusalem in 1669,' 12mo, 1672; 7. 'Fragmenta Antiquitatis: or Ancient Tenures of Land, and Jocular Customs of some manors,' 8vo, 1670, and many times reprinted, the last edition being "with considerable additions" by H. M. Beckwith, 4to, London, 1815.

* BLUHME, or BLUME, FRIEDRICH, a German jurist and professor of law, was born at Hamburg on the 29th of June, 1797. He studied law at the universities of Göttingen, Berlin, and Jena, and took his doctor's degree in 1820, with a thesis entitled 'De gemitibus et similibus, quæ in digestis inveniuntur, capitibus,' Jena, 1821. He afterwards contributed to the 'Zeitschrift für geschichtliche Rechtswissenschaft,' an article on the Order of the Fragments in the titles of the Pandects, 'Die Ordnung der Fragmente in dem Pandektentiteln.' In 1821, in the interests of his science, Bluhme undertook a journey to Italy, where he explored a great number of libraries. The results of his researches were seen in the notes which he furnished, after a revision of the palimpsest, for a second edition of the 'Institutes' of Gaius; for the 'Monumenta Germaniæ Historica;' for Schrader's edition of the 'Corpus Juris Civilis;' for Savigny's History of Roman Law in the Middle Ages, 'Geschichte des Römischen Rechts im Mittelalter;' and for the Archives of German History, 'Archiv für ältere deutsche Geschichts-Kunde.' Besides these he published, as the fruits of his Italian tour, his works entitled 'Iter Italicum,' 4 vols. 8vo, Berlin and Halle, 1824—1836; and 'Bibliotheca Librorum Manuscriptorum Italica,' 8vo, Göttingen, 1834. The reputation attending the learned activity of Bluhme, has procured for him various posts of honour and emolument. His academical progress was rapid, and he was advanced to the professorship of law at the university of Halle, which he exchanged in 1831 for a similar appointment at Göttingen. In 1833 he was named a Counsellor of the High Court of Appeal of the Free Cities at Lübeck; and in 1843 succeeded Rufe as professor of law in the university of Bonn. Besides the works already named, Bluhme is the author of Elements of the Ecclesiastical Law of Jews and Christians, 'Grundriss des Kirchenrechts der Juden und Christen besonders in Deutschland,' 8vo, Halle, 1826, 2nd edition, 1851; Outlines of the Pandects, 'Grundriss des Pandektenrechts,' 8vo, Halle, 1829, 2nd edition, 1843; and Encyclopædia and System of the Laws in force in Germany, 'Encyclopædie und System der in Deutschland geltenden Rechte,' 3 vols. Bonn, 1847—1858. Bluhme has also edited works on Jurisprudence, and contributed to the 'Rheinisches Museum für Jurisprudenz.'

* BLUM, JOHANN REINHARD, an eminent German mineralogist, was born at Hanover, on the 28th of October, 1802. After attending one of the elementary schools in his native town, where he manifested his natural history tendencies, he proceeded to the university of Heidelberg in 1821, where he formed the acquaintanceship of Leonhard, which determined his resolve to study mineralogy. In 1826 he was appointed to take charge of a mineralogical shop at Heidelberg; in 1828 he qualified himself as teacher, from which year he has been constantly lecturing on his special branch of knowledge; and in 1838 he became extraordinary professor of mineralogy. He has written several papers and separate publications, but his name is best known in connection with 'Die Pseudomorphosen der Mineral-reiches,' 1843, with continuations published in 1847 and 1852; a work which is indispensable to the investigator of pseudomorphism amongst minerals.

BOCCHI, ACHILLE (ACHILLES BOCCHIUS), a scholar and man of letters, was born in 1488, at Bologna, where he died on the 6th of November, 1562. When scarcely twenty years old, he published his 'Apologia in Plautum, cui accedit vita Ciceronis, auctore Plutarcho,' 4to, Bologna, 1508. He attached himself to the celebrated Albert Pio, count of Carpi; and became imperial orator at the court of Rome, obtaining the titles of chevalier and count Palatine. At Bologna he was professor of Greek and Latin, rhetoric and poetry, and in 1522 was chosen one of the Anziani, or elders of the city. He founded in 1546 the Academia Bocchiana, which frequently went by the name of Ermetana, from its device, exhibiting the union of Hermes and Athené. He also established a printing-office in his palace, and

employed himself, with his academicians, in correcting the many beautiful editions which they printed. He was named historiographer to the city of Bologna, of which he wrote a Latin history, which runs through seventeen books, and which, although never printed, is still preserved in the library of the Bologna Institute. There is likewise in the Laurentian library at Florence, a MS. collection of poems, with the title of 'Achillis Philerotis Bocchii Lusum Libellus ad Leonem X,' where the name of Phileros is supposed to refer to the friendship that existed between himself and Lilius Gyraldus. Other of Bocchi's works are his 'Carmina in Laudem Joannis Baptistæ Pii,' 4to, Bologna, 1509; 'Symbolicarum questionum de universo genere, quas serio ludebat, Libri V.; Bononiæ, in ædibus novæ Academiæ Bocchianæ,' 4to, 1555, reprinted in 1574, a work which is valued on account of the emblems, which are almost all the invention of Bocchi, and were engraved for the first edition by Giulio Bonasoni, and retouched for the second by Agostino Carracci.

BOCCHI, FRANCISCO, one of the most voluminous writers of Florence, was born in that city in 1548, and died there in 1618. He left many works in Latin and Italian, which are to a great extent of merely local interest. They comprise 'Discorso a chi de' maggiori guerrieri, che insino a questo tempo sono stati, si deve la maggioranza attribuire,' 4to, Florence, 1573 and 1579; 'Discorso sopra la lite delle armi e delle lettere, e a cui si deve il primo luogo di nobiltà attribuire,' 8vo, 1579, 1580; 'Discorso sopra la Musica, non secondo l'arte di quella, ma secondo la regione alla politica pertinente,' 8vo, Florence, 1581; 'Discorso sopra il pregio dell'umano valore,' 8vo, Florence, 1587; 'Le Bellezze della città di Firenze, dove a pieno di pittura, di scultura, di sacri templi di palazzi, i più notabili artifizi e più preziosi si contengono,' 8vo, Florence, 1591, 1592, and 1595; a new edition, enlarged by Cinelli, 1677; 'Elogia Virorum Florentinorum,' 4to, 1604 and 1607; 'Della Grandezza di Roma,' 8vo, Florence, 1598; 'Oratio de Laudibus Henrici IV. Regis Galliarum,' 4to, Florence, 1610; and other biographical, historical, and literary productions.

BOCH, or BOCHIUS, JAN, a Flemish poet, who on account of his skill in Latin verse was called the "Belgic Virgil," was born at Brussels on the 27th of July, 1555. After a course of study he attached himself to Cardinal Radzivil, whom he accompanied to Rome, where he studied theology under Bellarmine, afterwards the celebrated cardinal. Leaving Rome after a time, he prosecuted his travels into other parts of Italy, and visited Poland, Livonia, Russia, and other countries. On his way to Moscow, his feet were frozen to such an extent as to make some of his friends advise their amputation. The Czar's physician, however, recommended him to defer the operation. Meanwhile the place in which he was staying was surprised by the attack of an enemy, and the poet found in his own fear a better cure for his disease than the skill of the surgeons. He fled so fast and so far as to secure his own safety, and to re-establish for the rest of his life, the strength and soundness of his feet. On his return home he devoted himself to his literary pursuits, especially to poetry; and on account of a panegyric which he addressed to the Duke of Parma on the taking of Antwerp, he was appointed by the conqueror to be town-secretary. He died on the 23rd of January, 1609.

The principal literary remains of Bochius are 'De Belgii Principatu;' 'Historica Narratio professionis et inaugurationis Alberti et Isabellæ,' folio, Antwerp, 1602; 'Psalmorum Davidis Parodia heroica. Ejusdem varii in Psalmos Observationes physicae, ethicae, politicae, et historicae,' 8vo, Antwerp, 1608. His 'Poemata,' consisting of epigrams, elegies, &c., were collected and printed at Cologne, 1616, with the addition of some poems by his son, Jan Ascanius Bochius, a promising youth, who died in Calabria. It is, lastly, to Bochius that we owe the verses which occur underneath the engravings in Verstegan's extravagant book against Queen Elizabeth, entitled 'Theatrum Crudelitatum Hereticorum nostri temporis,' a work which has been defined as a sort of Popish martyrology.

BOCHOLT, FRANZ VON, one of the earliest German engravers, was a native of Bocholt, in Westphalia, and lived in the last half of the fifteenth century. Nothing authentic is known of his personal history, and the archives of Bocholt have been searched in vain for any reference to him. His engravings are signed FVB. His style shows the influence of the Van Eycks, but he displays both originality and invention in his designs and great freedom and mastery over the burin, his handling of which Passavant thinks resembles that of a goldsmith. He has been spoken of as the earliest German engraver, but he was preceded by Martin Schongauer, whose engraving of the 'Temptation of St.

Anthony' he copied, and he preceded Israel van Menecken, who erased Bochoit's mark from some of his plates and substituted his own. Bochoit's works are necessarily rare, but 55 are described by Bartsch and Passavant; good impressions of several are in the British Museum. A 'Veronica' is regarded as one of his first works; a 'Nativity,' an 'Annunciation,' a 'Christ on the Cross,' the series of 'Christ and the Apostles,' and the 'Judgment of Solomon,' are among the finest.

BOCKHORST, JAN VAN, an eminent painter of the Flemish school, was born at Munster, in Westphalia, in or about 1610. He learned painting of Jordaens; was admitted freemaster by the corporation of St. Luke, Antwerp, in 1633, and carried on his profession in that city till his death, which occurred on the 21st of April, 1668. Bockhorst practised both historical and portrait painting, and made designs for the Antwerp tapestry weavers. Some of his best pictures were painted for the Augustinian convent at Antwerp, but dispersed on its suppression by Joseph II. His best work now in that city is in the Church of the Beguinage, a triptych having a representation of the Resurrection in the centre, the Annunciation on the right wing and the Ascension on the left. Another noteworthy picture is 'The Empress Helena holding the true Cross,' in the old church of the Augustines. The Antwerp Museum contains a 'Coronation of the Virgin.'

BOCTOR, ELLIOUS, an oriental philologist, was born on the 12th of April, 1784, at Siut, in Upper Egypt, the see of a Coptic Bishop, and supposed to be the ancient Lycopolis. He was brought up in the Coptic communion, and became attached, in the quality of an interpreter, to the French army in Egypt. He accompanied this army on its return to France; and in 1819 he succeeded the Syrian priest Raphaël as professor of Arabic at the King's Library. He held this position for two years, and died of disease of the liver on the 26th of September, 1821. His works include 'L'Explication de l'inscription arabe qu'on lit sur une cassette conservée dans la cathédrale de Bayeux,' which was inserted in the 'Revue Encyclopédique'; 'Discours prononcé à l'ouverture d'un cours d'arabe vulgaire de l'École royale des Langues orientales vivantes, le 8 Décembre, 1819,' Paris, 1820; 'Alphabet arabe, accompagné d'exemples,' Paris, 1820; 'Abrégé des conjugaisons arabes, corrigé et augmenté,' Paris, 1820; and a Dictionary which was posthumously published by M. Caussin de Perceval, with the title of 'Dictionnaire Français-Arabe, revu et augmenté,' &c., 2 vols. 4to. Paris, 1827—1829, reprinted, with additions and corrections, in 1848, in a single large octavo volume.

BODE, JOHANN ELERT, a distinguished German astronomer, was born at Hamburg, on the 19th of January, 1747. He received his early education from his father, who kept a commercial school in that city; and having shown a decided taste for the mathematical sciences, received special instruction from Johann Georg Büsch. While assisting his father in the school, young Bode constructed a telescope and other astronomical instruments for his own use, and began to watch the stars sedulously. At the age of 18 he made accurate calculations concerning lunar eclipses and planetary movements; and soon afterwards published a small work relating to the solar eclipse of the 5th of August, 1766, 'Berechnung und Entwurf der Sonnenfinsternisse,' Berlin, 1766. The favourable reception of this work led to the publication of a book which has had great success, his Introduction to the study of the starry heavens, 'Anleitung zur Kenntniss des gestirnten Himmels,' Berlin, 1768. More than twenty editions of this useful popular work have appeared in Germany. Olmanns published a Supplement to it in 1833. In 1769 Bode put forth instructions for viewing the transit of Venus; and in the same year discovered a comet in the constellation Taurus. In 1770 he commenced a series of monthly notices of the positions and movements of the moon and planets, which he continued for seven years. In 1772 he received the appointment of Astronomer to the Berlin Academy of Sciences. In the following year he assisted in founding the Society of Naturalists at Berlin, whose archives were enriched with many memoirs from his pen. In 1776 he commenced his valuable 'Astronomische Jahrbücher oder Ephemeriden,' of which he lived to prepare 54 annual volumes, and which was continued after his death by Encke under the title of the 'Berliner Astronomische Jahrbuch.' In 1778 he published a useful guide to the stars, 'Erläuterung der Sternkunde.' This was followed, in 1782, by a work in French, 'Représentation des Astres,' consisting of thirty-four small maps, on which were represented all the stars visible to the naked eye, and the chief telescopic stars visible in the latitude of Berlin, with a catalogue, and a description of the constellations. In the same year Bode was

elected fellow of the Berlin Academy, and soon afterwards director of the Berlin Observatory. His observations on Uranus, while still regarded as a star, assisted the elder Herschel in determining the planetary nature of that body. In 1793 appeared his sketch of astronomical science, 'Entwurf der Astronomischen Wissenschaften,' Berlin, 2nd ed. in 1825; and in 1801, 'Allgemeine Betrachtungen über das Weltgebäude,' Berlin, 3rd ed. in 1834. A larger and more important work was published in Latin, 'Uranographia sive Astrorum descriptio,' Berlin, 1801; this work contained, on twenty maps, 17,240 stars and nebulae, being 12,000 more than those contained in any preceding atlas. This production gained admission for Bode into the chief learned societies of Europe, and honours and decorations from sovereigns. A jubilee, or 50th anniversary, of Bode's official connection as astronomer with the Berlin Academy, was held in 1822, and was attended with very flattering honours to him. Failing health gradually compelled him to resign his active offices; but he still continued to make the calculations for his Astronomical Ephemeris until his death, which took place on the 23rd of November, 1826. An autobiography of Bode, brought down to his 59th year, was published in Lowe's 'Biographie des Savans,' 1806. 'Bode's Law,' as it is called by astronomers, is an empirical formula relating to planetary distances from the sun. Kepler had observed some numerical peculiarities in those distances; and Bode so far tabulated them as to render apparent a great gap between Mars and Jupiter; and he boldly predicted the probable discovery of some planet that would fill up this gap, at a distance from the sun which he approximately estimated. There have been discovered, between 1801 and 1870, not indeed one large planet, but more than a hundred planetoids, or asteroids, which collectively pretty well fulfil Bode's conditions. His law appears, however, to fail in regard to Neptune.

BODE, JOHANN JOACHIM CHRISTOPH, a remarkable writer, composer, musician, diplomatist, and translator, was born at Brunswick, on the 16th of January, 1730. His father, an old soldier, on quitting the army, worked as a journeyman at a tile-work, in a village between Helmstadt and Brunswick; and in the village school the boy learned to read and write. After acting as shepherd on the farm of a relation, young Bode, at the age of 15, was placed by his uncle with Kroll, the musician; and though his position was little removed from servitude, he eagerly availed himself of all opportunities to learn music, in which he acquired such proficiency as to be able to play on nearly all kinds of instruments. He married early, and had to struggle against much poverty. In 1749 he removed to Helmstadt, and placed himself under Stolze, an eminent bassoon-player. In 1750 he served as oboist in a Brunswick regiment. A friend, Schlabeck, taught him the French and Italian languages; Stockhausen taught him English, while he taught himself Latin; acquirements which were of great value to him in later years. He returned to Brunswick, but being disappointed in the hope of engagement at the Court Chapel, he removed to Hanover in 1752, where he obtained the post of court oboist at Celle, at the same time studying musical composition. He published two lyrical collections, 'Scherz-und-Ernsthafte Oden und Lieder.' On the death of his wife, in 1757, Bode removed to Hamburg, where he established himself as a teacher of music and languages, and translated many tales and dramas from the English and French. In 1762—3 he edited the 'Hamburger Correspondenten,' in which his musical criticisms attracted much attention. Having about this period become a freemason, he entered with much zeal into the interests of the craft, and travelled extensively about Germany to acquire information, gradually collecting a library of 800 volumes on the subject. When Weisshaupt founded the singular 'Illuminatenorden,' or Society of Illuminati, Bode became one of the members, and remained so until the suppression of the order. Meanwhile he supported himself by directing concerts, conducting orchestras, and giving music lessons. Having, by a second marriage, acquired some property, he bore the expense of printing Lessing's 'Dramaturgie'; and being again made a widower, he married the widow of a bookseller named Bohn. Lessing and he joined in establishing a printing and publishing business for high-class books; but neither of them being versed in the ways of trade, the undertaking failed. His translations attracted great notice by their excellence. Among them were Sterne's 'Sentimental Journey,' in 1768; Smollett's 'Tristram Shandy,' in 1774; Goldsmith's 'Vicar of Wakefield,' in 1776; and Fielding's 'Tom Jones,' in 1786; together with Smollett's 'Humphrey Clinker,' Marмонтel's 'Incas,' Montaigne's 'Essays,' Clavigo's 'Pensador,' &c. In 1778 he went to Weimar, and accepted the post of geschäfts-

fihrer, or man of business, to the Countess of Bernstorf; this brought him several diplomatic honours from the petty courts of Germany. In 1787 he visited Paris, deputed by the freemasons of Germany to become acquainted with the Société Philaethes, and to investigate the origin and history of the masonic order. On his return to Saxony he published a pamphlet, 'Mehr Noten als Text,' against a specious plan of public education which had been submitted to him at Weimar. When about to commence a translation of Rabelais, he died, on the 13th of December, 1793, at Weimar. As a composer, Bode left behind him several solos, concertos, and symphonies; but he is chiefly remembered for his excellent translations, which are highly esteemed in Germany. A memoir of him by Böttiger, 'Bode's literarisches Leben,' was published at Berlin in 1796.

BODEMER, JAKOB, a distinguished German enameller, was born in 1777, at Nöttingen, near Carlsruhe, learned the art of enamelling at Geneva, and went to Vienna, where he completed his studies under Füger and other professors in the Academy. His enamels, which are in great request with collectors, are remarkable for technical excellence as well as artistic taste. Many of them are reductions of celebrated works by the great painters, but he also executed portraits. He died at Vienna in 1824.

BODIN, JEAN, a French political writer, was born at Angers about 1530. After having studied law at Toulouse, he endeavoured to establish himself as an advocate at Paris; but, dissatisfied with the slowness of his professional advancement, he abandoned law for literature. In 1555 he published a Latin verse translation of Oppian's 'Cynegetica,' with a commentary, a work in which it has been charged that he made an unfair use of the then recently published edition of Turnebus. Bodin enjoyed for a short time the favour of Henri III., and when this declined, secured that of the Duke of Alençon, with whom he visited both England and Flanders. In 1576 he retired to Laon, where he married; and in the same year was deputed by the *tiers état* of Vermandois to the States-General. He fulfilled the duties of his office with much independence, and declared for liberty of conscience with such vigour as to alienate the king, who refused to complete his appointment to a place actually promised to him. He continued accordingly to reside at Laon, and by his personal influence caused that town to declare successively for the League and for Henri IV. Bodin died at Laon, of the plague, in the year 1596.

His works comprise 'Methodus ad facilem Historiarum Cognitionem,' 4to, Paris, 1566, 8vo, Lyon, 1583 and 1595, 8vo, Basel, 1679, &c., a book with small claims to either method or judgment; 'De la Demonomanie, ou, Traité des Sorciers,' 4to, Paris, 1580 and 1586, translated into Latin, almost immediately after its publication, by Francis Junius, and into Italian by the Cavalier Hercole Cato, 4to, Venice, 1587 and 1592, a work which favours and fosters popular superstitions; and 'Universæ Naturæ Theatrum, in quo Rerum omnium Effectrices, Causæ, et Fines, contemplantur,' 8vo, Lyon, 1596, 8vo, Frankfurt, 1597, &c., a work of posthumous publication, which has been considered by some as a specimen of disguised Pantheism; and 'Heptaplomeres de abditis rerum sublimium Arcanis,' which, long suffered to remain in manuscript, was at length published for the first time by G. E. Guhrauer, 8vo, Berlin, 1841. But the most important of Bodin's productions, and that by which he is most favourably known, is that entitled 'Six Livres de la République,' folio, Paris, 1576, folio, Lyon, 1580, 8vo, Lyon, 1593, &c., in which the author has based his principles upon examples drawn from universal history, and of which he owes many of the most striking ideas, without thinking it necessary to acknowledge the obligation, to the 'Politics' of Aristotle. A Latin translation of this work was done by the author himself, and went through several editions, folio, Lyon, 1586, 8vo, Frankfurt, 1591 and 1594, &c. Italian and Spanish versions appeared respectively at Geneva, folio, 1588, and Turin, folio, 1590. An English translation by Richard Knolles was entitled 'The Six Bookes of a Common-Weale, out of the French and Latin copies,' folio, London, 1606. Amongst the works which have recently been published illustrative of Bodin and his times may be mentioned Colombel's 'Jean Bodin, suite des études sur le 16me Siècle,' Nantes, 1845; and 'Jean Bodin et son temps. Tableau des Théories politiques et des Idées économiques au seizième Siècle,' 8vo, Paris, 1853, by M. Henri Baudrillart.

* BODMER, GEORG, a skilful Swiss mechanic, was born at Zurich in December, 1786. At the age of 16 he was placed under a millwright at Hauptweil in Thurgau. In 1803 he invented an improvement in wheel-gearing, and in 1805 several improvements in cotton-spinning machinery. Soon after this

he established a machine factory at Küssnacht, in the canton Zurich. Here, in 1808, he constructed a 1-pounder breech-loading cannon, which discharged shells provided with some kind of percussion fuse. He next settled at St. Blasien in Baden, where he conducted an extensive manufacture of cannon and machinery for Baden, Switzerland, and France. In 1816 he was appointed captain of artillery, and was also much employed by the government of Baden till 1822. Returning to Switzerland, and remaining a short time there, he then came to England, where he established a factory for machines and machine-tools at Manchester. He made great improvements in cotton-spinning machines, which he grouped under the collective name of 'bandvereinigungs-system,' and for which he obtained patents in England, France, Austria, the Netherlands, and the United States of America. He also took out many patents for improvements in machine-tools, made locomotives, as well as land and marine steam-engines, and constructed a water-wheel at Bolton 61 feet in diameter. After remaining in England about a quarter of a century, Bodmer went in 1847 to Austria, where he was concerned in the construction of the government railways, especially the Sömmering incline over the Alps.

BÖCKH, AUGUST [E. C. vol. i. col. 737]. This distinguished scholar and archæologist died at Berlin on the 3rd of August, 1867, in his 82nd year.

BOETTCHER or BOETTGER. [BÖTTGER, E. C. S.]

BOFFRAND, GERMAIN, a celebrated French architect, was born at Nantes, May the 7th, 1667. The son of a sculptor, he was at a suitable age sent to Paris to study design with a view to following the profession of his father, but his own inclination was much stronger for architecture, and by the kindness of Mansard he was enabled to take his own course. Under Mansard he made rapid progress and was entrusted to supervise the erection of several of his great works. He began practice for himself with good prospects of success, and they were amply fulfilled. He erected many important buildings in Germany as well as in France, and executed some considerable engineering works. Of the chief of these he has given plans and elevations in his 'Livre d'Architecture contenant les principes généraux de cet art, et les plans, élévations et profils de quelques-uns des bâtimens faits en France et dans le pays étrangers,' folio, Paris, 1746. His architectural principles are founded, seemingly, on Horace's principles of poetry; his professional admiration is however wholly given to Palladio, in whose style most of his buildings are avowedly designed; but his Palladian is very French. Boffrand lived at a time when French taste was rapidly decaying. He protested against the corruptions which were gaining ground in architectural design, but he did not escape their influence. In Paris he built the hotels Guerchy, de Duras, de Tingry, and de Voyer, the houses of Le Brun, the painter, of M. de Montaran and the vast structure for the Enfants-Trouvés, in the rue Notre-Dame; and added to or embellished several others, particularly the interior of the Hôtel Soubise. Other works of his are the Palace of Nancy, the Hôtel de Craon, at Nancy, the Château de Harroué in Lorraine, the Château de Luneville erected as a summer residence for Leopold I. Duke of Lorraine; the famous Puits de Bicêtre; the gates of the Hôtel de Villars and the Petit Luxembourg; and the bridges of Sens and of Montereau. He also directed the construction of several canals and hydraulic works, and of various buildings in Germany and Flanders. He was elected member of the Academy in 1709. At his death, which occurred in Paris, on the 18th of March, 1754, he was dean of the Academy of Architecture, pensionnaire of the royal buildings, and chief engineer of the bridges and highways of France. Besides the 'Livre d'Architecture' mentioned above, M. Boffrand published a treatise written, like his larger work, in Latin and French, entitled 'Description de ce qui a été pratiqué pour fondre en bronze d'un seul jet la figure équestre de Louis XIV., élevée par la ville de Paris dans la place de Louis-le-grand en 1699,' with 19 plates, folio, Paris, 1699, a work now rare, the plates having been destroyed when 200 impressions were taken. M. Boffrand, who was of a lively disposition, also wrote some comedies which were acted in the Theatre of the Comédiens Italiens, and printed in the 'Theatre' of Gherardi, but though enjoyed at the time they have long been obsolete.

BOGDANOVICH, HIPPOLYTE, an eminent Russian author, was born at Perevolotchna, in Little Russia, December 28, 1743; and was in 1754 sent to Moscow to complete his education, with a view to the military service. By the time he had entered on his 15th year he had, however, imbibed so strong a taste for the stage, that he applied to Kheraskoff, then superin-

tendent of the theatre, for employment as an actor. Kheraskoff as wisely as kindly dissuaded him from his design, took him into his house, induced him to continue his attendance at the university, and undertook to guide his studies in poetry and general literature. He now made rapid progress; in 1761 was appointed class-inspector in the university, and in 1765 translator in the office of foreign affairs. The following year he went, as secretary of legation, to Dresden; where he commenced the poem which made him famous. He returned to St. Petersburg in 1768, and, whilst continuing in the civil service, edited a journal called 'Innocent Amusement,' and contributed to other periodicals. In 1780 he was nominated member, and in 1788 president, of the commission of the imperial archives. He was allowed to retire in 1796, when he returned to Little Russia, settling finally at Koursk, where he died, on the 6th of January, 1803. 'Dooshinka,' the Little Soul, the poem by which his fame was established, was founded partly on the fable of Apuleius, but mainly on the *Psyche* of La Fontaine; but much of it is original, and it displays considerable imagination and poetic feeling. Many critics assign it a higher place than the pieces from which it originated, and it is still one of the most esteemed and popular of the older Russian poems. Bogdanovich composed several dramatic pieces for the Empress Catharine, wrote various minor poems, and translated Voltaire's 'Ode on the Destruction of Lisbon;' but his fame rests on his 'Dooshinka.' His prose works comprise a 'Description of Russia,' 1777; a 'Selection of Russian Proverbs,' 1785; and a translation of Vertot's 'Histoire des Revolutions de la République Romaine,' 1771. His collected works were published in 6 vols. Moscow, 1809—10; 2nd ed. in 4 vols. 1818. Specimens of his poetry are given in Sir John Bowring's 'Russian Anthology.'

* BÖHTLINGK, OTTO, a distinguished Russian Orientalist, was born on the 30th of May, 1815, at St. Petersburg, and was descended from a German family of Lübeck. He was educated successively at St. Petersburg and at Dorpat; and in 1835 repaired to Germany in order to avail himself of the teaching of the learned Oriental scholars of Berlin and Bonn. After a stay of seven years in Germany he returned to Russia, where he presently obtained a chair in the Academy of Sciences of St. Petersburg, and the titular dignity of Councillor of State.

Böhtlingk has applied himself especially to the grammar of the Sanscrit language, and has published in connection therewith an edition of Panini's 'Eight Books of Grammatical Rules,' 2 vols. Bonn, 1840; Remarks on the Second Edition of Franz Bopp's Critical Grammar of the Sanscrit Language, 'Bemerkungen zur zweiten Ausgabe von Fr. Bopp's Kritischer Grammatik der Sanskritsprache in Kürzerer Fassung. Erster Artikel,' 8vo, St. Petersburg, 1845; Sanscrit Declension, 'Die Declination im Sanskrit,' 4to, St. Petersburg, 1844; A first Essay upon the Accent in Sanscrit, 'Ein erster Versuch über den Accent im Sanskrit,' 8vo, St. Petersburg, 1843; an edition of the Sanscrit text, with a German translation and commentary, of Sakuntala, 'Kālidāsa's Ring-Çakuntala,' 8vo, Bonn, 1842; 'Sanskrit-Chrestomathie,' 8vo, St. Petersburg, 1845; 'Hermakandra's Abhidānakintāmani,' 8vo, St. Petersburg, 1847, a systematic Lexicon of Synonyms, edited, translated, and annotated jointly by Böhtlingk and C. Rieu. Dr. Böhtlingk has likewise contributed to the 'Mémoires de l'Académie Impériale des Sciences de Saint-Petersbourg,' and especially a work which afterwards enjoyed a separate publication, 'Die Unādi-Affixe;' and a dissertation, afterwards separately published in 1851, on the Language of the Jakutes, 'Ueber die Sprache der Jakuten. Grammatik, Text und Wörterbuch,' to Alexander von Middendorff's Journey to Siberia, 'Reise in den äussersten Norden und Osten Sibiriens,' 4to, St. Petersburg, 1847, &c. Jointly with Rodolph Roth, Dr. Böhtlingk has compiled a Dictionary of the Sanscrit Language, 'Sanskrit-Wörterbuch,' 4to, St. Petersburg, 1853. His last contribution to Oriental science has taken the form of a work, in 3 parts, on Indian Aphorisms, 'Indische Sprüche. Sanskrit und Deutsch,' 8vo, St. Petersburg, 1863, 1864, and 1865.

BOHUN, EDMUND, a political writer of some notoriety in the latter part of the 17th century, was born on the 12th of March, 1645, at Ringsfield, near Beccles, Suffolk, of a family long settled at Westhall Hall, in that county. In 1663 he was admitted fellow-commoner of Queen's College, Cambridge, but left on account of the plague in 1666. He was sworn justice of the peace for Suffolk in 1675, and for some years led the life of a country gentleman, his leisure hours being given to literature; but monetary difficulties forced him to London, and no more profitable employment offering, he turned to literature as a regular pursuit. His writings were much read, admired, and

censured when they appeared, but they have no intrinsic value, and would have passed into oblivion long ago but for their connection with a singular phase of religious and political opinion. Bohun was one of the last and strongest supporters of the theory of passive obedience in Church and State, and he reprinted Sir Robert Filmer's 'Patriarcha,' and defended Filmer's position; but when James II. had abdicated his throne and quitted the kingdom, Bohun held that as a good citizen he was bound to transfer his allegiance to William and Mary, who were by right of conquest, as well as by the acceptance of the legislature, *de facto* king and queen. The writings he issued to this purpose did not convince his high-church friends, who had previously held him in much esteem, but procured for him, 1692, the office of licenser of the press in succession to Fraser. He held it, however, only five months, and the office ceased with his tenure of it. The circumstances which led to his dismissal are narrated under BLOUNT, CHARLES [E. C. S. col. 261]. Blount's treatise 'William and Mary Conqueror' was brought to Bohun on the 9th of January, 1693, by Bentley, the bookseller, who did not know the name of the author. "I read it over that day and the next with incredible satisfaction," wrote Bohun in his 'Autobiography,' "finding it well written, close argument, modest, full of reason; and which I believed could not fail to satisfy great numbers of the non-swearing, for whose sake only it was written." He gave his licence, and the book was published. Unluckily for Bohun, instead of satisfying anybody it raised a storm in which he was wrecked. On the 20th of January the notice of the House of Commons was called to the publication, and as the work was anonymous, the licenser was ordered into custody; the next day he was examined at the bar of the House; on the 23rd the Commons and on the 24th the Lords condemned the book and ordered it to be burned by the common hangman, and sent up an address to the Throne for the removal of the licenser from his office; and on the 28th the Chancellor of the Exchequer having signified to the Houses that his Majesty had given orders for his dismissal from his employment, Bohun was "upon his knees before the House" reprimanded by the Speaker and discharged out of custody. He had now nothing but his pen to depend upon, for his country property was deeply involved, but in 1698 he was, through what interest is unknown, made Chief Justice of South Carolina, with the munificent salary of 60*l.* a year. It would seem, however, that there were fees as well as salary, for not long after his installation he was officially warned not to take more than his dues. But he enjoyed neither long. An epidemic of small-pox and fever visited Charleston, and Bohun was one of its victims. He died on the 5th of October, 1699. Bohun's most noteworthy writings are:—'An Address to the Freeman and Freeholders of the Nation,' 1682; 'The Justice of the Peace and his Calling,' 1684, 2nd ed. 1693; 'A Defence of Sir Robert Filmer against Algernon Sidney's Paper delivered to the Sheriffs upon the Scaffold,' 8vo, 1684; Preface to Filmer's 'Patriarcha,' 1685; 'Life of Bishop Jewel,' prefixed to his 'Apology,' 1685; translation of Le Clerc's *Bibliothèque* (Jan.—March, 1687); 'Geographical Dictionary,' 1688, 2nd ed. 1691; translations of Sleidan's 'General History of the Reformation,' and of Puffendorf's 'De Statu Germanici Imperii,' 1690; 'The character of the Queen Elizabeth and of her principal Ministers of State,' 1693; 'Historical, Geographical, and Political Dictionary,' folio, 1694; and various tracts. After his death appeared an edition largely augmented and continued by Bohun of Heylin's 'Cosmogony,' folio, 1703; and in 1705 his 'Doctrine of Passive Obedience.' 'The Diary and Autobiography of Edmund Bohun, Esq.,' was published for the first time in 1853, with an Introductory Memoir, Notes, and Illustrations by S. W. Rix, which has supplied many of the dates and facts in this notice.

BOICEAU, JEAN, a French jurist, was born at the beginning of the 16th century at Poitiers, and died in the same city on the 14th of April, 1589. He practised as an advocate in the Presidial, a court which had the power of final judgment, without appeal, in civil causes involving no more than a specified sum of money. He acquired considerable reputation by the publication of a commentary on the ordinance of Moulins, which was passed in 1566, and had the effect of limiting to 100 livres the amount over which the Presidial courts had jurisdiction, with the title 'Ad Legem regiam Molinensis habitam de abrogatu testium, a libra centena Probatione Commentarius,' 8vo, Poitiers, 1582. This work is remarkable for the clearness and excellence of its method, and the additions which have been made to it in various issues have scarcely touched its general plan or its principles. The 'Commentarius' of Boiceau was translated into French by Gabriel Michel, and printed at the end of the 'Paraphrase de

Gilles Bourdin sur l'ordonnance de l'an 1539, traduite par Antoine Fontenon, 8vo, Paris, 1600, 1606, and 1615. The best edition of Boiceau is that of Danty, which gave both the Latin and French texts, and was published, with observations and additions, in 4to, Paris, 1696; and which was seven times reprinted in the course of the 18th century.

Boiceau had the misfortune to lose his sight, a deprivation which did not put a stop either to his consultations or his forensic practice. He sought to amuse himself by the composition of verses in Latin and French, but as a poet he never achieved a great reputation. His productions in this kind are an 'Eglogue pastorale sur le vol de l'Aigle en France, par le moyen de la Paix,' 16mo, Lyon, 1539; and 'Le Monologue de Robin qui a perdu son procès,' Poitiers, 1555. The last is a satire upon the litigious tendencies of the Poitevins, in whose dialect it was written.

* BOIS-DUVAL, JEAN ALPHONSE, French entomologist, was born June 17, 1801, at Ticheville, a small village in the department of Orne, and was educated first at Vimoutier, next at Rouen, and finally at Paris. In 1824 he won the prizes awarded at the École de Pharmacie for proficiency in botany and natural history, and in 1828 he was made a doctor of medicine. His first publication was a 'Notice sur cinq espèces nouvelles de Lepidoptères d'Europe,' which appeared in the *Memoirs of the Linnean Society of Paris* for 1827, and was indicative of his future line of study. From this time he seems to have been actively engaged in researches on butterflies, for in 1829 no fewer than three lepidopterological works in which he had a hand issued from the press. One was entirely by himself, viz., an 'Essai sur une Monographie des Zygenides suivi du tableau méthodique des Lepidoptères d'Europe'; another was executed in conjunction with Count Dejean, and was a work giving figures of the European beetles; and the third was the 'Histoire générale et Iconographie des Lepidoptères et des Chenilles de l'Amérique septentrionale,' in which his co-worker was J. Leconte, and the issuing of which in parts commenced in the above-mentioned year. His attention, however, was not confined to butterflies and beetles, for in 1828 there appeared a 'Flora française,' in 3 vols., 18mo, forming portion of the Roret encyclopædic series of manuals. In 1830 was commenced the publication of his 'Faune entomologique de l'Océan pacifique,' one of the series of works illustrative of Dumont D'Urville's scientific voyage in the *Astrolabe*. The second volume appeared in 1834, and in 1835 he received the Cross of the Legion of Honour for his services in connection with the *Astrolabe*, and for his efforts in repelling cholera. This work was only one of several which he was carrying on at the same time. Thus in 1832 appeared the first part of a large illustrated work on the caterpillars of Europe, in which he was aided by Rambur and Graslin; and which was finished in 1843. In 1832 also he commenced the publication of his 'Icones historique des Lepidoptères nouveaux ou peu connus, Collection des papillons d'Europe nouvellement découverte, ouvrages formant le complément de tous les auteurs iconographes,' of which the 42nd part was issued in 1834, and we believe it then stopped. In 1833 appeared his 'Faune entomologique de Madagascar, Bourbon, et Maurice Lepidoptères.' In 1836 we have his 'Histoire générale des Insectes. Espèces générales des Lepidoptères,' forming portion of the 'Suites à Buffon.' After this his literary efforts seem to have slackened, for little has issued from his pen, except occasional short papers in the 'Annales de la Société Entomologique de France' (his contributions to which extend from 1832 to 1868); a note or two in *Goumain-Cornille's* 'La Savoie,' of which the first edition appeared in 1864, and the third in 1866; a new edition of the 'Nouveau Manuel complet des destructeurs des animaux nuisibles,' 1847; and an 'Essai sur l'Entomologie horticole comprenant l'histoire des Insectes nuisibles à l'Horticulture,' &c., 1867; which is a thick octavo volume, containing a popular account of the gardener's insect foes and friends, and the best way of getting rid of the former.

BOISGELIN, JEAN DE DIEU RAYMOND DE CUCÉ DE, a French theologian and cardinal, a member of an ancient family of Bretagne, was born at Rennes on the 27th of February, 1732. He abandoned the birthright which fell to him by the death of his elder brother in order to devote himself unreservedly to the church. He was appointed successively to be grand-vicar of Pontoise, Bishop of Lavaur in 1765, and in 1770 Archbishop of Aix. The last-named city owes much to his skill and benevolence; and as deputy of the clergy of his province, in 1789, he had many opportunities, in his place in the States-General, of exhibiting his prudence and moderation. At the Session of the Constituent Assembly a constitutional archbishop was named to

the province of Aix, and M. de Boisgelin retired to England, from which he did not return to France until after the signature of the concordat. In 1802 he was raised to the archbishopric of Tours, and shortly after, 1803, was promoted to the cardinalate. He died on the 22nd of August, 1804. To his prelate and administrative ability, M. de Boisgelin added the culture of a man of letters. In 1776 he was appointed a member of the French Academy, in the place of the Abbé de Voisenon. In 1765 he delivered the funeral oration over the Dauphin, son of Louis XV.; in 1766 another on Stanislaus Leczinski, King of Poland; and a third on the Dauphine in 1769. His greatest oratorical effort, however, was the sermon he delivered at the coronation of Louis XVI., at Reims, when the popular applause broke through the rules of decorum. The works of Cardinal de Boisgelin comprise 'Art de juger par l'analyse des idées,' 8vo, Paris, 1789; 'Considérations sur la paix publique, adressées aux chefs de la Révolution,' 8vo, Paris, 1791; 'Discours à la Cérémonie de la Prestation du Serment des Archevêques et Evêques,' 4to, Paris, 1802; 'Exposition des principes sur la constitution du clergé, par les Evêques députés à l'Assemblée Nationale de France,' 8vo, Paris, 1791; an anonymous French translation, in verse, of the 'Héroïdes d'Ovide,' 8vo, Paris, 1786; 'Mémoires pour le Clergé de France, au sujet de la prestation de foi et d'hommage; avec la réponse de l'inspecteur du domaine,' 8vo, 1785; 'Précis des conférences des commissaires du clergé avec les commissaires du conseil,' 4to, and 8vo, Paris, 1786; 'Le Psalmiste: Traduction des Psaumes, en vers, précédée d'un discours sur la poésie sacrée des Hébreux,' 8vo, London, 1799; besides various poems. His Works were published by M. de Bausset, with the title of 'Œuvres du Cardinal de Boisgelin, précédées d'une Notice historique sur la Vie et les Écrits de ce Prélat,' 8vo, Paris, 1818; and his 'Œuvres oratoires complètes' find a place in the Abbé Migné's 'Collection Intégrale et Universelle des Orateurs Sacrés,' 4to, Paris, 1844, &c.

BOISGELIN, LOUIS BRUNO, COMTE DE, a French diplomatist, and brother of the cardinal, through whose self-abnegation he became head of his house, was born at Rennes in 1733. He embraced the profession of arms, and through successive grades became in 1762 colonel of the Lorraine Guards, and brigadier and field-marshal in 1780. He was also "Maitre de la garde-robe" and "Chevalier du Saint-Esprit," and was sent as minister plenipotentiary to the court of Parma. He was "baron des états de Bretagne," and in this position made himself remarkable for the energy he displayed in the assembly held under his presidency in 1789. He persistently refused a seat in the States-General, and during the revolution sought concealment and security. But in this object he was unsuccessful, for he was arrested, imprisoned in the Luxembourg, condemned, and executed on the 7th of July, 1794.

BOISSERÉE, SULPIS, [E. C. vol. i. col. 751] died on the 2nd of May, 1854. His brother, MELCHIOR BOISSERÉE, noticed in the above biography as having shared in all the labours of his brother, was born on the 23rd of April, 1786, and died on the 14th of May, 1851. His specialty was glass-painting, and to his example and influence the royal glass-painting establishment at Munich is largely indebted for its present high character. Their friend and coadjutor, JEAN BAPTISTE BERTRAM (born in 1776) died at Munich in 1841.

* BOISSIER, EDMOND, Swiss botanist. He was born at Geneva in 1810, and in 1837 commenced a series of tours through various parts of Europe for the purpose of studying and collecting plants, more especially those of which little had previously been known. The results obtained were embodied in papers contributed from time to time to the 'Annales des Sciences Naturelles (Bot.),' and in the separate works entitled 'Voyage botanique dans le Midi de l'Espagne pendant l'année 1837,' 2 vols. 1839—1845; 'Elenchus plantarum novarum minus cognitarum quasi in itinere Hispanico legit E. B.,' 1840; and 'Diagnoses plantarum Orientalium,' 1st series, 2 vols. 1842—1854; 2nd series, 1853, &c.

BOISSONADE, JEAN FRANÇOIS. [E. C. vol. i. col. 751.] M. Boissonade died on the 12th of September, 1857, at the ripe age of 83. Since 1840 he had held the rank of officer of the Legion of Honour. In 1863 was published a selection from his early contributions to the 'Journal des Débats,' in two volumes, 8vo, under the title 'Critique Littéraire sous le premier Empire,' with an historical introduction by M. Naudet.

BOISSY D'ANGLAS, COMTE FRANÇOIS-ANTOINE DE, one of the most active participants in the great French Revolution, was born of a Protestant family at St. Jean-Chambre, department of Ardèche, on the 8th of December, 1756. After studying at Annonay, he was admitted to the faculty of advo-

cates at Paris, but did not practise at the bar. For a time he was maître d'hôtel to Monsieur, afterwards Louis XVIII., and was on terms of intimacy with Malesherbes and with the two Montgolfiers. After publishing an 'Adresse au Peuple Languedocien' in 1789, he was elected to the States-General as deputy for Annonay. In 1790 he published 'Adresse à mes Concitoyens,' expressing hopes for a peaceful issue of liberal reforms, speaking well of the king, and deprecating violence. In 1791 appeared his 'Observations sur l'ouvrage de M. de Calonne, intitulé de l'état de la France présent et à venir, et, à son occasion, sur les principaux actes de l'Assemblée Nationale, avec un postscript sur les derniers écrits de MM. Mounier et Lally.' In the same year he was elected Secretary of the National Assembly. Next, during a temporary absence from the Legislature, he acted as procureur-syndic of Ardèche, in which office he displayed firmness and judgment. In 1792, after publishing a pamphlet, 'Boissy d'Anglas à Thomas Raynal,' refuting certain accusations, he manifested an increasing tendency towards revolutionary views, in an essay, 'Quelques idées sur la liberté, la révolution, le gouvernement républicain, et la constitution Française.' In the same year he was elected member of the National Convention for Ardèche. When on the war committee he wrote 'Rapport sur l'arrestation de Bidermann,' and several other papers on the army organisation of the period. In 1793 he voted for the safe keeping of the hapless king, but against his execution; nevertheless he soon afterwards published 'De Notre Situation présente et future,' a sort of apology for having differed from the majority. He voted with the Girondists against the Jacobins; and wrote 'Lettre au Citoyen Dumont' against the violence of the extreme party. During the Reign of Terror he remained nearly silent. In February, 1794, as member of the Committee of Public Instruction, he addressed to the Convention 'Quelques idées sur les Arts, sur la nécessité de les encourager, sur les institutions qui peuvent en assurer le perfectionnement, et sur divers établissements nécessaires à l'enseignement public;' this, with other addresses and reports, were ordered by the Convention to be printed. In October of the same year he became Secretary to the Convention; and in December a member of the Committee of Public Safety. In the last-named office one of his duties was to attend to the victualling of Paris during the dearth of the winter 1794—5, in which he displayed much energy and tact. He continued to publish numerous reports and letters. The influence of Boissy d'Anglas was much increased by the line of policy which he followed in 1795, bringing about the downfall of Robespierre and the Jacobins, and reconstituting more moderate measures. The Executive Directory, then founded, made him Secretary of the Council of Five Hundred, of which body he became president in 1796, writing and speaking very frequently on various public topics. He fell into disfavour with the Directory, however, in 1797, and did not take part again in public affairs till 1800, when the influence of Napoleon gave a new turn to his writings and speeches. He was made president of the tribunate in 1803, senator in 1804 (with the title of count), grand cordon of the Legion of Honour in 1811, and commissary extraordinary in providing for the defence of the south-west of France against the English in 1814. He kept in favour with the ruling powers during the changes of 1814—15, was made a peer, and was admitted into the Academy of Inscriptions in 1816. During all changes the writings of Boissy d'Anglas on public questions were numerous. His death took place on the 20th of October, 1826. He published many of his miscellaneous writings under the title 'Études littéraires et poétiques, d'un vieillard, ou Recueil de divers écrits en vers et en prose,' 6 vols. 12mo, Paris, 1825.

BOIVIN, or BOYVIN, RENÉ, known also as RENATUS, a celebrated early French engraver, was born at Angers in 1530. Having acquired an elementary knowledge of design, he went to Rome, where he appears to have resided for the greater part of his life; but he visited Germany and executed portraits of the more celebrated Reformers, and eventually returned to France, where he is believed to have died in 1598. The dates of his engravings extend, according to Passavant, between 1568 and 1580. His works are unequal, but the best of them have great spirit. Among the most prized are his prints after Primaticcio; 'Francis I. approaching the Temple of Immortality,' after Rossi; the portrait of Henry II.; the engravings to the 'Toison d'Or' of Prince Jason of Thessaly; 12 plates of the Ancient Philosophers and Poets; portrait of Clement Marot; Agar and Ishmael; and the Dutch Breakfast, after Metzsu.

* BOLCKOW, HENRY WILLIAM FERDINAND, closely connected with the development of the iron manufacture of the Cleveland district in Yorkshire, was born in Mecklenburg-

Schwerin in 1804. He arrived in England in 1827, and after some years became senior partner in the now eminent firm of Bolckow and Vaughan, who established iron-works at Middlesbrough in 1841. They took a keen interest in the discovery of good iron ore in the neighbouring Cleveland hills. Iron smelting is known to have been carried on in that district in early times; but early in the present century all records had been lost concerning the exact locality whence the ore had been obtained. At various times between 1800 and 1850 beds had been discovered, but not of such quality as to induce smelters to use the ironstone to any great extent. At length, in the last-named year, Mr. Vaughan discovered a bed 16 feet thick, exceedingly rich in protoxide of iron, close to the present busy town of Eston, near Middlesbrough; and between 1850 and 1870 the whole district has grown in wealth and population at a rate scarcely equalled in any other part of England. The chief firm, Messrs. Bolckow and Vaughan (whose partnership has recently been converted into a limited liability company), are the owners of smelting-works on a vast scale, together with collieries, limestone quarries, machine-works, gas-works, and brick-works. Mr. Bolckow, who became a naturalised British subject in 1841, has been closely connected with the rising prosperity of Middlesbrough. When the town received its charter of incorporation in 1853, he became its first mayor; when it received the parliamentary franchise in 1868, he became its first member of parliament. He is a magistrate of Middlesbrough, a county magistrate for Durham and the North Riding of Yorkshire, and deputy-lieutenant of the Riding. He has laid out 20,000*l.* in forming the Albert public park at Middlesbrough. This park was opened with great ceremonial on the 11th of August, 1868, by H.R.H. Prince Arthur, who slept at Marton Hall, the residence of Mr. Bolckow, on the preceding night. On the next day an iron rail, stamped in the rolling-mill with the inscription "His Royal Highness Prince Arthur. 1868," was made in his presence in the Bolckow mills, of iron obtained from the Bolckow mines, and smelted at the Bolckow furnaces.

* BOLINTINEANO, DEMETRIUS, a Roumanian poet, was born in 1826 at Bolintina, near Bucharest, in which city he studied at the college of St. Sava. He entered the service of the State, but his poems, several of which had appeared in the public journals, having attracted the interest of wealthy friends, he was sent in 1847 to complete his studies at Paris. The revolutionary movements of the following year recalled him to Bucharest, where for some months he edited the 'Populul Suverano,' a journal published in the interests of the national democratic party. The success of the reactionary party forced him to flight, and he sought refuge successively in France and in Turkey. Under Prince Couza, he was summoned, in May, 1861, to undertake the duties of Minister of Foreign Affairs in the Galesco cabinet. He is the author of volumes of Poems and Ballads, entitled respectively 'Cantece si Plangeri,' 'Cantarea romaniei,' 'Melodii romane,' 'Legende si basme nationale,' and 'Poesie vechi si nove.' A French version of his Roumanian Poems has been published with the title of 'Brises d'Orient; Poésies Roumaines, traduites par l'auteur lui-même, précédées d'une Préface de M. P. Chasles,' 8vo, Paris, 1866. Bolintineano has likewise attracted attention by a philosophical romance entitled 'Manilu,' in which he exposes the corruption of the Boyards; and by his brochure entitled 'Les Principautés Roumaines,' 8vo, Paris, 1854.

BOLZANO, BERNHARD, a German philosopher and theologian, was born at Prague on the 5th of October, 1781. His studies at first were chiefly mathematical, but he soon adopted those by which he afterwards acquired his reputation. He became in 1805 doctor of philosophy, took orders, and was appointed professor in the theological faculty of the High School at Prague. In this position he became obnoxious to the clerical party by the freedom of his speculations, and he was accused of adhering to the principles of Schelling. Nevertheless, finding a supporter in the Prince-Archbishop Salm Salm, he was enabled to continue for 15 years in the full enjoyment of his academic privileges. But in 1820 his enemies prevailed, and he was not only ejected from his chair, but was even subjected to annoyance in his domestic and personal relations. At this juncture the family of Count Leo von Thun afforded him an asylum, and in the refuge thus opened to him he continued the production or the revision of his works till his death on the 18th of December, 1848. His writings comprise a treatise on Scientific Instruction, &c., 'Wissenschaftslehre, oder Versuch einer neuen Darstellung der Logik,' 4 vols. Sulzbach, 1837; on Aesthetics, 'Abhandlungen zur Aesthetik,' 2 vols. Prague, 1843—49; What

is Philosophy? 'Was ist Philosophie?' Vienna, 1849; Paradoxes of the Infinite, 'Paradoxien des Unendlichen,' Leipzig, 1851; Proofs of the Immortality of the Soul, 'Athanasia, oder Gründe für die Unsterblichkeit der Seele,' 2nd edition, 8vo, Sulzbach, 1838; Manual of Theology, 'Lehrbuch der Religionswissenschaft,' 4 vols. Sulzbach, 1834; and a Succinct Manual of Catholic Christianity, 'Kurzgefasstes Lehrbuch der Katholischen Christlichen Religion als der wahren göttlichen Offenbarung,' Bautzen, 1840.

BONALD, LOUIS GABRIEL AMBROISE, VICOMTE DE, a philosopher and statesman, was born at Monna, near Milhau, in Rouergue, on the 2nd of October, 1754. He was educated at the college of Juilly, and afterwards entered the King's Mousketeers (mousquetaires de la maison du roi). Upon the abolition of this corps in 1776, he quitted the service, married, and was appointed to the mayoralty of his native place. In 1790 he was named president of the first departmental administration of Aveyron; but, dissatisfied with its proceedings with reference to the clergy, he resigned his office, and retired to his estate. In 1791 he quitted France and joined the "Armée des Princes," under the command of Louis Joseph de Bourbon, Prince de Condé. When this army was disbanded, De Bonald retired with his family to Heidelberg, where he wrote his 'Théorie du pouvoir politique et religieux dans la Société civile, démontrée par le raisonnement et l'histoire,' 3 vols. 8vo, Constance, 1796, reprinted in 3 vols. 8vo, Paris, 1843, and in 2 vols. 8vo, 1854, in which he prophesied, but without affixing a date, the return of the Bourbons to the throne of France. This work was proscribed by the Directory, and few copies in France escaped the vigilance of its agents; and when the author repaired to Paris in 1797 he found it expedient, in order to preserve his own personal liberty, to accept a modest retreat offered to him by an adherent of his political and ecclesiastical opinions. He now composed his 'Essai analytique sur les Lois naturelles de l'ordre social; ou, Du Pouvoir du Ministre et du Sujet dans la Société,' 8vo, Paris, 1800; 'Législation primitive, considérée dans les derniers temps, par les seules lumières de la raison, suivie de plusieurs traités et discours politiques,' 3 vols. 8vo, Paris, 1802, 2nd edition, 1821, a development, in another form, of the preceding work; and 'Du Divorce considéré au XIX^e siècle relativement à l'état domestique et politique de la Société,' 8vo, of which a second edition, revised, corrected, and enlarged by the author, was published in 8vo, Turin, 1824. Under the Consulate, De Bonald was allowed to return to his estate at Monna, where he devoted himself to the production of various articles which, contributed in the first instance to the journals of the time, were afterwards collected in two 8vo volumes with the title of 'Mélanges littéraires, politiques, et philosophiques.' In 1806 he became associated with M.M. de Chateaubriand and Fiévée in the editorship of the 'Mercure de France.' In 1808 he was named councillor of the Imperial University, an institution which had frequently been the object of his attacks, and with which he allowed himself to be connected only after the repeated entreaties, extending over two years, of various friends, and especially of M. De Fontanes, the principal of the university. Although it has been sharply said that De Bonald, with a salary of 12,000 francs, patiently awaited in the Imperial salons the predicted return of the Bourbons, he refused to accept any other office under Napoleon, and even declined the charge, offered to him in an autograph letter by Louis Bonaparte, King of Holland, of educating his son, the present Emperor of the French. Upon the return of Louis XVIII. to France, he appointed De Bonald a member of the Royal Council of Public Instruction, established by an ordinance of the 17th of June, 1814, under the presidency of M. (afterwards Cardinal) De Bausset. De Bonald also received from the king the Cross of St. Louis; and about the same time published a brochure entitled 'Réflexions sur l'intérêt général de l'Europe,' 8vo, Paris, 1814, 2nd edition, 8vo, Paris, 1815, in which he claimed the extension of the frontiers of France to the Rhine. In 1815 he was elected deputy for the department of Aveyron, and took his seat in the chamber called *introuvable*, where he spoke often, and chiefly in the ecclesiastical interest. In March, 1816, he was chosen a member of the French Academy, and closed his career as a deputy, to which office he had been elected in 1820 and 1823, by being named, at the end of the latter year, peer of France. He forfeited this dignity in 1830 by his refusal to take the oath, after the revolution of July. Some months before this event, which marks the termination of his political life, he had published his 'Démonstration philosophique du principe constitutif de la Société,' 8vo, Paris, 1830; and after it he retired to Monna, where he died somewhat suddenly on the 23rd of November, 1840. The 'Œuvres' of M. de Bonald were

published collectively in his lifetime, 12 vols. 8vo, Paris, 1817—19, &c.; and they have been re-issued with the title of 'Œuvres Complètes de M. de Bonald, précédées d'une Notice sur sa Vie et ses Œuvres,' &c., 3 vols. 8vo, Paris, 1859.

* BONALD, LOUIS JACQUES MAURICE DE, cardinal, primate of the French, and Archbishop of Lyon, third son of the Vicomte de Bonald, was born at Milhau on the 30th of October, 1787. He was placed successively at a school at Lyon for the pursuance of his classical studies, and at the Seminary of Saint Sulpice. Having entered holy orders, he was called upon to accompany Monseigneur de Pressigny, Archbishop of Besançon, to Rome, as secretary, when that prelate went thither charged by Louis XVIII. with the conclusion of the concordat. In 1817 De Bonald was appointed grand vicar and archdeacon to the Bishop of Chartres, and acquired a reputation for his Lent lectures in the cathedral church of that city in 1822. In 1823 he was preferred to the bishopric of Puy, then recently restored by an ordinance of the king, and enjoyed this incumbency for more than 16 years, at the end of which time he was appointed, by a royal ordinance of the 4th of December, 1839, to the archbishopric of Lyon. He was created cardinal on the 1st of March, 1841, and received the hat at the hands of the pope on the 22nd of May, 1843, with the title of Santissima Trinità al Monte Pincio. Monseigneur de Bonald distinguished himself by his zeal in upholding the dignity and privileges of the clergy, and occasioned a controversy of some magnitude and importance by his denunciation of a new edition of the 'Manuel de Droit Ecclésiastique,' by M. Dupin, procureur général of the Cour de Cassation:— 'Mandement de Monseigneur le Cardinal de Bonald portant condamnation d'une livre intitulée "Manuel de Droit Public Ecclésiastique" par Dupin, et d'un écrit du même auteur intitulé "Réfutation des assertions de M. le Comte de Montalembert dans son Manifeste Catholique,"' 8vo, Paris, 1845.

The Archbishop of Lyon was one of the first to hail the revolution of 1848, of which the watchwords "Liberté, Égalité, Fraternité," seemed favourable to the interests of the church. "Le Drapeau de la République," he said, in a circular addressed to his clergy, February 27th, 1848, "sera toujours pour la religion un drapeau protecteur;" and on the 2nd of March following he prescribed a solemn service for the victims of February. Subsequent events did not, however, fulfil his expectations as based upon a presumed republican piety. After the coup d'état of the 2nd of December, 1851, Cardinal de Bonald became a member of the Imperial Senate in virtue of his ecclesiastical dignity. His works are almost exclusively professional, and include 'Observations sur le projet de loi sur l'instruction secondaire, adressées à la Chambre des Pairs,' 4to, Lyon, 1844; 'Lettre Pastorale à l'occasion du Carême de 1844, sur l'éducation chrétienne,' 4to, Lyon, 1844; 'Instruction Pastorale à l'occasion du Carême de 1846, sur la Liberté de l'Église,' 12mo, Paris, 1846; 'Lettre Pastorale de son Eminence le Cardinal de Bonald, à l'occasion du Carême de 1857, sur la Nécessité et les Avantages de l'Instruction religieuse,' 4to, Lyon, 1857; and 'Mandement portant Condamnation du livre intitulé "La Vie de Jésus," par M. E. Renan,' 4to, Lyon, 1863.

* BONAPARTE. NAPOLEON III. [E. C. vol. i. col. 805: see NAPOLEON III., E. C. S.]

BONAPARTE, FAMILY of. JÉRÔME BONAPARTE [E. C. vol. i. col. 814.] The Prince Jérôme died on the 24th of June, 1860. The 'Journal des Opérations Militaires du Roi Jérôme en Silésie,' followed by his inedited correspondence with Napoleon I., appeared in 2 vols. 8vo, in 1854, and is a valuable addition to the historical materials of the time to which it refers.

CHARLES LUCIEN JULES LAWRENCE BONAPARTE, PRINCE of CANTINO [E. C. vol. i. col. 815]. The death of this eminent ornithologist occurred shortly after the former article was finished. For the last few years of his life he resided at Paris, suffering much from swellings and ulcerations in his legs. Notwithstanding this he frequently visited this country in order to attend the meetings of the British Association, in which he always took a hearty interest. No amount of illness or pain seemed to make him flag in his scientific zeal, or in his capacity for work, indeed the worse he became the harder he studied. His great ambition was to produce a complete classification of birds, and up to the very last hour he was labouring hard upon a large monograph of pigeons. The affection in his legs extended to his chest, and he was carried off by dropsy on July 29, 1857, in the 55th year of his age.

BOND, WILLIAM CRANCH, a distinguished American astronomer, was born at Portland, State of Maine, in September, 1789. He learned the trade of watch-making; but while living

at Dorchester, Massachusetts, he provided himself with astronomical instruments, and directed his attention to an eclipse which occurred in 1806. In 1811 his sedulous observations enabled him to be one of the earliest in America to see the comet of that year. After a long course of individual observations in astronomy, he was commissioned by the United States Navy Department in 1838 to prosecute a series of observations, preparatory to the fitting out of an exploratory expedition to the South Seas under Captain Wilkes. In 1840 he was appointed astronomical observer to Harvard University, Cambridge, Massachusetts, and director of the observatory at that place. With the great Fraunhofer equatorial Mr. Bond, assisted by his son, Mr. George Phillips Bond, made valuable astronomical observations. His knowledge of watchmaking, combined with his skill in astronomy, enabled him to construct an ingenious instrument for marking small fractions of a second of time: one part of a train of clock-work is regulated by a pendulum having a dead-beat escapement; another part, recording its own motion through the means of an elastic axis, is made to run uniformly by a balance or fly-wheel; while the whole is guided by a spring-governor. Mr. Bond was one of the first to perceive the possibility and the importance of celestial photography, and of the use of electric clocks in astronomical observations. He and his son, working sometimes together and sometimes separately, made observations embracing a wide range of phenomena—comets, occultations, eclipses, the planets Neptune and Saturn, nebulae, asteroids, moon-culminations, missing stars, solar parallax, photometry of the sun and moon, celestial photography, &c. These observations are described in a large number of papers, mostly printed originally in 'Silliman's Journal,' the 'Proceedings of the American Society of Arts and Sciences,' 'Gould's Astronomical Journal,' and the 'Cambridge (Massachusetts) Mathematical Monthly,' but afterwards reprinted in various European scientific journals. Professor Bond's 'History and Description of the Astronomical Observatory of Harvard College,' 4to, Cambridge (Mass.), 1856, is in the 1st vol. of the 'Annals' of that observatory; which Annals also contain the results of many of his scientific labours. He discovered the eighth satellite of Saturn on the 19th of September, 1848,—the same day and almost the same hour that marked the discovery of the same satellite in England by the Rev. W. R. Dawes and Mr. Lassell. Mr. G. P. Bond, at the same observatory, and with the same telescope, discovered an inner ring of Saturn, not before observed, on the 11th of November, 1850. Mr. G. P. Bond, in 1859, succeeded his father as director of the observatory and Phillips Professor of Astronomy at Harvard; and died in February, 1865.

BONIFAZIO, or BONIFACCIO, a distinguished Italian painter, was a native of Verona, and was born about 1491. Most of the biographies, following Vasari, say that he was born in Venice, but this is a mistake, as Morelli ('Notizia,' p. 196, &c.) has shown. He was a scholar of Palma, but studied closely the works of Titian, of whose style he was a close copyist. His works are distinguished rather by refinement than originality or vigour, and he is a good, though not grand, colourist. The most celebrated of his works are at Venice, in the Ducal Palace, in which is his great picture of the 'Expulsion of the Money-dealers from the Temple,' and the Academy, in which are 14 paintings collected from various churches and convents. The Louvre, Paris, possesses three pictures by him—The Resurrection of Lazarus, and two Holy Families. Bonifazio of Verona died in 1553. With him must not be confounded an earlier painter, BONIFAZIO OF CREMONA, who flourished about 1460, nor a later one, BONIFAZIO OF VITERBO (born 1637), a clever pupil and imitator of Pietro da Cortona.

* BONNECHOSE, FRANÇOIS-PAUL-EMILE BOISNORMAND DE, French historian, was born August 18, 1801, at Lyderdorp in North Holland, where his father, a French émigré, was then resident. M. Bonnechose was serving in the army when the revolution of 1830 afforded him a welcome opportunity of exchanging the sword for the pen. He obtained the post of librarian of St. Cloud, which he retained during the reign of Louis Philippe. He has since held similar appointments at Versailles and elsewhere. His early works include a tragedy, 'Rosemonde,' and a poem, 'La Morte de Bailly,' which obtained the prize of the French Academy; but his popularity was secured by his 'Histoire de France,' 2 vols. 8vo, 1834, of which ten or twelve editions have been published. M. Bonnechose has since produced several other historical publications, including a 'Histoire Sacrée,' 1838; a 'Histoire des quatre Conquêtes de l'Angleterre,' which was crowned by the Academy; and a 'Histoire d'Angleterre' (4 vols. 8vo, 1858—59), which has been

translated into English; but the only one of any real value is 'Les Réformateurs avant la Réforme du XVème Siècle,' &c., 2 vols. 8vo, 1844. He has, besides, written a kind of novel, 'Christophe Sauval, ou la Société Française sous la Réformation,' and contributed articles to periodicals.

BONNEVILLE, NICOLAS DE, a French political and socialistic writer, was born March 13th, 1760, at Evreux, and studied in the college of his native place and afterwards at Paris. Having paid particular attention to the modern languages, he began his literary career by translating dramatic pieces from the German, for Friedel, by which he obtained favourable notice from the Queen; and he assisted Tournour in rendering Shakspeare into French. In 1786 Bonneville paid a visit to England, where he formed a plan of translating Russell's 'History of Modern Europe,' then recently published; but finally determined to write an original history instead. Returning to Paris full of the revolutionary and perfectibility fervour then so rife in France, he founded the Cercle Social, a society which published a journal called 'La Bouche de Fer, ou les Tribunes du Peuple,' and later 'Le Chronique du jour' and 'La Bien-Informé,' and printed a number of patriotic and semi-philosophic publications, many of which were written by Bonneville himself. But as in his writings he advocated comparatively moderate measures, he failed to obtain much favour with the extreme revolutionists; and although he rendered useful service in a municipal office at Paris, he was baffled in an attempt to enter the legislature. He wrote boldly as a journalist during the terrible period of Jacobin power. As a Girondist he was arrested in 1793, and only liberated on the death of Robespierre. During the Empire, Bonneville was out of favour; among other causes of offence he had drawn an unwelcome comparison between Bonaparte and Cromwell. Once or twice he was arrested, and for a long time he was placed under the surveillance of the police. His last years were spent in poverty. He opened a second-hand book-shop in the Quartier Latin, where he was known to the learned men of that neighbourhood, and where he died November the 9th, 1828. Bonneville's chief works were the following:—(1) 'Le Nouveau Théâtre Allemand,' 12 vols. 8vo, Paris, 1782, of which the last 10 were translated by him; (2) 'Choix de petits romans imités de l'Allemand; suivis de quelques Essais de poésies lyriques,' 12mo, Paris, 1786; this work contains the best of his lyrical pieces; (3) 'Les Jésuites chassés de la Maçonnerie, et leurs poignards brisés par les Maçons,' 8vo, 1788, relating to the introduction of freemasonry into England; (4) 'Histoire de l'Europe Moderne, depuis l'irruption des peuples du Nord dans l'Empire Romain jusqu'à la paix de 1783,' Geneva and Paris, 1789—92, 3 vols. 8vo, only the first part of what was intended to be a very comprehensive work, and of little value; (5) 'Le Tribunal du Peuple, ou Recueil de lettres de quelques Électeurs de Paris avant la Révolution,' 8vo, 1789; (6) 'De l'Esprit des Religions, ouvrage promis et nécessaire à la confédération universelle des Amis de la Vérité,' 8vo, 1791, a dreamy scheme for a new social compact, in which freemasonry was to be combined with a theology not wholly unlike that which Auguste Comte afterwards propounded; (7) 'Le Nouveau Code conjugal, établi sur les bases de la Constitution,' 8vo, 1792, a volume still wilder; (8) 'Poésies,' 8vo, 1793. To Bonneville is attributed the proposal to form the Garde Bourgeoise, afterwards famous as the Garde National.

BONO FERRARESE, or BONO OF FERRARA, an excellent Italian painter of the 15th century, of whom nothing is really known, except that he was a pupil of Pisano (called Vittore Pisanello), of Verona, and that he was employed on pictures in the cathedral of Siena in 1461. He was, for his time, an admirable colourist; and his execution, though hard and somewhat dry, is precise and careful. The National Gallery possesses a very fine signed example of his pencil—No. 771, 'St. Jerome in the Desert.' It is painted in tempera, on panel. (Wornum, *Catalogue of the National Gallery*; Laderchi, *La Pittura Ferrarese*.)

BONONE, CARLO, an eminent Italian painter, was born at Ferrara, in 1569. He was a pupil of Bastaruolo; but on leaving him studied first at Rome, and afterwards at Bologna, where he modelled his style on that of the Carracci, whose bold contrasts of form, chiaroscuro, and colour he successfully imitated. Subsequent visits to Venice led him somewhat to modify his manner, but it is essentially that of the Carracci. His pictures were long greatly admired by the Italian connoisseurs, but the current of taste outside of Italy has of late set in a different direction. Bonone painted many large pictures of festive scenes, introducing numerous splendidly dressed figures, furniture, and decorative work, with architectural backgrounds, similar to the

compositions of Paolo Veronese, by which, indeed, they were no doubt suggested. Such are 'The Marriage at Cana,' in the Refectory of the Carthusians; and 'The Feast of Herod' in San Benedetto in Ferrara; 'The Feast of Ahasuerus' in the Refectory of San Giovanni at Ravenna; and many more. Bonone died at Ferrara in 1632, and was interred in the church of Santa Maria del Vado, the walls and vaults of which are decorated with a large number of his best works, and which, it is said, Guercino used to spend hours at a time in contemplating. His easel pictures were less esteemed by his contemporaries than his mural paintings.

BONPLAND, AIMÉ. [E. C. vol. i. col. 825.] There is little to be added respecting this eminent traveller. For the last few years of his life he resided at Santa Anna, ready to receive and help any scientific man who visited him, and died at that place on May 4, 1858, having nearly completed his 83th year.

BONSIGNORI, FRANCESCO, an eminent Italian painter of the 15th century, erroneously called Monsignori by Vasari and Lanzi, and consequently entered under that heading in most biographical dictionaries, was born at Verona in 1455. He learned painting under Andrea Mantegna at Mantua, and worked there with so much success as to attract the notice of Francesco, Marquis of Mantua, who employed him to decorate his palaces of San Sebastiano and Marmitolo and the Castello di Gonzago, as well as to take the portraits of various members of his family and court. The palatial decorations have been destroyed, and the portraits are dispersed and probably lost, but many of his larger works still remain in the churches of Mantua, and easel pictures and portraits are often met with in the public galleries. Bonsignori was famous both as an historical and a portrait painter. Vasari dwells on his skill in painting animals, and in confirmation relates anecdotes of living animals being deceived by his representations of them; whence it is said he was called 'the Modern Xeuixis.' Bonsignori passed the chief part of his life at the court of Mantua, where he continued in great esteem, but falling ill, he went to drink the waters at Caldiero, near Verona, and there died on the 2nd of July, 1519. His most famous extant works are SS. Ludovico and Bernardino, now in the Brera, Milan, a Madonna and Saints at Verona, and a St. Sebastian at Santa Maria delle Grazie, Mantua. In the National Gallery is a well painted 'Portrait of a Venetian Senator' (No. 736) by him. It is signed, like most of his works, FRANCISCU BONSIGNORIUS VERONENSIS P. 1487.

BONVICINO, ALESSANDRO [MORETTO, E. C. S.].

BOOLE, GEORGE, an eminent mathematician, was born at Lincoln, on the 4th of November, 1815. His father, a tradesman in that city, was unable to give him more than an ordinary school education; but imparted to him some of his own knowledge of mathematics and optical instruments. A neighbouring bookseller, Mr. Brooke, aided young Boole in studying the Latin language, to which he himself afterwards added a study of Greek. At the early age of 12, George Boole produced a metrical version of one of the odes of Horace, which excited much surprise among classical scholars in the county. At the age of 17 he commenced, unaided, the study of mathematics; and with the assistance of the Rev. G. S. Dickson, incumbent of St. Swithin's, Lincoln, he pursued that study to a high degree of development. After acting as assistant in a school at Doncaster, he opened a school on his own account at Lincoln, which had much success. He took great interest in the Mechanics' Institution of his native city, to which he delivered two addresses, afterwards printed, 'On the Genius and Discoveries of Sir Isaac Newton,' 1835; and 'On the Right Use of Leisure,' 1847. He became gradually known to mathematicians by his high-class papers on that science. He contributed to the Cambridge and Dublin Mathematical Journal, in 1847, a 'Mathematical Analysis of Logic, being an Essay towards a Calculus of Deductive Reasoning.' This and other articles led to his appointment (although he had not received a university education) as Professor of Mathematics at Queen's College, Cork, in 1849; a post which he filled during the remaining fifteen years of his life. The University of Dublin conferred on him the degree of LL.D.; the University of Oxford that of D.C.L.; the Royal Society elected him one of its Fellows; and he was a member or fellow of other learned bodies. Besides his labours as a professor, Dr. Boole wrote a large number of mathematical papers—11 of which were published in the 'Cambridge Mathematical Journal,' between 1841 and 1845; 10 in the 'Cambridge and Dublin Mathematical Journal,' between 1846 and 1852; others in the 'Transactions' of the Royal Society, the Edinburgh Royal Society, and the

Royal Irish Academy; and others in the 'Philosophical Magazine,' and in the 'Proceedings of the British Association for the Advancement of Science.' These papers were nearly 50 in number, and took a wide range of subjects, including the Analytical Transformation of Functions, the Calculus of Variations, Quaternions, Definite Integrals, the Theory of Probabilities, the Mathematics of Logic, &c. His 'Treatise on Differential Equations,' 1859, 2nd edition 1865, has become a class-book at Cambridge University. Dr. Boole's chief work was his 'Investigation into the Laws of Thought,' Dublin, 1854; it is an attempt to express the processes of reasoning by mathematical formulæ; and contains also a special application of his method to the Theory of Probabilities. Dr. Boole married, in 1855, a niece of Colonel Everest, the able conductor of the Trigonometrical Survey of India; this lady rendered her husband great assistance in his scientific labours. Working too hard for his bodily strength, he died of congestion of the lungs, on the 9th of December, 1864, at Ballintemple, near Cork. His acquirements took a very extensive range, including classics, modern languages, poetry, and mental philosophy; many of which studies contributed to the development of some of his more special mathematical researches. At a meeting of the Cork Cuvierian Society, in 1865, the President, adverting to the death of Dr. Boole, said:—"Probably in few individuals could a greater diversity of taste and talent be found combined than in him. No subject was ever brought under our notice that he was not only familiar with, but he illustrated it with the results of his own great experience, or the practical application of his reasoning mind."

BOONE, DANIEL, known in America as the "Pioneer of Kentucky," was born in February, 1735, in Bucks County, Pennsylvania, to which settlement his father, a native of Devonshire, had emigrated. Living near what was at that time the frontier between the settlers and the Indians, young Daniel's early days were passed amid a good deal of hunting, shooting, and backwood life. The family removed to North Carolina in 1753; and young Boone, after marrying, settled down as a farmer. Being, however, more prone to an adventurous life than to steady industry, he made one of a party of six in 1769 to explore and hunt in the wilds of Kentucky; and two more joined them in the following year, with a store of powder and shot. After many vicissitudes, the separation of the party, and the killing and scalping of some of them by the Indians, Boone and his brother found themselves alone, forced to trap animals, and collect peltry for a subsistence. They returned home in 1771; but not deterred by their experience of hardships, the two brothers converted their little property into stores for the backwoods, and removed with their families to Kentucky in 1773. The wives and daughters were the first white women ever seen on the Kentucky river. Boone passed his time in hunting, fighting, and exploring, and sometimes in surveying for the government. A stockade or frontier fort was entrusted to him for defence. In 1778 he was captured by a party of Shawnee Indians, carried off to Chillicothe, and exposed to much suffering; but by shrewdness and activity he effected his escape, walking 160 miles in 5 days with only one regular meal. Boonesborough, the name which he gave to his settlement, became a government post. During the American war of independence he was made successively captain, major, and colonel, for his services against the Indians who were in alliance with the British. Most of his brothers and sons were killed in the course of the fighting in which they were engaged. After the war was ended Boone settled down once more as a farmer and hunter.

When Kentucky was admitted as a State into the Union in 1792, he was pronounced to have no legal title to the land he had reclaimed and settled. In disgust, he went further west into the wilds, settling with a few followers on the Little Osage. In 1800 Boone and his associates explored the head waters of the Arkansas river. In 1804 he crossed the Mississippi, and lived at Femme Osage, 45 miles west of St. Louis. His title to the land he had acquired here being questioned, Boone, fearing that litigation would be of little service to him, sent in a memorial to the legislature of Kentucky, setting forth the straits to which he was reduced, and asking for a confirmation of the grant made to him by the governor of Louisiana prior to the territory having been ceded to the United States. A title to 2000 acres was voted to him by the Assembly, and the old man was thus saved from the necessity of seeking for a new home. It was thoroughly characteristic of the old pioneer and trapper that when Chester Harding, an artist, went to take a portrait of him in 1830, he found Daniel Boone, then 86 years old, reclining on a bunk in

his cabin cooking a venison-steak on a ramrod. He died on the 26th of September, 1820, surrounded by five generations of descendants. The annals of America do not present a better type than Daniel Boone of the class of character depicted by Fenimore Cooper in his *Leatherstocking*.

BOPP, FRANZ [E. C. vol. i. col. 826]. Notwithstanding his advanced age, and suffering severely from asthma, Bopp's last years were neither inactive nor unproductive. Between 1856 and 1861 he brought out an entirely re-written and greatly augmented edition of the noble work which won for him the title of the founder of the science of Comparative Philology, '*Vergleichende Grammatik des Sanskrit, Zend, Griechischen, Lateinischen, Litauischen, Altalawischen, Gothischen und Deutschen*,' in 3 stout volumes, the Armenian being now included for the first time; and this he followed by a third and revised edition of his '*Kritische Grammatik der Sanskritsprache*,' Berlin, 1861—63. He also contributed papers to academies and journals, and continued till within six months of his decease to perform his professorial duties. He died on the 23rd of October, 1867, having completed his 76th year on the 14th of the previous month.

BOR, PIETER (CHRISTIAENZON), a Dutch historian, was born in 1559 at Utrecht, where his father, Christiaan Bor, who descended from an ancient and reputable family, practised as an apothecary. From an early age he devoted himself to the study of history, especially to that of his native country, for the illustration of which he presently began to collect materials. The States of Holland and West Friesland appointed him their historiographer in 1615, with a yearly salary of 600 florins. He died at Haarlem, on the 16th of May, 1635. He wrote a *History of the Origin and Progress of the Wars in the Low Countries in the 16th Century*, which first appeared in an incomplete form as '*Oorspronck, Begin ende Aenvang der Nederlandtscher Oorlogen*,' folio, Utrecht, 1595, of which he wrote an epitome in verse, with the title of '*Den Oorspronck, Begin ende Aenvanck der Nederlandtscher Oorlogen, geduyrende de Regeringe vande Hertoginne van Parma, de Hertoge van Alba, ende eenseels vanden Groot Commandeur*,' 4to, Leyden, 1617. The *History*, in a fuller and more complete form, was published by instalments, in 5 massive volumes, with the title of '*Oorspronck, Begin ende Vervolgh*,' &c., folio, Leyden and Amsterdam, 1621—1630; and again, in the most prized edition, at Amsterdam, in 4 vols. folio, which were issued respectively in 1679, 1680, 1681, and 1684. Another less valued work of Bor's is his *History of Hertogenbosch (Bois-le-Duc)*, '*Gelegenthey van's Hertogen-Bosch, Vierde Hooft-Stadt van Brabant*,' 4to, the Hague, 1630. His principal remaining works are a *Continuation of the Chronicle of Carion*, beginning in 1576, and ending on the 20th of March, 1619, folio, Amsterdam, 1619; and two *Tragedies*—*Apollonius, Prince of Tyre*, and *Apollonius and his Daughter Tarsia*, '*Apollonius, Prins van Tyro*,' and '*Apollonius en zyne dogter Tarsia*,' 4to, the Hague, 1617.

BORDE, ANDREW, who, punning upon his name, called himself *Andreas Perforatus*, was born about 1500 in Sussex, probably at Borde Hill, near Cuckfield, and was educated successively at Winchester and Oxford. Before he had taken a degree he entered himself a brother of the Carthusian order, in a religious house in London or its neighbourhood. He left the society, however, in order to resume his studies at Oxford, where he especially devoted himself to the pursuit of medicine. Soon after he indulged his inclination for travel by wandering through most parts of Europe and a portion of Africa. Upon his return he settled at Winchester, where he acquired a reputation for his success in the practice of his profession. In 1541 and 1542 he was living at Montpellier, in France, where he seems to have taken his degree of M.D., in which he was soon afterwards incorporated at Oxford. He now resided successively at Pevensey and Winchester, where, as in other places, he practised the austerities of the Carthusians. He always professed celibacy, and wrote zealously against those of the clergy who had broken their vows by marriage at the dissolution of their respective houses under Henry VIII. This gave occasion to Bishop Poynt, himself a married man, to charge Borde with having, about the year 1547, kept three women of improper character in his chambers at Winchester, as well for his own convenience as for the comfort of the brethren of the order to which he had belonged; the more charitable explanation, and that offered by the friends of Borde against this posthumous libel, being that the three women were patients who occasionally resorted to him for medical advice. "At length," says Wood, "after many rambles to and fro in this world, he was made prisoner in the close wards of the Fleet in London, the reason

why, I cannot justly say; where he died in the month of April, in 1549 . . . I cannot otherwise but say that our author Borde was esteemed a noted poet, a witty and ingenious person, and an excellent physician of his time." Further, Wood mentions as a report, what Fuller affirms confidently, that Borde was physician to King Henry VIII., and a member of the College of Physicians in London, to whom he dedicated his '*Breviary of Healthe*; wherein are Remedies for all manner of Sicknesses and Diseases, the which may be in Man or Woman: expressing the obscure Termes of Greek, Araby, Latyn, and Barbary, in Englishe, concerning Phisicke and Chirurgie,' 4to, London, 1547, 1552, 1557, 1575, 1587, and 1598. The second part of this work, under the title of '*Extravagantes*,' was printed in the edition of 1575. Considering his creed, it was probably policy if not principle that inclined Borde so much to vagabondage and to a course of conduct which it is impossible to reconcile with the conventional gravity of his profession. It is from him that the designation of "*Merry Andrew*" is said to be derived; and Hearne says that "*Dr. Borde* was an ingenious man, and knew how to humour and please his patients, readers, and auditors. In his travels and visits he often appeared and spoke in public, and would often frequent markets and fairs, where a conflux of people used to get together, to whom he prescribed; and to induce them to flock thither the more readily he would make humorous speeches, couched in such language as caused mirth, and wonderfully propagated his fame, and it was for the same end that he made use of such expressions in his books as would otherwise, the circumstances not considered, be very justly pronounced bombast." The principal works of Dr. Borde, besides the '*Breviary of Healthe*,' are '*The Princyples of Astronomie, the whiche diligently perscrutyd is in a manner a Prognosticacyon to the Worlde's End*,' 8vo, London, 1540; '*A Boke of the Introduction of Knowledge, the which doth teach a man to speak part of all manner of Languages, and to know the usage and fashion of all manner of Countries, and for to know the most part of all manner of Coins of Money*,' 4to, London, 1542, dedicated, in an epistle dated from Montpellier, May 3rd, to the Princess (afterwards Queen) Mary: a reprint (of only 100 copies) was made in 1814 under the editorship of Mr. W. Upton; another, with fac-similes of all the curious wood-cuts, is about to be made (1870) by the Early English Text Society, under the editorial care of Mr. Furnivall; '*Compendyouse Regimente or Dietary of Healthe, made in Mounte Pyllor*,' 12mo, London, 1542, 8vo, 1567, 8vo, 1576. '*The Merry Tales of the Mad Men of Gotham*,' 8vo, London, "printed," says Wood, "in the time of King Henry VIII., in whose reign and after it was accounted a book full of wit and mirth by scholars and gentlemen," is also ascribed to Borde; and he is by some supposed, but with little reason, to be the author of '*A right pleasant and merry History of the Mylner of Abington, with his Wife and his fair Daughter, and of two poor Scholars of Cambridge*,' 4to, London; and of a collection of the '*Jests*' of John Scogan.

BORGHESI, COMTE BARTOLOMEO [E. C. vol. i. col. 829]. M. Borghesi died at San Marino on the 16th of April, 1860, without having obtained the aid which would have enabled him to carry out his long-cherished purpose of publishing in a '*Corpus universale*' his unrivalled collections. After his death, however, the French government appointed a commission to put in order for publication the whole or more important parts of his published writings and inedited documents. Under the general title of '*Œuvres Complètes*' several volumes, including his numismatic and epigraphic compositions, have already been issued from the Imperial press, and it is intended to comprise also his extensive archaeological correspondence.

BORGHINI, VINCENZIO, a learned Italian ecclesiastic and antiquary of the 16th century, was born at Florence, October 29, 1515; entered the order of Benedictines in 1532; in 1552 was made prior of his monastery; was placed by the Grand Duke Cosmo at the head of the Hospital of Santa Maria; served as suffragan to Alexander de' Medicis, Archbishop of Florence, during his absence at Rome; declined the archbishopric of Pisa, and died, universally esteemed, on the 15th of August, 1580. Borghini was a great authority in all literary and artistic matters. He was one of the committee appointed to correct the *Decameron* of Boccaccio according to the requirements of the Council of Trent, and to him are attributed the '*Annotazioni e Discorsi*,' published by them. By the Grand Duke Cosmo I. he was nominated vice-president of the Florence Academy of Art. His great work is entitled '*Discorsi di Monsignore V. B., parte prima, recarti a luce da' deputati per suo testamento*,' 4to, Florence, 1584; seconda parte, 1585, reprinted, with notes, by D. M. Manni, 2 vols. 4to,

Florence, 1755. The more important of the treatises are those on the origin and early history of the city of Florence, of the bishops, nobles, chief families, arms, antiquities, money, &c.; of Fiesole and other Tuscan cities; the Latin colonies and municipalities, &c. Of the same family was RAFFAELLO BORGHINI, who lived in the latter part of the 16th century, wrote three or four comedies (one 'Diana Pietosa,' being a pastoral in verse), and a much esteemed and often reprinted work on the fine arts, 'Il Riposo, in cui della Pittura e della Scultura si favella,' 8vo, Florence, 1584. Some of R. Borghini's inedited verses were published at Florence in 1822.

BORGOGNONE, AMBROGIO, called also AMBROGIO DA FOSSANO, an eminent Italian painter, was born at Fossano, in Piedmont, about 1455. He is said to have been a scholar of Vincenzio Foppa, but all the particulars related of him are uncertain. He attained distinction as an architect as well as a painter, and was engaged early in life on the façade of the Certosa, near Pavia: it is, however, only as a painter that he is remembered. His style is archaic, the forms are meagre; but there is always great refinement visible, and often a gentleness of expression verging on pathos. Some critics think they perceive traces of the influence of Da Vinci and Luini in his style. Borgognone appears to have been much occupied in painting at Pavia between 1475 and 1493; his famous picture of the 'Assumption,' in the Brera at Milan, is dated 1522; he probably died about 1535. His chief works are at Milan and Pavia. The National Gallery possesses some characteristic examples of his pencil—No. 298, 'The Marriage of St. Catherine of Alexandria,' a large altar piece, executed in tempera on wood, brought from the chapel of Rebecchino, near Pavia, in 1857; and Nos. 778—79, two groups of family portraits (9 men and 11 women), painted on silk, and originally portions of a processional standard.

BORRI, JOSEPH-FRANÇOIS, born at Milan, 4th May, 1627. He was educated at Rome in the Jesuits' seminary, and devoted himself to the study of medicine and chemistry. He became attached to the pontifical court, but his life was so irregular, that in order to avoid the pursuit of justice, he sought refuge in a church. This was in 1654. From this time he changed his mode of life, pretended to be inspired, and founded a new sect vowed to poverty, the wealth of the new devotees being given up to the master. The new sect fell under the censure of the Church, and in order to escape from the Inquisition, Borri went to Milan. He was condemned to be burnt by a decree of the 3rd of January, 1661. He sought refuge in Strasbourg, and afterwards in Holland, where, setting up as a physician and alchemist, he led away much people. His true character becoming known, he went to Hamburg, and placed himself under the protection of Queen Christina of Sweden, who advanced large sums of money to enable him to carry on his researches for the discovery of the philosopher's stone. He also persuaded Frederic III. of Denmark to patronise his alchemical pursuits, but on the death of this prince he had to leave Denmark, and proceeded towards Turkey. He was, however, arrested and given up to the papal authorities by the Emperor on condition that his life should be spared. He was sentenced to perpetual imprisonment in the dungeons of the Inquisition at Rome; but after some years, being consulted respecting the dangerous illness of the French ambassador at Rome, he cured him, and through his intercession his prison was rendered less irksome. He died at Rome on the 10th of August, 1695.

Bayle has a long and curious article on Borri, which is the source of the numerous biographical sketches of this quack, whose influence passed away with the belief in alchemy. Several works are attributed to Borri, the chief of which is 'La Chiave del Gabinetto,' 'The Key to the Cabinet,' a mixture of medical, chemical, and political secrets, together with spiritual details.

BORRON, ROBIERS (ROBERT) and HELIE, whose surname varies as Boiron, Bouron, Boaron, and Buron, writers of the 12th century, are commemorated as contributors to the cycle of poems and romances which gathered about the Arthurian Round Table and the Holy Graal. The two Borrons were either brothers or near relations. It is probable that Robert Borron was born about the year 1144, and that the birth of his relative, Helie, took place within a very few years after. That Robert was of the condition of a gentleman, is certain; and, even in his self-deprecatory preface, he promises to let his name, and life, and ancestry, "and birth-place, and a great part of his lineage," be known hereafter. In the prologue he speaks of himself as a monk, or rather as a hermit; but this has been ingeniously believed to have been a figure adopted as affording a more appro-

priate vehicle for the exhibition of his vision of heaven. Traces of the influence of the scenery and physical aspects of Nottinghamshire are to be detected in his work.

The two Borrons are reputed to have been employed by King Henry II., to put into prose the Romances of the Round Table, or to continue the translations of those different romances, of which a series has been published under the titles of 'Joseph d'Arimathie' and 'Saint-Graal,' Paris, 1516 and 1523; the 'Histoire de Merlin' having been printed at Paris in 1498. Helie de Borron published, separately, the Palamede of the Round Table; in the other works he was associated with Robert.

It may be interesting to give in this place the order of the Arthurian Romances, which, as given by Sir F. Madden in his preface to 'Sir Gawayne,' (Abbotsford Club, 1839), is as follows:—(1) 'The Roman du Saint Graal,' sometimes entitled the 'Roman de Joseph d'Arimathie,' composed by Robert de Borron. In the printed editions this is called the First Part of the Saint Graal. (2) The 'Roman de Merlin,' by the same. (3) The 'Roman de Lancelot du Lac,' composed by Walter Map. (4) The 'Roman du Quete du Saint Graal,' by the same. In the printed editions this forms the Second Part. (5) The 'Roman de la Mort Artus,' by the same, and originally distinct, but in the printed editions united to the Lancelot. (6) The first portion of the 'Roman de Tristam,' by Luces, Seigneur de Gast. (7) The conclusion of 'Tristam,' by Helie de Borron. (8) The 'Roman de Gyron le Courtois,' by the same. Of these the first six were written in the latter half of the 12th century, and the remainder in the first half of the 13th. To these must be added the metrical romances composed by Chrestien de Troyes, between the years 1170 and 1195; as also the later prose compilations of Rusticien de Pise and his followers, in the 13th and 14th centuries. Of these works editions have been published at various times, and in the principal capitals and languages of Europe. One of the most elaborate issues of any work of the series, is that which was undertaken by Mr. Furnivall, for the Roxburghe Club, and which was illustrated by several learned dissertations on matters calculated to throw light on the poems or their subjects. The title of Mr. Furnivall's volume, which was edited from MSS. in the libraries of Corpus Christi College, Cambridge, and the British Museum, is as follows:—'The History of the Holy Graal, Seynt Graal, or the Sank Ryal. The History of the Holy Graal, partly in English verse, by Henry Lonelich Skynner (Temp. Hen. VI. A.D. 1422—1461); and wholly in French prose, by Sires Robiers de Borron (about A.D. 1180—1200; MS. about 1320). From the Original Latin, written by Jesus Christ with his own hand (vol. i. p. 357). Being the only writing made by God since his uprising,' 2 vols. 4to, London, 1863.

The Holy Graal, as a symbol of Christian salvation to the romantic poets of the Middle Ages, was, like King Arthur and the Sorcerer Merlin, for nearly five centuries the central point of an extensive cycle of poems, wherein the knights of old found edification, and in writing on which the poets believed they should obtain final bliss. The Graal cycle is distinguished from the Arthurian and others by not owing its birth to recorded facts. A pious thought was the fruitful germ which, from poet to poet, from land to land, and from century to century, transplanted and carefully nursed, finally acquired an outward form and being, which the poets endeavoured to transmit to posterity as the developed history of a holy vessel. At the same time, it is difficult to discover the first traces of the formation of the legend of the Holy Graal, and of its cultus, and to give any certain foundation to the first history of its development; but it is fairly concluded that the idea of the Graal was originally distinct from the Histories of Percival and of the other Arthurian knights, and that it was first woven into them by North French poets—namely, in the second half of the 12th century.

BOSC, LOUIS AUGUSTIN GUILLAUME, a celebrated French naturalist, was born at Paris on January 29th, 1759. He studied at Dijon, and was allowed to attend the lectures on botany by Durande, which imbued him with a passion for the study of plants. He then proceeded to Paris, where he attended various courses of lectures, more especially those delivered at the 'Jardin des Plantes.' At eighteen he entered a government office, rose to be one of the chiefs of the posting department, and was subsequently entrusted with the charge of the prisons. In 1793 he was proscribed, but making his escape, he wandered, homeless, about the country, suffering from hunger, and barely subsisting upon snails, the roots of the common *Arum*, and an occasional loaf of bread. Soon after he went to America, and spent

two years in collecting the objects and facts which he liberally contributed to the works of Lacépède, Latreille, Daudin, Fabricius, and others. Under the Directory he was restored to his inspectorship of prisons, but the *coup d'état* of November, 1799, again left him destitute. This compelled him to have recourse to his literary abilities for the means of subsistence, and he set to work with astonishing vigour, contributing to the 'Supplément au Dictionnaire de Rozeau,' the 'Nouveau Dictionnaire d'histoire naturelle,' the 'Dictionnaire raisonné et universel d'agriculture,' a new edition of the 'Cours complet d'agriculture théorique et pratique,' the 'Encyclopédie méthodique,' editing the 'Annales de l'agriculture française,' writing memoirs and reports for various societies; attending scientific missions to the provinces and to Italy; and superintending the nursery Gardens at Versailles, as also those which were under the control of the Minister of the Interior. The later years of his life were mainly occupied in producing an immense work on the vine, for which purpose he visited almost every part of France, and described upwards of 450 different forms, but his labours were not completed when he died, on July 10th, 1828. His notes are said to be still in existence, and to be an immense mass of undigested material, the arrangement of which had only just been begun by him.

BOSCH, or BOSSCHE, BALTHASAR VAN DEN, an eminent Flemish painter, was born at Antwerp, January 6, 1681. He was a pupil of Gerard Thomas, and was admitted master by the guild of St. Luke in 1696; he then spent three years in France; returned home, painted small portraits, interiors of apothecaries' shops, laboratories, painters' studios, and subject pieces, for which he obtained very high prices; and died on the 8th of September, 1715, from an abscess, the consequence of what seemed at the time a slight blow. His masterpiece is in the Antwerp Museum (No. 448), 'Reception of the Burgo-master of Antwerp, J. B. del Campo, by the junior guild of Cross-bow men,' a large and sumptuous interior with forty portraits, signed and dated 1711. Bosch often obtained the assistance of other artists in parts of his pictures which were in their particular line; thus in the picture just noticed the architecture was painted by Verstraeten, and the glimpse of landscape by C. Huysmans; whilst in his celebrated portrait of the Duke of Marlborough on horseback, the horse was painted by P. van Bloemen.

BOSCH, GENERAL JAN VAN DEN, a distinguished Dutch soldier and statesman, was born February 2nd, 1780, at Herwigen, where his father was a physician. He joined the Corps of Engineers as lieutenant in 1797. He went to the Dutch East Indies in 1801, and so distinguished himself in various ways as to be promoted to the rank of captain and adjutant soon after his arrival, major in 1804, lieutenant-colonel and adjutant-general in 1807, and colonel in 1808. After an interval of cessation from military duties, he resumed active service in 1813, and was on the General Staff of General Constant de Villars at the battle of Waterloo in 1815. In 1816 he became major-general, and in 1823 Administrator of Militia. During this period his knowledge acquired in the East led him to write a work on the Dutch colonies generally—'Nederlandsche bezittingen in Azie, Amerika, en Afrika, in derzelver toestand en aangelegenheid voor dat Rijk, Wijsgeerig, Staatskundig, en Geographisch beschouwd; met bijvoeging der Noodige tabellen, en eenen Atlas nieuwe Kaarten,' Hague and Amsterdam, 1818—a work valued alike for the interest of its subject and the elegance and vivacity of its style. In 1828 he was appointed Commissioner for the West Indies, and a few years afterwards Governor-General of the Dutch East Indies. He was made Grand Cross of the Order of the Lion of the Netherlands in 1831, Member of the Society of Literature of Leyden in 1833, and Fellow of the Royal Netherlands Institute in 1838. He died at his estate of Boschlust, 28th of January, 1844. General Van Den Bosch was virtually the founder of the remarkable 'Agricultural Pauper Colonies of Holland.' When residing in Holland as a major-general, he noticed the severe distress which was occasioned to the poor by the famine or dearth in 1816 and 1817, and conceived the idea of applying some of the waste lands of North Holland for their benefit. He wrote an essay to show the practicability of establishing a system of poor-relief on a self-paying basis, by means of agricultural pauper colonies—'Verhandeling over de mogelijkheid, de beste wijze van invoering en de belangrijke voordelen eener algemeene armeninrigting in het rijk der Nederlanden, door het veltigen eener landbouwende Kolonie in deezelfe Noordelijk gedeelte,' Hague and Amsterdam, 1818.

This essay led to a suggestion from Van Den Bosch to Prince Frederick, second son of the king, who set on foot a Society of Beneficence, the 'Maatschappij van Weldadigheid.' A colony was formed near the eastern shore of the Zuider Zee, consisting of two villages, named after the king's sons, *Frederiksoord* and *Willemsoord*. Land was taken, houses built, instruments and stores of all kinds provided. The funds were supplied in part by subscriptions from shareholders, and in part by communes or parishes; the former believing that an adequate return would be obtained for the money, and the latter deeming it an economical mode of averting pauperism. Each village formed a complete community, growing crops, rearing live stock, spinning and weaving woollen cloth. As Van Den Bosch was not officially connected with the scheme after its initiation, we need not trace its history further here, except to say that the self-paying element languished from the first, as generally happens when commerce and charity are joined in the same project.

BOSCH, JEROME VAN. [AKEN, JEROME VAN, E. C. S. col. 40.]

BOSCHINI, MARCO, a celebrated Italian painter and writer, was born at Venice in 1613, and was a pupil of Palma, whose style he endeavoured to combine with that of Tintoretto. A Last Supper in the sacristy of San Girolamo, at Venice, is his most celebrated work, but others remain in the churches and palaces of Venice and Padua. He practised engraving equally with painting, and executed many plates from the designs of Tinelli, Liberi, and others. He was also distinguished as a writer on art. His various merits seem to have met with suitable recognition. It is related that in one year, 1661, he received chains of gold from the Emperor Leopold I., the Archduke of Austria, and the Duke of Modena; but it is added that he was fond of gaming, and dissipated his gains. He died in 1678. Boschini's most famous publication is *The Chart of Pictorial Navigation*, a dialogue on painting between a Venetian senator and a painter, 'La Carta del Navigar Pittoresco: Dialogo tra un Senator Venetian deletante e un Professor de Pittura soto nome d'Eccellenza e de Compare, Comparti in oto venti. Con i quali la Nave Venetiana vien condotta in l'alto mar de la Pittura, come assoluta dominante de quello a confusion de chi non intende el bossolo de la calamita,' 4to, Venice, 1660. This *Carta* is a poem in the homely Venetian dialect, in quatrains, as quaint, though not so verbose, as the title; eulogistic throughout of the Venetian school of painting, and particularly of Titian, whom he declares to be the greatest of all painters, but containing many interesting notices of pictures, biographical details, and curious anecdotes, related chiefly from his own experience. It is Boschini who records that Velasquez, when at Rome, being asked by Salvator Rosa his opinion of Raffaele, replied that Titian was the greatest painter and Venice the best school; Rubens and Vandyck, he says, always expressed the same opinion; Guido placed Veronese at the summit of art, whilst Pietro da Cortona was disposed to give the highest place to Tintoretto. The original edition contains 25 plates, engraved by Boschini, and his own portrait. Other works by him are 'Il Regno tutto di Candia, delineato e parte a parte intagliato,' fol. Venice, 1645; 'L'Arcipelago con tutte le isole,' &c., 1658; 'Le Ricche Minere della Pittura Veneziana,' &c., Venice, 1663, and several times reprinted; 'Gioielli Pittoreschi, cioè indice delle pubbliche pitture della città di Vicenza,' Venice, 1676.

BOSIO, ANTONIO, a learned Roman antiquary of the early part of the 17th century, was the nephew of Giacomo Bosio (author of the History of the Order of St. John of Jerusalem, and that of the Holy Cross), and succeeded his uncle as agent to the Knights of Malta at Rome. Bosio was deeply interested in the paintings and other vestiges of early Christian art brought to light in the newly opened catacombs, and during five-and-thirty years he patiently explored the subterranean tombs and alleys, and examined and annotated the various articles they contained; but he did not live to give to the world the result of his prolonged labours. He died in 1629, and it was not till 1632 that the goodly folio on which he had been working appeared under the title of 'Roma Sotteranea, opera postuma, compita e disposta da Giov. Severani da S. Severino, nella quale si tratta de' Sacri Cimiterii di Roma, del sito, forma, et uso antico di essi,' &c. This work, or Aringhi's enlarged Latin version of it [Aringhi, in E. C. S., col. 107], first made known to the learned world the marvels of Subterranean Rome, and was the precursor of the vast range of elaborate and costly works by which it has been illustrated.

BOSQUET, MARSHAL. [E. C. vol. i. col. 839.] Pierre François Joseph Bosquet was born at Mont-de-Marsan, depart-

ment of Landes, November 8, 1810. The principal events in his career are noticed in the above article, down to his promotion to the rank of marshal, in 1856. About the same time he was created Senator of France; and, shortly before, Queen Victoria had nominated him grand-cross of the order of the Bath, in recognition of the timely aid he rendered to the English troops at Inkermann. When hostilities were imminent with Austria, Marshal Bosquet was appointed to the command of the army of the south-west, but illness prevented him from taking part in the Italian campaign; and he died on the 3rd of February, 1861.

BOTTÉE DE TOULMON, AUGUSTE, a French writer on music, was born at Paris on the 15th of May, 1797. His original profession was the law, but his inclination was for music, and abandoning the bar, he studied harmony under Desvignes, Cherubini, and Reicha. Having paid much attention to the literature of music, he obtained the post of librarian to the Conservatoire in 1831, and made many journeys to Germany and other countries to collect MSS. of old music for the library. He was a member of the Society of Antiquities of France, and of the Historical Committee instituted by the Minister of the Interior, and wrote a considerable number of works relating to music. His own compositions, including an oratorio on the Passion and several *Messes*, did not make much impression; but he was more successful in commenting on the compositions of others. His principal works were the following:—*Discours sur l'histoire de l'Art Musical depuis l'ère Chrétienne jusqu'à nos jours*, 1835; *'De la Chanson en France au moyen âge'*, 1836; *'Notice biographique sur les travaux de Guido d'Arezzo'*, 1837; *'Des puits de Palinodes au moyen âge'*, 1838; *'Des Instruments de Musique en usage au moyen âge'*, 1838 (expanded to a larger work in 1844); *'Sur la restauration des anciens jeux d'Orgue'*, 1839; *'Observations sur les moyens de restaurer la Musique religieuse dans les Églises de Paris'*, 1841; *'Notice des Manuscrits autographes de la Musique composée par Cherubini'*, 1843. He collected many materials for a *'Recueil de documents inédits de l'Art Musical, depuis le treizième jusqu'au dix-septième Siècle'*, but did not live to produce the work. Bottée de Toulmon died at Paris on the 22nd of March, 1850. A notice of his life and works was published in 1851 by M. Vincent, member of the Institute of France.

* BÖTTGER (BÖTTCHER), ADOLF, a German poet and translator, was born at Leipzig, on the 21st of May, 1815; and was educated successively at the Thomasschule and the university of his native city. He applied himself with great assiduity to the acquisition of modern languages; and he has achieved a reputation by his translations into German of several English masterpieces. Thus he has published the Complete Works of Byron, *'Byrons Sämmtliche Werke'*, Leipzig, 1840, 12 volumes, 1841, 3rd edition, 1845, diamond edition, 12 vols., 1850, standard edition, 8 vols., 1856; Goldsmith's Poems, *'Gedichte'*, Leipzig, 1843; Milton's Poetical Works, *'Poetische Werke'*, Leipzig, 1846; Pope's Poetical Works, 4 vols., Leipzig, 1842; and *'Ossian'*, Leipzig, 1847; Shakespeare's Plays, *'As You Like It, Midsummer Night's Dream, Much ado about Nothing, 'Was ihr Wollt,' 'Sommernachts Traum,' 'Viel Lärmen um nichts,' 'Longfellow's 'Hiawatha,' Leipzig, 1856; Racine's 'Phädra,' Leipzig, 1853; and Ponsard's 'Odyssey,' Leipzig, 1853. As an original poet, Böttger occupies a place of his own in German literature. His talent is eminently descriptive, and his narrative varies as heroic and adventurous, and as imaginative and fanciful. Of the romantic kind of poem, which may be less or more referred to a Byronic model, he has produced *'Évil Stars, 'Düstere Sterne,' Leipzig, 1852; a lyrico-epic poem entitled 'Habana. Lyrisch-Epische Dichtung,' 16mo, Leipzig, 1853; the Fall of Babylon, 'Fall von Babylon,' Leipzig, 1855; and Cameos, 'Cameen,' Leipzig, 1856. The school of legend and fancy is represented by a Tale of Spring, 'Ein Frühlingsmärchen,' Leipzig, 1849, 3rd edition, 1850; and the Pilgrimage of the Flower-Spirits, 'Die Pilgerfahrt der Blumengeister,' Leipzig, 1851, 3rd edition, 1857. His mastery over the art of versification, and his poetical powers generally, are evidenced by his Tragedy, in five acts, entitled *'Agnes Bernauer,' 8vo, Leipzig, 1845, 2nd edition, 1847, and 3rd edition, 1850; Poems, 'Gedichte,' 2nd edition, 8vo, Leipzig, 1846, 7th edition, 1850; Poems on the Wartburg, 'Auf der Wartburg Dichtungen,' 16mo, Leipzig, 1847; a Mock Heroic Poem entitled 'Till Eulenspiegel,' Leipzig, 1850; the Book of the Saxons, &c., 'Das Buch der Sachsen. Originaldichtungen aus der Sächsischen Geschichte,' 4to, Leipzig, 1858; Love Stories, 'Historien der Liebe,' 16mo, Leipzig, 1860; Goethe's Youthful Love, 'Goethe's Jugendliebe,' 8vo, Leipzig,***

1862; a small volume entitled *Holy Days, 'Heilige Tage,' 16mo, Vienna, 1865. Böttger's Collected Works have been published under the title of 'Gesammelte Werke,' 6 vols., 16mo, Leipzig, 1865—66.*

BÖTTGER, JOHANN FRIEDRICH, was born at Schleiz, in Voigtland, on the 4th of February, 1682. The name being of difficult pronunciation in the mouth of a foreigner, has probably led to the various ways in which it is written, such as Böttcher, Böttcher, and Böttiger, with a view to catch the sound. In the documents drawn up by the Saxon Government he is invariably referred to as Böttger, and in this way, indeed, he wrote his own name. His father was master of the mint at Magdeburg, and was engaged, after the fashion of the time, in searching for the philosopher's stone, the secret of which Böttger is said to have thus acquired. He attached a superstitious importance to the day of his birth, Sunday, as enabling him to look into the future. The father died early, and the mother married again and settled in Berlin, where Böttger was apprenticed to an apothecary. He soon made known his pretensions to hermetic philosophy, and was laughed at; but his master having contributed 15 double groschen, Böttger undertook, in the presence of an adept, Von Haugwitz, and some members of the court, to convert them into gold. He is said to have been so successful that the king, Frederick William I., wished to secure him; but Böttger, probably mistrusting his own powers, stole away to Wittenberg, where he was welcomed by the metallurgist, Kirchmeier, who had a good laboratory and powerful wind furnaces. He was followed by an officer of the court, who had authority to arrest him on the ground of fraud; but Böttger, probably with perfect sincerity, declared he would rather be hanged than give up the secret. To avoid being taken back to Berlin, he appealed to Frederick Augustus I., King of Poland and Elector of Saxony, for protection, which was granted, and he was conveyed to Dresden under a military escort. There he was splendidly lodged, constantly watched, and encouraged to make experiments, and those about him were under oath not to reveal any secrets they might learn from him. After amusing his host (who was no other than the Elector himself) during four years, and getting tired of his captivity, he secretly escaped, but was overtaken at Ems, and brought back with so much violence that in the confusion he declared he had lost a tincture that had cost him years of labour to prepare, and which was worth millions of gold. He was now earnestly pressed to reveal his secret, which he consented to do under thirty-six conditions, one of which was that he should be set at liberty as soon as he had written out his *Arcana*. This was agreed to, and in the autumn of 1705 he described in writing his process for making gold. It is a long, tedious, mystical composition, still to be seen at Dresden. The Elector thought fit to have the *Arcana* tested before setting the writer at liberty.

But in the meantime the minister, Tschirnhauss, obtained Böttger's assistance in the solution of another problem of a less hopeless character, namely, how to produce from native materials the true hard porcelain of China and Japan, which it had been the fashion to admire during two centuries. In Böttger's first attempts, instead of a hard, white, transparent ware, he produced an opaque red one. At length a singular accident occurred, which Böttger was acute enough to take advantage of, and this is the grand service rendered by him to the world. An iron-master named Schnorr, in riding over his estate, noticed that at a particular spot his horse struck his hoofs in mud of a whitish character. On taking some of this home it dried into a white powder, and the idea occurred to Schnorr that this powder would serve as well as that prepared from corn flour for powdering wigs. Accordingly large quantities were sold for the purpose, and Böttger remarking that his wig was unusually heavy, examined it and found it to be true China clay or kaolin, with which the first true porcelain of Europe was manufactured. This was about 1710.

During the years that Böttger and his three or four skilled companions (two of them being potters by profession, and one a mineralogist) worked together they were sometimes in Dresden, and while Charles XII. of Sweden was in Saxony, for better security, in the fortress of Königstein on the Elbe above Dresden, and lastly at the castle of Albrechtsburg at Meissen below Dresden. The Elector took such interest in their work that he was sometimes present at the drawing of the kiln. Böttger is described as a witty, jovial companion, the delight of his fellow-workers. But when the porcelain factory was fully established and his services were no longer needed, they began to find fault with his administration as director. They accused him of getting drunk

with brandy three times a day, and also of negotiating with foreign courts for the sale of the porcelain secret. They would probably have succeeded in getting him discredited in the eyes of the Elector had not a stronger hand interposed and laid him quietly in the grave, March the 13th, 1719.

BOTTICELLI. [FILIPPI, SANDRO, E. C. vol. ii. col. 913.]

BÖTTIGER, CARL AUGUST, an eminent German archaeologist, was born on the 8th of June, 1760, at Reichenbach, in Saxony, and finished his education at Leipzig University. After acting for some time in Dresden as a private teacher, he was, in 1794, appointed rector of the academy at Guben; in 1790 removed to a like post at Bautzen; and in 1791, on the recommendation of Herder, was made director of the gymnasium at Weimar. Here he was brought into close connection with Goethe, Schiller, and Wieland; and through their influence, and association with the artists who formed a characteristic section of the remarkable society then collected in that little capital, his attention was strongly directed to the literature of art, which became more and more an absorbing pursuit. For some years, however, much of his spare time was taken up with the management of journals like the 'Journal des Luxus,' the 'Deutschen Mercur,' and 'London und Paris;' and he long continued to contribute critical and biographical papers to the 'Allgemeine Zeitung.' In 1804 he was invited to Dresden as director of studies at the court academy, and afterwards was appointed superintendent of the Museum of Antiquities. Here he remained occupied with his official duties, delivering courses of lectures on art and archaeology, and preparing his various works for the press, till his death, which occurred on the 17th of November, 1835. Herr Böttiger's earliest work, 'Sabina oder Morgenscenen einer reichen Römerin,' Leipzig, 1803, 2nd ed. in 2 vols., 1806, was a pleasing description of the habits and toilette of a Roman lady in the first century of the Christian era. His later publications were all on the archaeology of art. Of these the chief were—'Ideen zur Archäologie der Malerei,' and 'Kunstmythologie,' Dresden, 1811; 'Vorlesungen und Aufsätze zur Alterthumskunde,' Leipzig, 1817; 'Amalthea,' 3 vols. 1821—25; and 'Ideen zur Kunstmythologie,' 2 vols. Dresden, 1826—36. His academic dissertations and Latin poems were published in a collected form, by Julius Sillig, in 1837, under the title of 'Böttiger Opuscula et Carmina Latina,' Dresden, 1837; and his chief essays and antiquarian articles by the same editor, as 'Kleine Schriften archäologischen und antiquarischen Inhalts,' 3 vols. Dresden, 1837—38. Various inedited papers were printed under the title of 'Literarische Zustände und Zeitgenossen,' 2 vols. Leipzig, 1838, by his son, C. W. Böttiger, who also printed a biographical sketch of his father, 'Carl Aug. B., eine biographische Skizze,' Leipzig, 1857.

BOUCHARD (or BOUCHART), ALAIN, a Breton historian, was born in the 15th century, most probably at the manor of Kerbouchart, near Croisic. He was an advocate of the parliament of Bretagne, and councillor and master extraordinary of requests under the Duke Francis II. Encouraged by Queen Anne, who facilitated his researches amongst the archives of Bretagne, Bouchard compiled his 'Grandes Chroniques,' which were completed and on the point of being presented to that princess, when she died in January, 1514. Bouchard published the same year the first edition of his great work, the imputed faults of which are his plagiarism from antecedent chroniclers and his indiscriminating perpetuation of their fables. His local information is, however, valuable, and his style is picturesque. The title of the first edition is as follows:—'Les grandes croniques de Bretagne nouvellement imprimées à Paris: tant de la grande Bretagne depuis le roy Brutus qui la conquist et la appella Bretagne jusques au temps de Cadualadrus dernier roy breton dicelle grande Bretagne ensemble tous les aultres bretons y estans lors furent contrains de habandonner le pays pour les pestilences de maladie qui y survindrent que lors les anglois de Saxonie y vindrent habiter et la nommerent angleterre, que aussi de nostre bretagne de present depuis la conqueste du roy Conan meriadec breton qui lors estoit appelle le royaume darmorique jusques au temps et trespas de François II. de ce nom duc de Bretagne dernier trespasé pere de la feue royne de france nagueres decedee a qui dieu pardoint, esquelles croniques est mencion faicte daucuns notables faiz advenuz es royaumes de France Dangleterre Despaigne Descosse Darragon et de Navarre es Allemagnes es Itales en Lombardie en Tartarie en Jherusalem: & aillieurs en plusieurs aultres pays & contrees durant le regne dun chascun roy & prince desd. deux bretaignes,' folio, Paris, 1514, second edition, folio, Caen, 1518, third edition, folio, Paris, 1531, fourth edition, folio, Caen, 1532, fifth edition, folio, Caen, 1541. All

BIOG. DIV.—SUP.

the editions of Caen, as compared with those of Paris, present various readings and interpolations.

BOUCHER, FRANÇOIS, a celebrated French painter of the Pompadour period, was born at Paris the 29th of September, 1703. He studied painting under Le Moine, but about 1720 entered into an engagement with M. Cars, the engraver, to reside in his house, learn engraving, and make designs for various publications. Whilst here he made twenty-six designs for Daniel's 'Histoire de France,' which were engraved by Baquoy, and he himself engraved various plates after Watteau. In 1723 he won the first prize for painting at the Academy, and two years later went to Rome. The great works of Italy had no influence on his style, and if he learned anything from any of the Italian masters it was from Albani, whose Dianas and Cupids he adopted as themes for his pencil, and whose gay colour and polished manner his contemporaries thought he rivalled. On his return to Paris, Boucher became exceedingly popular. He was of a light, cheerful disposition, very fond of society, and he was admitted into the best circles; and he caught and reflected exactly the elegant but frivolous and flimsy taste of the day. The Painter of the Graces, as he was named, he drew his inspiration from the reigning mode of the court of Louis XV., and helped to give it a definite form. With Madame Pompadour he was an especial favourite; the loveliest portrait of her is from his pencil; and not only did she employ him to make for her numerous pictures and drawings, but she herself etched a large number of his designs—Leda, Loves, Nymphs, the Youthful Bacchus, 'Offrande au dieu Terme,' 'L'Amour sacrifiant à l'Amitié' (that is, the Pompadour offering her heart to Love), and the like; and it was noticed that though she etched some of Vien's and Vanloo's designs, she always succeeded best with Boucher's, and that her own designs were altogether in his manner. Boucher was in 1733 admitted into the Academy, of which he was afterwards director; and on the death of Vanloo in 1765 he was nominated principal painter to the king. He died at Paris on the 30th of May, 1770. Boucher designed and painted with amazing facility, and produced an enormous number of pictures and drawings. Sir Joshua Reynolds gives an instructive illustration of his manner of working (Discourse XII.): "When I visited him some years since in France I found him at work on a very large picture, without drawings or models of any kind. On my remarking this particular circumstance, he said when he was young, studying his art, he found it necessary to use models; but he had left them off for many years." Boucher is the representative painter of the style Pompadour, of mincing grace and modish elegance displayed alike in classic and pastoral prettinesses, very refined and well-bred, and with a certain naive yet courtly charm, but essentially false and meretricious. The influence of this style is still strong in French decorative art, though long banished from its higher branches. The Louvre has seven characteristic paintings by Boucher—'Diana and one of her Nymphs coming out of the Bath,' 'Venus (attended by Cupid and the Graces) ordering from Vulcan arms for Æneas,' 'Reynold and Armida' (the latter contemplating herself in a mirror which Cupid holds up to her), and four 'Pastoral Scenes,' with shepherds and shepherdesses of the true Parisian type.

BOUCHER DE CRÈVECEUR DE PERTHES, JACQUES, was born at Rethel, September 10, 1788. He was descended from a family which had been established in France for a long time, some of his ancestors having been men of note prior even to the crusades of the middle ages. In early life he received an official appointment, but he soon resigned it in order to devote himself entirely to literary and scientific pursuits. Possessed of an ample fortune, endowed with most exemplary industry, and gifted with an amount of enthusiasm and imagination which falls to the lot of few men, he poured forth work after work from his prolific pen, dealing with an immense range of subjects in a style peculiarly his own. A complete set of his works comprises upwards of thirty volumes. His literary activity does not seem to have commenced until he was more than thirty years of age, for the earliest work known to us is a play entitled 'La Marquise de Montalle,' 1820, which was followed by several tragedies, comedies, and dramatic compositions, of which three were received at the Odéon, the most noteworthy, perhaps, being a comedy, the 'Grande homme chez lui.' In 1830 he wrote 'Romances, Legends et Ballades,' of which a second edition was issued in 1849. His first work of any importance was the 'Opinion de M. Christophe sur les prohibition et la liberté de commerce,' 1831—34, in which he was one of the first persons to advocate free trade for France, and to demand a universal exhi-

bition at Paris, which last idea he urged again in 1833. Another work of his, 'De la Creation,' 1841, 5 vols., is a curious metaphysical and imaginative disquisition upon organisms. Amidst much mysticism, verbiage, and speculation, there are here and there a few bright sparks of thought. Towards the end of the work he has several chapters on the progression of life, in which he advocates to their utmost extent the evolutionary ideas now in vogue, and which Professor Huxley announces will be the accepted theory of the future geologist. He maintains the indestructibility of matter and force, and the gradual passage from one state to another, commencing in simplicity and passing on to complexity. The simple cell becomes the complex man, an observation which he deems equally true whether applied to the short period of life allotted to the individual or to the far longer duration of organisms in general. In one place he says that great fire, the sun, began with a spark, and it will go out with a spark; an idea which is in harmony with the most recent discoveries. In another place he says an animal is an imperfect man, man is an imperfect angel, and an angel is one degree below some higher and wiser creature. But the principal work with which Perthes's name will be associated is the 'Antiquités Celtiques et Antédiluviennes.' This was one of the many results of his untiring efforts to promote the study of the antiquity of man. The first nucleus of the work was a short paper read to the Société Royale d'Emulation at Abbeville in 1836, to which society other papers on the same subject were contributed from time to time. The first volume was printed in 1842, and presented to the Institute in 1844, but it was not published till 1846, when it appeared under the title of 'De l'Industrie primitive et des Arts à leur Origine.' This title did not attract attention, and in the following year it was re-issued under the title given above, which has been since retained. The work is a valuable contribution to the archaeology of his native province of Picardy, and so far as his statements concern the Celts, they have been generally accepted, but his conclusion as to the existence of antediluvian men met with much opposition, which, however, only induced him to renew his efforts to collect evidence. He spent his money and time freely in examining every available section that was made under his directions or in executing various engineering and building operations. He did not, however, confine himself to his own country, but searched all over Europe, and thus collected a magnificent museum of ancient implements, utensils, and rudimentary artistic fabrics, which at a later period he presented to the nation. Wherever he went he was received with hearty greetings, and assurances of help in his researches reached him from all quarters. His observations on these journeys are detailed in his 'Voyage à Constantinople,' 1855; 'Voyage en Danemark, en Suede, en Norwege,' 1858; 'Voyage en Espagne et en Algérie,' 1859; 'Voyage en Russie,' 1859; while those which more particularly appertain to archaeology were embodied in vol. ii. of his 'Antiquités Celtiques.' In 1864 appeared the third and concluding volume, in which he gives a full account of the finding of the famous human jaw of Moulin Quignon, which excited much discussion, as this fragment was supposed to be the oldest human relic discovered up to that time. Its authenticity has, however, been disputed, the evidence tending to show that the bone was not deposited along with the gravel in which it was found. Finding that his discovery was not generally accepted, Boucher de Perthes effected a series of new excavations and searches, which led to the discovery of many more human bones, some of which were at the very base of the gravel and resting on the chalk itself. The evidence connected with these would have convinced most anthropologists had they not been discovered after the first Moulin Quignon jaw bone, which there is strong reason to suspect was placed in the gravel fraudulently. It should be borne in mind that Boucher de Perthes had been in the habit of offering rewards for many years for objects connected with the antiquity of man, that he himself had frequently rejected spurious articles which had been offered him, and that he was fully aware of the possibility of deception. He lived long enough to see the position accepted which he had battled for so long and so arduously, viz., that men existed contemporaneously with various extinct mammals, and long before the so-called Celts, who were considered to be the earliest inhabitants of France. In addition to the above-mentioned works he wrote many others, amongst which we can only mention the 'Petit Glossaire,' 1835; 'Hommes et Choses,' 1851; 'Les Masques, biographies sans noms,' 1861—64, 5 vols.; and 'Sous dix Rois, souvenirs de 1791 à 1860,' 1864, 6 vols. His latest work was 'Des Idées innées de la Mémoire et de l'Instinct,' 1867. He died August 3,

1868, after having been for more than thirty years the president of the Emulation Society of Abbeville.

BOUCHET, JEAN, a voluminous French writer, was born at Poitiers on the 30th of January, 1476. Failing, by the death of King Charles VIII. at Amboise, on the 7th of April, 1498, of the appointment which that monarch had promised in recognition of his already declared talent, Bouchet adopted at his native city his paternal profession of procureur du roi, which does not appear to have ever completely won his affection. He was obliged frequently to withdraw into the country, where he could devote himself without distraction to study, by the ravages of the plague at Poitiers. Beyond this circumstance, and the incidental information that he had eight children, little is known of the events of his life. He died in some unascertained year between 1550 and 1555.

His works comprise 'L'Amoureux transi sans espoir,' 4to, Lyon, 1507, a collection of those juvenile poems by which he had won the regard of Charles VIII., and the production of the last of which dates from not later than 1500; 'Livret des Angloises et des remèdes d'amour du traverseur, en son adolescence,' 4to, Poitiers, 1537; a serious volume, in which he sought to make the amende for the frivolities of the preceding one, which he regretted, 'Les Cantiques de la sainte et dévote âme, amoureuse et épouse de Notre-Seigneur Jésus-Christ,' &c., 16mo, Lyon, 1540. The productions, however, for which Bouchet is alone regarded at present are of a memorial or historic kind, the chief of which are 'Le Panegyrique du Chevallier sans reproche, ou, La Vie et les Gestes de Louis de la Trémouille,' 4to, Poitiers, 1527; 'Les anciennes et modernes généalogies des Roys de France, et mesmement du Roy Pharamond, avec leurs epitaphes et effigies,' 4to, Poitiers, 1527, 1531, and 1535, 16mo, Paris, 1536, and 8vo, 1537; 'L'histoire et Cronique de Clotaire premier de ce nom. vij. roy des François, et Monarque des Gaules. Et de sa très illustre espouse, Madame Sainte Radegonde,' 4to, Poitiers, 1527; 'Les Annales d'Aquitaine, faits et gestes des rois de France et d'Angleterre, pays de Naples et de Milan,' &c., folio, Poitiers, 1524, 1535, 1557, 1644, &c. In addition to the foregoing, it may be mentioned that Bouchet is the author of a curious and very interesting volume of 'Épîtres Morales et Familières,' &c., folio, Poitiers, 1545.

Another JEAN BOUCHET, or DU BOUCHET, who was born in 1599 and died in 1684, is the author of several genealogical works of considerable local value and interest. They are 'Véritable Origine de la seconde et troisième lignées de la maison de France,' folio, Paris, 1646 and 1661; 'Histoire généalogique de la maison de Courtenay,' folio, Paris, 1661; 'Preuves de l'histoire généalogique de la maison de Coligny,' folio, Paris, 1662; 'Table généalogique des comtes d'Auvergne,' folio, 1665; 'Table généalogique des anciens vicomtes de la Marche,' folio, Paris, 1682; and an edition, with notes and additions, of Coustureau's 'Histoire de Louis de Bourbon, premier duc de Montpensier,' 4to, Rouen, 1642.

BOUDIN, JEAN CHRISTIAN MARC FRANÇOIS JOSEPH, anthropologist and hygienist, was born at Metz, in the department of Moselle, April 27, 1806. His father was a private soldier who had gradually worked his way up to official rank, and was during the first few years of his son's life in command of Mayence, at which place the subject of the present notice received his early education, and soon evinced an extraordinary ardour in the collection of facts and figures, a passion for music, and a strong faculty of acquiring languages. In 1824 he entered the hospital at Metz as a pupil; in 1826 he accompanied the military expedition to Spain; and in 1828 his services were transferred to the Morea. In 1830 he received the diploma of doctor, and in 1831 was appointed a regimental surgeon. In 1832 he was placed on the medical staff of the hospital at Marseille, and in this capacity he showed uncommon energy and skill in battling against the cholera epidemic which ravaged the town in 1835. About this time he established the 'Gazette Médicale de Marseille,' for which he wrote several papers, and in one of them he strongly urged the necessity of reform in sanitary regulations, and the abolition of quarantine imposed on travellers from Algeria. In 1837 he was entrusted with the medical direction of the second French expedition to Algeria. This army suffered much from cholera, and he himself was one of the persons seized by it. He ordered a horse, caused himself to be fixed to it, and rushed off on board a vessel to seek that change of air which he considered essential to his safety; the result was that he soon recovered his health. From 1838 to 1840 he resided at Algiers, and diligently studied the morbid influence of the marshy tract near that town; and in 1842

appeared his '*Traité des fièvres intermittentes, rémittentes et continues des pays chauds et des contrées marécageuses*,' which contains some original ideas as to the influence of miasms, and in which he advocated the use of arsenical preparations in certain fevers. This work led to much angry discussion, but the author's thoughts were thus turned to the subject of medical geography, on which he is one of the principal authorities. In 1842 he was appointed chief physician of the military hospital at Marseille, and to the Royal Society of that town he read a paper entitled '*Traité de géographie et de statistique médicales*,' published in the '*Bulletins*' of the Society in 1842, and separately in 1843, and which was subsequently expanded into a two volume work published in 1857. This last is his principal literary claim to notice, and embodies the fruit of some fifteen or more years of close observation and study, the results of which were announced from time to time in various scattered papers. It is an encyclopædic work on all that relates to the distribution of diseases, and the influence which climate, local peculiarities of physical geography, racial characters, &c., have in regulating such distribution. From 1843 onward he passed through various posts, such as chief physician to the hospitals at Roule, Vincennes, and St. Martin; to the Alpine army (1848-1849); and to the Italian army (1859), in succession to Larrey. In 1859 the French Anthropological Society was founded, and he at once joined its ranks as an active worker, and in 1862 he was elected its president. Amongst the papers which he contributed to this society may be mentioned, '*De non-cosmopolitisme des races humaines*,' '*Du croisement des familles, des races, et des espèces*,' and papers on food, water, cretinism, human hybridity, serpent worship, etc. Many of his literary productions, more especially those of a statistical nature, are illustrated with coloured or shaded maps and diagrams, which enable one to perceive at a glance the general state of the evidence. His aptitude for this kind of work is well displayed in his '*Carte physique et météorologique du globe terrestre*,' showing the distribution of temperature, winds, rain, and snow, which, we believe, was the only French work of its kind at the time of its publication. He was long engaged upon a '*Carte ethnographique du globe*,' but it was left unfinished, a circumstance the more to be regretted as it promised to be an exceedingly valuable addition to scientific cartography. Besides all this, he wrote many papers for the '*Annales d'hygiène*,' and the '*Recueil de Mémoires de Médecine Militaire*,' which he assisted in editing for more than twenty years, as also for various other journals; but a full list of these will be found in the under-cited article by Perier. He has also left a large collection of inedited materials bearing on the investigations to which he had applied himself. His death occurred at Paris, after a long illness, on March 9, 1867.

(Perier, *Notice historique et bibliographique sur le Dr. Boudin*, in *Mém. Soc. d'Anthropologie de Paris*, III. pp. 29-69, 1868.)

* BOUÉ, AMI, was born 16 March, 1794, at Hamburg, of a thriving commercial family descended from French refugees. His education was chiefly private, the war preventing his residence at Göttingen, as had been intended. In 1812 he commenced his travels in various parts of Europe, and acquired a taste for geological studies. After passing four summers in Scotland he took his doctor's degree in medicine at Edinburgh in 1817, and between this and 1839 he passed much of his time in travelling over Europe, including Turkey, which was new to the geologist. In 1820 he published at Paris a '*Geological Essay on Scotland*,' in 1829, '*Geognostic Pictures of Germany*,' in 1835, at Paris, '*Guide to the Geological Traveller*,' in 1840, '*Turkey in Europe*,' in 1850, '*An Itinerary of Turkey in Europe*.' He has also published many papers on geological science, and was the first secretary, then vice-president, and afterwards president of the Geological Society of Paris. He has since resided at Vienna.

BOUILLET, JEAN, was born at Servien, near Beziers, 6th March (or, as some say, 14th May), 1690. His father was a farmer. He received a good education at Montpellier, and practised as a physician at Beziers from 1715 up to the time of his death, 13th August, 1777. About this time there was considerable activity among the provincial scientific academies. Those of Montpellier and Bordeaux were accustomed to offer prizes for the best essays on certain subjects, and in 1719 Bouillet gained the prize for an essay on Fermentation, and in 1720 for one on Gravitation, or 'The Cause of Weight,' as it was called. He was a corresponding member of the Academy of Sciences at Paris, and, in conjunction with Von Mairan, Secretary to the Academy of Sciences and Belles Lettres at

Beziers, he took part in the celebrated discussion on Evaporation, which ended in the adoption of Le Roi's theory of solution of water in air, which retained its place in science until the time of Dalton, although in 1743 Bouillet approached the true theory by placing the particles of water in the interstices of those of air. Bouillet published several works on medicine, mineral waters, &c., and, in conjunction with his son, Jean Henri Nicolas (physician of Montpellier, born 1729), a number of articles in the *Cyclopædia* edited by D'Alembert and Diderot. At that time it was not difficult to attain distinction in a variety of sciences, so that we need not be surprised at Bouillet's wide range. He is even now sometimes quoted in astronomy, as having made a good observation in 1772 on the immersion of Saturn.

BOUILLET, MARIE-NICOLAS, a learned and industrious French compiler, was born at Paris, May 5, 1798. Having completed his educational course at the École Normale, under Cousin and Jouffroy, he was employed for some time as substitute professor of philosophy at Rouen and Paris; afterwards as teacher of philosophy in the colleges Charlemagne and Henri IV. (subsequently the Lycée Napoleon); and in 1840 he was made principal of the Collège Bourbon. The revolution of 1848 caused his retirement from the public employment, but he was nominated in 1851 inspector of the Academy of Paris, and in 1861 inspector general of public instruction. He died on the 28th of December, 1864. M. Bouillet was an excellent teacher, and he published some useful works in his own line of instruction; but he was more generally known as perhaps the most successful dictionary-maker of a time and country unusually abundant in that class of compilers. His first work of the kind was a classical dictionary designed to supersede Lemprière, which in a great measure it succeeded in doing: '*Dictionnaire Classique des Noms propres de l'antiquité, sacrée et profane*,' 2 vols. 8vo, Paris, 1826, 4th ed. 1841; and of which he published an abridgment in 1827, which has also passed through several editions. The success of a still larger work, the '*Dictionnaire Universel d'Histoire et de Géographie*,' 2 vols. large 8vo, double columns, 1842, was for a while in peril, for some passages in it called down the papal censure; but M. Bouillet, after a journey to Rome, cancelled all that was objected to, and his pliancy was rewarded not merely by the removal of his book from the Index, but by being permitted to prefix to it the approbation of the pope, as well as the imprimatur of the French prelates. As a consequence it met with an amount of success unparalleled in works of a like class, the 20th edition having been reached in 1864. His other great dictionary, '*Dictionnaire Universel des Sciences, des Lettres, et des Arts*,' 2 vols. large 8vo, 1854, reached a 7th edition in 1864, and has, we believe, been reprinted more than once since. M. Bouillet also contributed numerous articles to the '*Dictionnaire de la Conversation*,' the '*Dictionnaire des Sciences Philosophiques*,' the '*Biographie Universelle*,' the '*Encyclopédie Moderne*,' and to various periodicals. His philosophical works include the editing a French translation of Bacon's works; annotated editions of the philosophical works of Cicero and Seneca; and a translation of the '*Enneads of Plotinus*,' 3 vols. 8vo, 1857, &c.

BOUQUET, DOM MARTIN, a learned French Benedictine, was born at Amiens, August 6, 1685. Received at an early age into the order, he made his profession at the Abbey of St. Faron, Meaux, in 1706. Owing to his studious habits and unusual attainments, he was made librarian of the abbey of Saint-Germain-des-Prés, and called to assist Montfaucon in the preparation of his '*Antiquité expliquée*,' and other laborious compilations. But Dom Bouquet's great work was the *Collection of the Chronicles of France*, an enterprise projected by Colbert in 1676, but delayed, mainly from the difficulty of finding a competent and willing editor, until Bouquet undertook the duty, in 1721, on the recommendation of Denis de Sainte-Marthe, superior of the congregation of Saint-Maur. Some delay was caused by his removal to the abbey of St.-Jean-de-Laon, but he was recalled to Paris at the instance of the chancellor D'Agnesseau, and by 1728 had completed the first two volumes, which appeared in folio in Latin and French, with the title '*Rerum Gallicarum et Francicarum Scriptores; ou Recueil des Historiens des Gaules et de la France*.' To the continuance of this work Bouquet devoted every hour not demanded by his religious duties, and he had the happiness to witness the publication of the 8th volume in 1752. He was engaged on the 9th volume till his death, which occurred on the 6th of April, 1754. The work was continued by the Benedictines J.-B., and C. Haudiquier, Housseau, Précieux, Poirier, Clément, and Brial, the

19th volume being published in 1832. Its completion was then transferred to the Académie des Inscriptions et Belles-lettres, and, under the editorship of M.M. Daunou and Naudet, three more volumes have been issued, the 22nd in 1865. Of the value of this work to the student, not merely of French history, but of the history of Europe in the middle ages, it would be superfluous to speak. Dom Bouquet did not possess the higher qualities of a critic or commentator, but he was honest of purpose and unwearied in labour, and his progress forms a remarkable contrast to that of his successors.

BOURGEOIS, LOUIS, or LOYS, a French musical writer, the dates of whose birth and death are not known, but who composed between 1541 and 1561. Having embraced the principles of the Reformation under the teaching of Calvin, he accompanied the reformer to Geneva in 1541, and was chosen by the Consistory as cantor at that place; but, being frustrated in a plan of introducing harmonized psalms in many parts, he returned to Paris after some years. He was one of the first to propose the teaching of singing by solmisation, as an improvement on the method of Guido d'Arezzo, by a better mode of regulating the syllables *sol, fa, ré, mi*, &c. The French Protestants adopted Bourgeois's plan, from whence it gradually spread to all the French schools of music. One of his works was 'Pseaulmes Cinquante de David Roy et Prophète, traduits en vers Français, par Clement Maret, et mis en musique par Loys Bourgeois à quatre parties, à voix de contrepoint égal consonnante au verbe,' oblong 4to, Lyons, 1547. Another was 'Le droit chemin de Musique, composé par Loys Bourgeois, avec la Manière de chanter les Pseaulmes par usage ou ruse,' 8vo, Geneva, 1550.

BOURNON, JACQUES LOUIS, known as COUNT DE BOURNON, was born at Metz, January 21, 1751. He displayed early a decided taste for the study of natural objects, and after devoting some time to botany and other branches of natural history, selected mineralogy as the subject likely best to repay his toil. He was the more tempted to this choice by the fine collection of minerals which his father had made in his château at Fabert. He made frequent excursions in Dauphigny and elsewhere, in company with friends of similar tastes, and he cultivated the society of mineralogists of repute, and also corresponded with them. On the breaking out of the revolution he emigrated with his family, and ranged himself under the flag of Condé. When this army was disbanded, he sought refuge in England, where his mineralogical knowledge was highly esteemed, especially as the science was then immature. He was employed by Lord Granville, and also by Sir A. Hume and Sir J. Saint-Aubin, to arrange their mineralogical cabinets. In 1802 he was elected into the Royal Society. He had commenced some years before a general treatise on mineralogy, which he illustrated chiefly with reference to the carbonates of lime; and he found these so numerous that he had to content himself with a special instead of a general treatise. He described 616 varieties of forms, perfectly distinct, and belonging to 59 different modifications. Hence it will be seen what a length of time and how many observers were required to exhaust the subject of derived forms of which Häuy had opened up the knowledge. A single group belonging to any one of these varieties might form a cabinet, and yet, as the Count remarks, many might be wanting.

This fine work being sufficiently advanced for publication, including 72 quarto pages of figures, the poor refugee looked for some time in vain for a publisher; but, on talking the matter over with Dr. Babington and Mr. Allen of the Royal Institution, he was introduced to Messrs. W. & R. Phillips, the printers, when it was proposed to form a committee of scientific men to raise a guarantee fund for defraying the expenses of publication, and securing some profit to the author. This led to the publication of this celebrated treatise, under the title of 'Traité complet de la Chaux Carbonatée et de l'Arragonite, Londres, Chez W. Phillips, George Yard, Lombard Street, 1808.' The letter-press is in 2 vols. 4to, with a third volume of plates. The preliminary discourse contains a variety of personal details respecting the author and his scientific friends, and is written with that charming grace of style which distinguishes the *savans* of France. In a report to the Emperor Napoleon I., Cuvier, with his usual manliness of character, mentions Bournon by name, and states the value of his services to mineralogy. On the restoration of the Bourbons the Count returned to France, and was appointed mineralogist to the king, Louis XVIII. He published, 1815—18, a catalogue of his majesty's collection. He is also the author of a few other short treatises, the last of which, in 1824, is a description of a goniometer; and of a large number of papers,

between 1796 and 1815, in the 'Journal des Mines.' He died at Versailles, 24 August, 1825.

* BOUSSINGAULT, JEAN BAPTISTE JOSEPH DIEU-DONNÉ, was born at Paris, Feb. 2, 1802, and educated at the mining school of St. Étienne. He entered upon his public life as the superintendent of an English company, whose object was to reopen and work some old mines in South America. This gave him the opportunity of making many observations on the phenomena presented by the tropical regions of the New World; and that he availed himself of it is clear, since his remarks soon attracted the attention of Humboldt, who was at the time working in the same field of observation. By-and-by the insurrection in the Spanish colonies broke out, the mining enterprise was ruined, and Boussingault, joining the ranks of Bolívar, traversed nearly the whole of the country forming the basins of the Orinoco and Magdalene rivers (rendered classic ground by Humboldt), nominally as a soldier, but practically as a scientific observer. On returning to France he became successively professor of chemistry at Lyon, dean of the faculty at the same place, member of the Academy (1839), and professor of agriculture at the 'Conservatoire des Arts et des Métiers' in Paris. In 1848 he was elected to represent the department of Bas Rhin in the Constituent Assembly, but finding political life was not suited to his tastes, he resigned his seat after holding it for a few months only, and returned to the pursuits which were more congenial to him, such as the application of chemistry to agriculture, the breeding of animals, the qualities and value of manures, the properties of food given to domestic animals, etc. His principal works are 'Agronomie, chimie agricole et physiologie,' of which the second edition, in three volumes, was issued in 1860—1864; and 'Economie rurale considérée dans ses rapports avec la chimie, la physique et la météorologie,' 2 vols., of which the second edition appeared in 1851, and of which English and German translations have been prepared. He has also written a great number of papers, mostly for the 'Annales de Chimie' and 'Comptes Rendus,' nearly 150 are mentioned in the Royal Society's 'Catalogue of Scientific Papers.' That catalogue, however, does not come later than 1863, since which time he has been as active as ever; and at the present time he is engaged in studying the influence of various metalloids upon the properties of steel. One of his papers on this subject is contained in the 'Comptes Rendus' for March, 1870. In 1857 he was made a commander of the Legion of Honour.

BOUITS, DIERICK. [STUERBOUT, D., E. C.]

BOUVART, ALEXIS, a distinguished mathematician and astronomer, was born of poor parents in a small village in the Valley of Chamouni, on the 27th of June, 1767. He went to Paris in 1785, and attended gratuitous lectures at the College of France. Hesitating for a time between mathematical and medical studies, he at length chose the former, and made rapid progress. After bearing poverty with tranquillity, he obtained a post, with a small salary, at the Paris Observatory in 1793; and became one of the regular astronomical observers there in 1795. From his first visit to the observatory to the end of his days he manifested intense love of this study, and devoted himself zealously to the observation of phenomena. On one occasion, when watching for a comet from the top of the observatory, on an inclement night, he fell asleep, and became enveloped in snow; during a severe illness, which resulted from this imprudence, he amused himself with calculating logarithms. Bouvart assisted Laplace in making the calculations for the 'Mécanique Céleste,' and won the favour of that illustrious astronomer. He was appointed joint director of the Bureau des Longitudes in 1804. His appetite for work was enormous. The theory of the moon, and the tables of Jupiter, Saturn, and Uranus, involved calculations which were a positive pleasure to him in their variety and complexity. During many years he spent almost every clear night by the side of the great telescope at the observatory. He died on the 7th of June, 1843, calculating almost to the last hour. Bouvart discovered the comets of 1797, 1798, 1801, and 1805. He received from the Académie des Sciences, of which he was a member, a prize for his elaborate tables of 4000 lunar observations. Besides the tables and calculations regularly made at the observatory, and published at the expense of the French Government, Bouvart contributed about 20 papers to various scientific journals, including the 'Mémoires de l'Institut,' Bode's 'Astronomisches Jahrbuch,' Zach's 'Monatliche Correspondenz,' 'Astronomische Nachrichten,' 'Connaissances des Temps,' Schweigger's 'Journal,' Quételet's 'Correspondance Mathématique et Physique,' the Bulletin of the Société Géographique, Poggendorff's 'Annalen,' and the Memoirs

of the Academy of Dijon. These papers related to the tables of Jupiter and Saturn, comets, the moon, longitude, meteorology, the diurnal variations of the barometer, the influence of the moon on atmospheric pressure, the capillarity of the mercury in the barometer, and atmospheric waves. He also wrote three papers, in conjunction with Nicolle, on the moon and on comets. Bouvet, like many other mathematicians, was attracted by the curious problem of the knight's move in chess; concerning which he wrote a paper—'Marche du Cavalier des Echecs pour parcourir de 128 manières différentes les 64 cases sans jamais passer deux fois par la même case, et revenir à la case de départ,' Dijon, Acad. Mem., 1830.

BOUVET, JOACHIM, a scientific and indefatigable French Jesuit missionary, was born at Mans, about 1662. Colbert, the French minister, formed a scheme for establishing agents of the government in China, commissioned to send home information, from time to time, concerning the arts, sciences, products, and learning of the Chinese. Colbert's death interfered with the full development of the plan; but it was partially carried out by his successor Louvois. Six learned Jesuits—Bouvet, Fontanay, Tachard, Gerbillon, Lecomte, and Visdelou,—were sent out in 1685, with special recommendations from Louis XIV. to the Emperor of China. Being shipwrecked on the way, they did not reach their destination until 1687. They were well received; the Emperor entered into their plans, facilitated their researches, and availed himself of their services in various scientific matters. They were allowed to build a church and a residence, and to establish a Christian mission at Pekin. The Emperor sent Bouvet home to France in 1697, to bring out more Jesuits, and to present to Louis XIV., a collection of 49 works in the Chinese language. Bouvet returned to China in 1699, taking with him the Jesuits Premare and Regis, and being the bearer from the king to the Emperor of a magnificently bound collection of engravings. Bouvet and his companions prepared a chart of the Chinese Empire. During a useful and honorable career of nearly half a century in China, he collected materials for several publications. He published four narratives of journeys which he had made in the course of his mission. During his temporary visit to France he issued from the press 'Etat présent de la Chine, en figures gravées par P. Giffart, sur les dessins apportés au Roi,' with 43 coloured plates, folio, Paris, 1697. He also published several letters; of which one was to Leibnitz, pointing out a similarity between the *Kona*, or the symbolic figures which constitute the base of the Chinese system of arithmetic, and the binary arithmetic proposed by Leibnitz. Bouvet died at Pekin, June 28th, 1732. The library at Mans contains several unpublished manuscripts of his, comprising treatises and letters on the state of China, and a Dictionary of the Chinese Language.

BOWER, ARCHIBALD, the younger son of a respectable Catholic family which had for several centuries possessed an estate in Forfarshire, was born at or near Dundee, on the 17th of January, 1686. At the age of 16 he was sent to the Scots College at Douay, where he remained four years, after which, removing to Rome, he was there admitted to the novitiate of the Society of Jesus, on the 9th of December, 1706. After his novitiate he taught classical literature and philosophy for two years at Fano, and subsequently spent three years at Fermo. In 1717 he was recalled to Rome, to study divinity in the Roman College, where he remained until 1721, when he became reader of philosophy and consultant to the rector of the College of Arezzo. In 1723 he was sent for a short time to Florence; and in the same year was transferred to Macerata, where he became professor of rhetoric and secretary to the Court of Inquisition. In these offices he continued till 1726, having in the year 1722 or 1723 made his last vows alternatively at Arezzo or Florence. At Macerata, according to his own account, he became so disgusted with the scenes of torture which he was compelled to witness, that he determined upon effecting his escape. It is alleged, on the other hand, that he sought safety in flight from the consequences of an intrigue with a nun of the noble family of Buonacorsi, an inmate of the convent of St. Catherine at Macerata, to which he had been appointed confessor. He accordingly obtained leave from the Inquisitor to visit the Virgin at Loretto, about thirteen miles distant, when, finding a convenient opportunity, he diverged from the high road near Recenati, and succeeded, after various dangers and adventures, the particulars of which he himself relates in a manner that has never placed his narrative above suspicion, in reaching England, where he arrived about July, 1726. Coming to London, he

introduced himself to Dr. Aspinwall, who gave him a favourable reception, and who, like Bower, had formerly belonged to the Society of Jesus. Bower's conferences with Dr. Aspinwall, and with the more celebrated Dr. Clarke, and Dr. Berkeley, Bishop of Cloyne, at that time Dean of Londonderry, produced, or appeared to produce, such a change in his religious sentiments that he soon after, in November, 1726, abjured the Roman Catholic faith, quitted his order, and took leave of his provincial. For six years he continued a Protestant, but without joining any Protestant communion, until he at length adopted that of the Church of England. Meanwhile he was introduced to Lord Aylmer, who required a person to assist him in reading the classics, and through whom he made the acquaintance of Lord Lyttelton, who remained to the last his firm friend. In 1730 he instituted a monthly review or magazine under the title of 'Historia Literaria,' which was finished in eight volumes in 1734. After its conclusion he was engaged by the publishers of the 'Ancient Universal History,' to which he contributed for a space of nine years, and especially wrote the article on Roman History. He is said to have become reconciled to the Jesuits in 1744 or 1745, and to have separated from them a second time; and he fell into great disrepute when his correspondence with Father Shirburn, the provincial of the order in England, was published in 1756 by Dr. John Douglas, afterwards Bishop of Salisbury, along with a commentary in proof of its authenticity. A desperate attack was opened from all quarters upon Bower, who was described as a sensualist and a hypocrite; the truth of a narrative which he had published of his escape from Macerata was impugned; and everything was done to effect the ruin of his literary and private reputation. Yet no tangible accusation was brought against him; and if his replies did not carry with them general conviction, at least they were ingenious and spirited. In 1748 he published the first volume of his 'History of the Popes, from the foundation of the See of Rome to the Present Time,' 4to, London, the second, third, fourth, and fifth volumes being issued severally in 1751, 1753, 1757, and 1761. The seventh and last was published in 1766. The production of this work at its various stages invited attack, and involved the author in controversy. The most important of his opponents were the Rev. Alban Butler and Dr. Douglas, the former of whom published 'Letters on the first two volumes of the History of the Popes,' 1754; and the latter, at whose hands Bower's personal reputation had received its first shock in 1756, published 'Bower and Tillemont compared,' 1757, the object of which was to show that a great part of the 'History of the Popes' was nothing more than a translation from the French historian, following up the attack in 1758 by the publication of 'A full Confutation of Bower's Three Defences,' and 'The Complete and Final Detection of Bower.' The apologetic and defensive side of the controversy was represented from first to last by Bower's 'Faithful Account of his Motives for leaving his Office of Secretary to the Court of Inquisition,' 8vo, London, 1750; his 'Affidavit, in Answer to the False Accusations brought against him by the Papists,' 8vo, London, 1756; his 'Answer to a scurrilous Pamphlet, entitled "Six Letters,"' &c., 2 parts, 8vo, London, 1757; his 'Answer to a new Charge brought against him in a Libel entitled "Bower and Tillemont compared,"' 8vo, London, 1757; and his 'Reply to a scurrilous Libel, entitled "A Full Confutation,"' &c., 8vo, London, 1757. To these may be added the author's 'One very remarkable Fact more, relating to the conduct of the Jesuits,' 8vo, London, 1758; 'Summary View of the Controversy between the Papists and the Author,' 4to, 1761; and 'A Brief Refutation of the Principal Charges brought against Mr. Bower by his Enemies, extracted from the Summary View.'

In the year in which the first volume of the 'History of the Popes' was published, Bower was appointed librarian to Queen Caroline; and on the 4th of August, 1749, he married a niece of Bishop Nicholson. In April, 1754, Lord Lyttelton, who was Bower's staunchest friend, appointed him clerk of the buck warrants. In 1761 Bower published an octavo volume, entitled 'Authentic Memoirs concerning the Portuguese Inquisition, in a Series of Letters to a Friend,' and on the 3rd of September, 1766, the long and chequered life of the author came to an end at his house in Bond Street. He was buried in Marylebone churchyard. His wife, some time after his decease, attested to his dying in the Protestant faith, a point much disputed at the time.

BOXALL, WILLIAM, R.A., was born at Oxford in 1801, and entered as a student at the Royal Academy in 1819. One of his earliest exhibited pictures was 'Milton's reconciliation with his wife,' 1819, and for several years he continued to paint

subject-pieces of a poetical character, as 'Cordelia,' 'Geraldine,' 'Hope,' 'the Repose in Egypt,' &c., which appeared in the successive exhibitions of the Royal Academy. But by degrees Mr. Bozall's pencil became almost exclusively employed in portraiture. Wordsworth, Gibson, Walter Landor, and many more of our most eminent poets, artists, and men of science, as well as persons distinguished by rank and position have been painted by him. In 1851 Mr. Bozall was elected associate, in 1863, member of the Royal Academy. On the death of Sir Charles Eastlake, in December, 1865, Mr. Bozall was appointed to succeed him as Director of the National Gallery. Without departing materially from the course marked out by his predecessor, Mr. Bozall has displayed activity and intelligence in his new office and enriched the gallery with many admirable works: but his pencil has necessarily been comparatively idle.

* **BOYD, ANDREW KENNEDY HUTCHISON**, a Scottish essayist and divine, was born in November, 1825, at Auchinleck, in Ayrshire, of which parish his father was minister. He was educated at the University of Glasgow, and obtained the highest academic honours in philosophy and theology. He was likewise known as the author of several prize essays. In 1851 he received ordination, and became incumbent successively of the parishes of Newton-on-Ayr, and Kirkpatrick-Irongray, in Galloway, of St. Bernard's, Edinburgh, and St. Andrew's, to the last of which he was presented by the crown. The University of Edinburgh conferred upon him the degree of D.D. in 1864.

Dr. Boyd first achieved general reputation by papers which he contributed as A. K. H. B. to 'Fraser's Magazine,' the most important of which were reprinted in a substantive shape. His works comprise 'The Recreations of a Country Parson.' Reprinted from "Fraser's Magazine," first series, 8vo, London, 1859, 2nd edition, 8vo, London, 1866; a Second Series, which was published in 8vo, London, 1861, and a popular edition, 8vo, London and Edinburgh, 1863; 'Leisure Hours in Town, being Essays, Consolatory, Aesthetical, Moral, Social, and Domestic,' 8vo, London, 1862; 'The commonplace Philosopher in Town and Country,' 8vo., London, 1863; 'Counsel and Comfort spoken from a City Pulpit,' 8vo, London, 1863; 'The Graver Thoughts of a Country Parson,' 8vo, London, 1863; 'The Autumn Holidays of a Country Parson,' 8vo, London, 1864; 'The Critical Essays of a Country Parson,' 8vo, London, 1865; 'Sunday Afternoons at the Parish Church of a University City,' 8vo, London, 1866; 'Lessons of Middle Age; with some account of various Cities and Men,' 8vo, London, 1868; 'Changed Aspects of unchanged Truths. Memorials of St. Andrew's Sundays,' 8vo, London and Edinburgh, 1869.

BOYER, ABEL, was born at Castres, in 1664. Compelled to leave France in consequence of the persecution following the revocation of the Edict of Nantes, he removed to Geneva, thence to Holland, and a few years later to England. He became, in 1692, tutor to Sir Benjamin Bathurst's son (afterwards Alan, Earl of Bathurst) and for some time was engaged in tuition. His French and English Dictionary, 4to, 1699, &c., the abridgment of which was long in nearly exclusive use in English schools, was originally drawn up for the use of the Duke of Gloucester. His French and English Grammar was almost equally popular; and his French and English Companion had down to our own time a large sale. Boyer was a voluminous and indefatigable writer, but his writings have little permanent value, with the exception perhaps of the 'Political State of Great Britain,' 60 vols., 1711—40, which was a monthly publication giving not merely as the title implies a narrative of political events, but a review of the party literature, and is therefore convenient as a summary of facts. His other works include a 'History of the reign of Queen Anne digested into Annals,' 11 vols. 8vo, 1703—13, and folio, 1722, 1735; 'History of the reign of William III.,' 3 vols, 8vo, 1702, (which the 'Nouvelle Biographie Générale' renders "Histoire de Guillaume le Conquerant;") 'Life of Sir William Temple,' 8vo, 1714. For several years he was editor of the 'Postboy.' A translation by him of Racine's 'Iphigenia' was performed under the title of 'Achilles in Aulis.' He died on the 16th of November, 1729, in a house he had built for himself in the Five Fields, Chelsea.

BOZE, CLAUDE GROS DE, an eminent French antiquary and numismatist, was born at Lyon, January 28, 1680. He was educated for the bar, but he early gave much attention to the study of ancient coins; some papers he wrote on coins procured him admission into the Académie des Inscriptions et Belles-lettres, and on being elected its permanent secretary in 1706, he finally abandoned the law. In 1715 he was made member of the Académie Française, and in 1719 keeper of the royal

cabinet of antiques. On the removal of the collection in 1741 from Versailles to Paris he resigned the secretaryship of the Academy in order to devote himself exclusively to the rearrangement of the royal collection. He was elected F.R.S. of London, in 1749, and died September 10, 1753. Besides numerous papers on separate coins and medals full of erudition and discrimination, and in which he frequently took occasion to make the medal the text for a broader enquiry,—as to one of Hygieia he appends a 'dissertation on the cultus rendered by the ancients to the goddess of health,'—M. Boze published the edition of the first 4 vols. of 'Mémoires de l'Académie des Inscriptions et Belles-lettres,' 8vo, Paris, 1740; 'Traité Historiques sur le Jubilé des Juifs,' 12mo, Paris, 1702; 'Médailles du règne de Louis XIV.,' 2nd ed., fol. 1723; 'Le Livre Jaune, contenant quelques conversations sur les logomachies,' 1748, and a 'Catalogue des livres du Cabinet de M. de Boze,' 1745.

BRACONNOT, HENRI, was born 28th of May, 1781, at Commercy (Meuse). He studied medicine and chemistry at Paris, and obtained a prize in botany, which seems to have determined his taste for researches in vegetable chemistry. His numerous papers are printed in the 'Annales de Chimie et de Physique,' 'Le Bulletin de Pharmacie,' 'Le Journal de Chimie Médicale,' &c. He was pharmaceutical chemist at the military hospital at Strasburg. He afterwards practised at Nancy, and in 1807 became professor of natural history and director of the Jardin des Plantes. He retired in 1840, and died 23rd January, 1855. It is needless to add that he belonged to many scientific societies, and, except for the date, that he was decorated in 1828.

BRADWARDINE, or BRADWARDIN, THOMAS, one of the most illustrious of English schoolmen, was descended from an ancient family, who originally derived their surname from Bradwardine, in Herefordshire, but had been settled in Sussex for three generations. He was born at Hartfield, near East Grinstead, in Sussex, in the latter half of the reign of King Edward I., probably between the years 1290 and 1300. He was educated at Merton College, Oxford, of which society he became a fellow. In 1325 he acted as proctor of the university, in which he was renowned not only for his great scholastic and theological learning, but also as "a most exquisite mathematician." He was perhaps the first Englishman who applied a regular connected series of reasoning from principles or conclusions already established to theological subjects, and from this circumstance arose the honourable title by which he was commonly known of the Profound Doctor—"Doctor Profundus." He had the privilege of being at one time chaplain to Richard de Bury, Bishop of Durham, whose manner it was, according to Godwin, "at dinner and supper-time to have some good book read unto him, whereof he would discourse with his chaplains a great part of the next day, if business did not interrupt his course." Bradwardine was distinguished as much for strictness of life and conversation as for his erudition, and hence Archbishop Stratford recommended him for the direction of the king's conscience. In the capacity of chaplain and confessor to Edward III., he attended that monarch during his wars in France. Some writers of his day did not hesitate to ascribe the king's victories to the virtue and holiness of the chaplain, rather than to the courage and tactics of the sovereign. It is certain that Bradwardine discharged the difficult duties of his office with integrity, discretion, and loyalty. He exerted himself to bring his master under the influence of religion, compelling him to moderate his anger when provoked, and restrain his ambition when flushed with victory. Whilst he counselled his prince, he was laborious in preaching to the troops and restraining their excesses. So far was he from being ambitious of ecclesiastical promotion, that it was with difficulty that, being already Chancellor of St. Paul's, he could be brought to accept a prebend in Lincoln cathedral. On the death of Stratford, Archbishop of Canterbury, which took place on the 23rd of August, 1348, the chapter elected Bradwardine to the primacy; but the election did not meet with the royal approbation, and Bradwardine was as willing to decline the primacy as the king was unwilling to part with his confessor. But it was a question of conscience with Bradwardine whether he ought to decline so responsible an office when imposed upon him. The king in consequence wrote to Pope Clement VI., requesting him to take no notice of the election of Bradwardine, but to bestow the archbishopric upon John de Ufford, or Offord, son of the Earl of Suffolk, and Dean of Lincoln and Chancellor of England. The Pope was too ready to comply, and declared Ufford archbishop, making him at the same time an unusual grant of favour and privilege. But the plague was at this time raging

in England, and Ufford fell a victim to it before he had received either pall or consecration. Again the choice of the chapter fell upon Bradwardine, and this time the king interposed no difficulty; whilst the Pope, unaware of his second election, had spontaneously appointed him by a bull of provision, of date June 10th, 1349. Bradwardine was accordingly consecrated at Avignon early in July, and the temporalities were restored to him on the 22nd of August; on the 26th of which month, before he had been enthroned, he died at Lambeth, and was buried in the chapel of St. Anselm, in his own cathedral. Bradwardine's best known work is his '*De Causa Dei, contra Pelagium*,' &c., folio, London, 1618, edited by Sir Henry Savile, from a MS. in Merton College Library; in addition to which may be mentioned his '*Geometria speculativa, cum Arithmetica speculativa*,' folio, Paris, 1495 and 1504. The Arithmetic was printed separately in 1502, and other editions of both appeared in 1512 and 1530; '*De Proportionibus*,' folio, Paris, 1495, folio, Venice, 1505; '*De Quadratura Circuli*,' folio, Paris, 1495. Bradwardine also left some Astronomical Tables, which appear never to have been printed.

BRAIDWOOD, JAMES, originator of the London Fire Establishment, was born in 1800 at Edinburgh, where he was brought up as a cabinetmaker by his father. Acquiring a considerable knowledge of mechanism, he was appointed by the Edinburgh police to improve and systematize the mode of extinguishing fires. Before he had perfected the arrangements, there occurred, in 1824, the most devastating fire which ever took place in that city, destroying the greater part of the High Street and the steeple of the Tron Church. His determination, daring, and skilful management on that occasion brought him into repute, which was increased by his management of the Engine Corps. A book published by him in 1830, '*On the Construction of Fire Engines and Apparatus, the training of Firemen, and the method of proceeding in Case of Fire*,' attracted the attention of many municipal bodies, and led to his settlement in the metropolis. Down to the year 1833, the various London fire insurance companies had their own engines, but failed to work together on any good system. Mr. Braidwood undertook to organise the London Fire Brigade in 1833, with the support of the several companies. He succeeded in drilling the men into admirable efficiency. He made many improvements in fire-engines and fire-escapes, introduced floating fire-engines on the Thames, and at length, in 1860, induced the various companies to adopt powerful steam fire-engines; the last-named improvement was, however, not ready until just after his death. On all matters affecting the security of the several government and other public buildings he was consulted as an authority; and he acted as superintendent of the royal palaces in reference to accidents from fire. On June 22nd, 1861, there occurred in Tooley-street one of the largest fires which had happened in the metropolis for many years, destroying buildings and merchandise to the value of nearly 2,000,000*l*. On this occasion the falling of a wall killed Mr. Braidwood. His interment at Abney Park Cemetery, on June 29th, assumed nearly the character of a public funeral. Throughout his career he was distinguished for his care of the men under him, his courage in time of danger, and his fertility of resources. On one occasion he brought out two barrels of gunpowder in succession through a burning shop into the street. In 1866 the essay already noticed, and various papers read before the Institution of Civil Engineers and the Society of Arts, were published in a volume called '*Fire Prevention and Fire Extinction*,' 8vo. When the London Fire Brigade was transferred to the management of the Metropolitan Board of Works in 1866, Mr. Braidwood's system of organization was retained in its main features.

BRAINERD, DAVID, a zealous and successful preacher and missionary to the North American Indians, was born in 1718, at Haddam, in Connecticut. At the age of nine years he lost his father, who was an assistant of the colony, or a member of the council. In 1739 he entered Yale College, from which he was expelled for expressions reflecting on one of the professors, early in 1742; in the spring of which year he repaired to Ripton, in order to prosecute his theological studies under the direction of Mr. Mills. Shortly after, at the end of July, he received licence to preach the gospel from the association of ministers which met at Banbury. Being impelled by a desire to exercise his ministry amongst the heathen, he repaired to New York, where, after having passed an examination by the correspondents of the Scottish Society for the Propagation of Christian Knowledge, he was appointed a missionary to the Indians. On the

1st of April, 1743, he settled at a place called Kannameek, between Stockbridge, in the State of Massachusetts, and Albany, in the province of New York. Here he endured extreme hardships and privations; but he was at the same time cheered by observing the marked effects of his teaching. After he had laboured among the Indians about twelve months, he advised them to remove to Stockbridge, about twenty miles distant, and to place themselves under the care of Mr. Sergeant. As most of them complied with this advice, Brainerd was free to proceed to the Forks of the Delaware, in Pennsylvania, where he set up his head-quarters, from which he made several excursions amongst the various tribes in the neighbourhood, and especially paid two visits to the Indians on the river Susquehanna. On his return from the latter of these tours, during which he had encountered uncommon hardships and fatigue, he was so depressed in mind and body as to meditate the abandonment of his labours; but was presently incited to new efforts by the encouraging intelligence which he received concerning a number of Indians at Crossweeksung, in New Jersey, whom he resolved to visit. After spending about a fortnight with them, with the most promising results, Mr. Brainerd returned home; and from this time Crossweeksung and the Forks of the Delaware were the principal scenes of his labours. In the summer of 1746, he again visited the Indians on the Susquehanna; and the progress of the disorder with which he had long contended was accelerated by the toils and privations he underwent on this occasion. The most alarming symptoms appeared, and he was no longer equal to the exertions to which his zeal impelled him; so that in the spring of 1747, being advised to proceed to New England, he went as far as Boston, from which he returned, in July, to Northampton, where, in the family of Jonathan Edwards, he passed the remainder of his days. He gradually declined until his death, on the 9th of October, 1747. He was quick of discernment, and tenacious in memory; of sound judgment, of great amiability, and power of attracting confidence and affection. His preaching was clear, forcible, tender, and pathetic, and charming for the warmth and temper of his natural eloquence. His theological attainments were great, and his friend President Edwards declared that he "never knew his equal, of his age and standing, for clear, accurate notions of the nature and essence of true religion, and its distinctions from its various false appearances."

Mr. Brainerd wrote a Narrative of his Labours at Kannameek, which, with his '*Journal, or an Account of the Rise and Progress of a remarkable Work of Grace amongst a number of Indians in New Jersey and Pennsylvania, with some General Remarks*,' was published in 1746, by the commissioners of his society in Scotland. President Edwards published '*An Account of the Life of David Brainerd, chiefly taken from his own Diary, and other private writings, written for his own use*.' To which is annexed, (1) Mr. B.'s Journal while among the Indians; (2) Mr. Pemberton's Sermon at his ordination. With an appendix relative to the Indian affairs, 8vo, Edinburgh, 1765. A new edition of his Memoirs was published, in 1822, by Sereno Edwards Dwight, including his Journal. Mr. Edwards had omitted the already printed Journals, which had been published in two parts—the first from the 19th of June to the 4th of November, 1745, entitled '*Mirabilia Dei inter Indicos*,' the second from the 24th of November, 1745, to the 19th of June, 1746, under the title of '*Divine Grace Displayed*,' &c. Mr. Dwight has incorporated these Journals in a regular chronological series with the rest of the Diary as given by Edwards. It may be added that the work which David Brainerd died in performing was taken up by his younger brother, JOHN BRAINERD, under whose care religion, civilisation, and education advanced, until, in 1759, he settled his congregation upon a tract of land purchased on their account by the Government of New Jersey, and comprising about 4000 acres, well adapted for the purposes of general cultivation. Towards the close of the American war, Mr. John Brainerd died; and, in 1783, was succeeded in the charge of his congregation by an Indian named Daniel Simon, who had received ordination. To this man, who was presently suspended from his office for irregularity, no successor was appointed; but the congregation was occasionally visited and supplied by the neighbouring ministers.

BRAMANTINO. BARTOLOMMEO SUARDI, called Bramantino after his master Bramante, the famous architect and painter, was the son of Alberto Suardi, an opulent citizen of Milan. The year of his birth is unknown. It is usually stated that he accompanied Bramante to Rome in 1495, and was employed by Julius II. to paint a series of portraits in the Vatican, which

were afterwards removed to make way for the paintings of Raffaele; on the other hand, Vasari says that they were painted by order of Nicholas V. But Julius was not elected Pope till November, 1503, while Nicolas died in 1455; neither, therefore, will suit the chronology. They were, perhaps, painted for Pope Alexander VI. (1492—1503). We know that they were destroyed by command of Julius II., after Raffaele had caused copies of them to be made, which were subsequently deposited in the museum of Paul Jovius at Como. Bramantino in 1525 painted a Pieta for the sacristy at Clairvaux, which was greatly admired. He also executed numerous works at Milan, and notably an Entombment over the door of the church of S. Sepolcro, which was regarded as a marvel of art for the foreshortening of the body of Christ (the feet being towards the spectator), and was the parent of numerous imitations; it is still in existence, but has been so enclosed as to be hidden from distinct inspection. The finest of his extant works are considered to be the frescoes on the vaulted ceiling of the St. Bruno Chapel in the Carthusian convent at Padua, and a Madonna Enthroned, in the Brera, Milan. Bramantino was employed as an engineer by Duke Francesco II. in repairing the fortifications of Milan, 1525; and Vasari states that the church of St. Ercolino was constructed, and that of St. Ambrogio, Milan, rebuilt from his designs, but this is at least doubtful. His death occurred between 1529 and 1536. As a painter he was especially celebrated for his skill in foreshortening and his knowledge of perspective; and Lomazzo has inserted his 'Rules' in his great work. But he was also admirable for the modelling of his figures and his clearness and truth of colour. Vasari, in his quaint way, relates that at Porta Vercellina was a picture by him (then destroyed), in which one of the horses was represented in so lively a manner that a living horse mistook it for reality, and kicked it repeatedly. Genuine pictures by Bramantino are rarely met with in the great collections; one is in our National Gallery, a large and fine example, No. 729, 'The Adoration of the Kings,' on wood, 7 ft. 10 in. high and 6 ft. 11 in. wide.

BRAMBILLA, FRANCESCO, an eminent Italian sculptor, was a native of Milan, and flourished in the second half of the 16th century. Vasari, a contemporary, mentions several of his works in marble, but he was most famous for those executed in bronze. The gates of the Certosa at Pavia are among his most admired productions, but his chief labour was on the Cathedral of Milan, upon which forty years of his life were spent. The grand figures of the four Evangelists and the four Fathers of the Church which support the great pulpit bear his name and the date 1570. He also designed the series of bass-relievi in the choir representing the history of the Virgin, and the metal Tabernacle of the Sacrament. He was interred in the cathedral which he had done so much to adorn.

BRAND, JOHN, an eminent antiquary, was born at Newcastle-upon-Tyne about 1743; completed his education at Lincoln College, Oxford; and, before he took orders, was for a time a master in the grammar-school of his native town. His first publication was 'Illicit Love: a poem written among the ruins of Godstow Nunnery,' 4to, 1775; but he became known by a more congenial labour, 'Observations on Popular Antiquities: including Bourne's *Antiquitates Vulgares*, with copious Additions,' 8vo, Newcastle, 1777. He now removed to London; was elected in 1777 fellow, and in 1784 secretary, of the Society of Antiquaries, to whose 'Archæologia' he was a frequent contributor. He was librarian to the Duke of Northumberland, who, in 1784, presented him to the rectory of St. Mary-at-Hill, London. In 1789 he published 'The History and Antiquities of the Town and County of Newcastle-upon-Tyne: embellished with engraved views of the Public Buildings, &c.,' 2 vols. 4to, London. He died on the 10th of September, 1806. Mr. Brand's fame rests on his Popular Antiquities. Up to the time of his death he had been collecting materials and making preparations for a greatly enlarged edition, in which he proposed "to dissolve amicably the literary partnership under the firm of Bourne and Brand, and to adopt a very different plan." But he left his MS. in so chaotic a condition that entire revision was required; a task finally undertaken by Mr. (afterwards Sir) Henry Ellis. The remodelled work appeared in 1813 under the title 'Observations on Popular Antiquities: chiefly illustrating the origin of our vulgar customs, ceremonies, and superstitions. By J. B.: arranged and revised with additions by H. E.,' 2 vols. 4to, London. A new edition, with further additions by Sir Henry Ellis, was published in 3 vols. sq. 8vo, 1841; and another issue with additions, forming 3 vols. of Bohn's 'Antiquarian Library,' in 1848. An edition by Mr. W. C. Hazlitt, also in 3 vols., appeared in 1869, but in this

the text has been so altered that the book cannot be fairly quoted as 'Brand's Antiquities.'

BRANDE, WILLIAM THOMAS [E. C. vol. vi. col. 980]. Mr. Brande, who was born in or about 1786, died at Tunbridge Wells on the 11th of February, 1866. He was a Fellow of the Royal Society, and in 1853 received the honorary degree of D.C.L. from the University of Oxford.

BRANDER, GUSTAVUS, a native of Sweden, engaged in commercial pursuits in the City of London, and yet finding time to devote himself to the study of natural history. He was elected a Fellow of the Royal Society in 1754, and contributed three short papers to the Transactions. He had the merit of pointing out that the fossil shells of the south coast of England were either of unknown species, or of such as lived in distant latitudes. After publishing descriptions of them he presented the originals to the Museum, or "Repository," as it was called, of the Royal Society. When the Society removed to Somerset House the Repository was presented to the British Museum, in 1781. Some of the specimens, however, found their way to the Museum of the College of Surgeons. It is said to be impossible now to recognise Brander's specimens among the crowds of fossils that enrich the British Museum—a fact much to be regretted. Brander died 21 January, 1787.

Brander's papers in the Ph. Tr. are in vol. xliii. on Belemnites, and in vol. xlix. a few lines on a Remarkable Echinus, and also 'An Account of the Effects of Lightning in the Danish Church in Wellclose Square, Ratcliff Highway.' His 'Fossilia Hantoniensia—Hampshire Fossils' was published in 4to, London, 1766. The Royal Society's copy is marked "December, 1765." The Preface is in parallel columns, Latin and English, from which it appears that the specimens figured "were collected out of the cliffs by the sea-coast between Christchurch and Lymington, but more especially about the cliffs by the village of Hordwell." The specimens are charmingly and artistically engraved, and the scientific descriptions in Latin are by Dr. Solander. The originals are said to be in the Branderian collection of the British Museum, "but very few are known to be natives of our own, or, indeed, any of the European shores; but the far greater part of them upon a comparison with the recent are wholly unknown to us."

BRANDIS, CHRISTIAN AUGUST, a German philosopher, a Prussian privy councillor, and professor of philosophy at Bonn, the son of Joachim Dietrich Brandis, an able physician and medical writer, was born at Hildesheim on the 13th of February, 1790. He studied philology and philosophy at the universities of Kiel and Göttingen, and took his degree of Ph.D. at Copenhagen in 1812, when he produced a thesis entitled 'Commentationes Eleaticæ,' 8vo, Altona, 1813, of which only the first part was published. The works of Professor Brandis comprise an edition of the Metaphysics of Aristotle, 8vo, Berlin, 1823; 'Scholia in Aristotelem,' 4to, Berlin, 1836; and 'Scholia Græca in Aristotelis Metaphysicam,' 4to and 8vo, Berlin, 1837. From 1827 to 1830 Brandis was joint editor of the Rhine Museum of Philology, &c., 'Rheinisches Museum für Philologie, Geschichte und Griechische Philosophie.' In 1837 he was called to Greece to become a member of the council of King Otho; and as the result of several years' sojourn in that country he published his Communications on Greece, 'Mittheilungen über Griechenland,' 3 vols. 12mo, Leipzig, 1842. His more strictly academical works are his Manual of the History of Græco-Roman Philosophy, 'Handbuch der Geschichte der Griechisch-Römischen Philosophie,' vols. 1—3, Berlin, 1835—1860; and a History of the Development of Greek Philosophy, and its Influence upon the Roman Empire, 'Geschichte der Entwicklungen der Griechischen Philosophie, und ihrer Nachwirkungen im Römischen Reiche,' 2 vols. 8vo, Berlin, 1862—64. He died July 24, 1867.

BRANDOLINI, AURELIO, called LIPPO on account of his infirmity of sight when a child: while yet young he became quite blind. He was born of a noble family at Florence about 1440. His fame was so great as an orator and philosopher that when Mathias Corvino, King of Hungary, founded the University of Buda in 1484, he was summoned by that sovereign to undertake the professorship of rhetoric. On the death of King Mathias in 1490, Brandolini returned to Florence, and entered the congregation of the Eremitani Brothers of St. Augustine, in the convent of Santa Maria. The achievements of his eloquence as a preacher, as related by various contemporary writers, are almost incredible. He was equally remarkable as an improvisatore. He died of the plague at Rome in 1497 or 1498. Considering his blindness, the acquirements and the productions of Brandolini are equally surprising. His works comprise 'Libri duo Paradoxorum Christianorum,' Basel, 1498 and 1543, Rome 1531, and

Cologne, 1573; 'Dialogus de Humanæ Vitæ Conditione et toleranda Corporis Ægritudine,' Basel, 1498 and 1543, Vienna, 1541; and 'De Ratione Scribendi Epistolas,' Basel, 1498 and 1549, and Cologne, 1573.

BRANDOLINI, RAFFAELLE, a younger brother of Aurelio, and who, from the same cause of blindness, was also surnamed Lippo, was born at Florence about the year 1465. He was celebrated as an orator, a scholar, and antiquary, and was especially famous for his remarkable powers of improvisation. Being at Naples when Charles VIII. of France made himself master of that kingdom, he surprised the victorious monarch by an extempore panegyric, which he afterwards turned into Latin verse. About two years after, the retirement of the French from Naples, or the death of his brother at Rome, called Raffaele Brandolini to the latter city, where he taught literature and eloquence. He was patronised by Leo X., who assigned him apartments in the Vatican, and called him *Oculus Pontificis*. This favour was either earned or recognised by Brandolini in a Latin dialogue entitled 'Leo,' written in praise of his patron and other distinguished members of the house of Medici. Two or three other Discourses, in the shape of Panegyrics or Funeral Orations, are extant by Brandolini, who died in some unascertained year after 1514, a date which appears in some of his letters.

* BRANDT, JOHANN FRIEDRICH, an eminent biologist, and, for many years, the director of the zoological museum belonging to the Imperial Academy of Science at St. Petersburg. His writings are very numerous, but mostly contained in the publications of the Academy with which he is connected. They range over a wide field, from infusorians, annelids, and insects, to birds and mammals. Their general tendency is towards the anatomical and physiological branches of zoological inquiry, although there are not a few papers entirely devoted to diagnoses and classification. His papers are upwards of 150 in number, some of them being of considerable bulk; and to the more important of them we propose devoting a few lines. One of his earliest efforts in literature was a 'Prodrum descriptionis animalium ab H. Mertensio observatorum,' 1825, which deals with the hydrozoan forms collected by Mertens, and which was, in 1838, expanded into an elaborate memoir on the jelly-fishes or scaphophor stages of this class of animals. (Mém. Acad. Sci. St. Petersburg, 6th series, iv. pp. 237—412.) It is, in fact, a full report on the state of knowledge respecting these animals at that time, and is illustrated with 31 plates of coloured figures drawn from nature by Mertens. A group allied to these, the *Hyalochætitæ*, has been similarly treated by him in 'De Nova Polyporum classis familia Hyalochætidum nomine designanda,' and 'Symbolæ ad polypus hyalochætitides.' At an early period of his life he had drawn up a full account of the anatomy and physiology of the common medicinal leech, which is given in the 'Medicinische Zoologie,' 2 vols., 1829—1833, a work written by him, in conjunction with M. Ratzeburg. He discovered the presence of a stomato-gastric, or sympathetic, system of nerves, and several other features connected with this annelid. Somewhat later appeared his 'Bemerkungen über die Mundmagen oder Eingeweiden nerven,' in Mém. Acad. Sci. St. Petersb., iii., pp. 561—612, 1835, in which he brings together all the information previously acquired respecting these nerves in the invertebrate sub-kingdom, and adds much fresh matter on the subject. Other papers touch upon various points—physiological, anatomical, and diagnostic—connected with crustaceans, myriapods, the cochineal insects, the genus *Meloe*, ('Monographia generis Meloes,' in 'Nova Acta Acad. Caes. Leop. Nat. Cur.,' xvi., pp. 101—142, written in conjunction with Erichson), and spiders. His contributions to the literature bearing upon vertebrates are both more numerous and more important. As regards fishes, he has published remarks on the classification of the class, and an abstract of a paper on the development of ganoids; this latter, we believe, was intended to have formed a portion of a monograph of the sturgeons of Russia, which the author was engaged on in 1865, but, so far as we know, the monograph has not been issued yet. Birds have occupied a considerable share of his attention, as is witnessed by his 'Beiträge zur Kenntniss der Naturgeschichte der Vögel mit besonderer Beziehung auf Skeletbau und vergleichende Zoologie,' in 'Mém. Acad. Sci. St. Petersburg,' v. pp. 81—238 (1840), which, together with numerous minor papers in the 'Bulletins' of the same society, form valuable additions to our knowledge of the order *Natares*. His specialty, however, is in the mammalian class. Thus we have a paper, 'De Solenodonte,' 1833, describing and establishing a remarkable genus of shrew-like animals; a number of papers on *Rhytina borealis*, of which the most noteworthy

BIOG. DIV.—SUP.

is 'Symbolæ Sirenologicae,' in 'Mém. Acad. Sci. St. Petersburg,' 6th Series, vii. pp. 1—160 (1849); papers on the tichorhine rhinoceros, of which we may specially mention 'De Rhinocerotis Antiquitatis,' in 'Mém. Acad. Sci. St. Petersburg,' 6th Series, vii., pp. 161—419, as being the fullest account known of that extraordinary extinct pachyderm, and as containing details respecting some of the soft parts; papers on the mammoth, amongst which will be found a coloured partially ideal figure of this beast; and a group of communications upon other mammalia, amongst which we may refer to the 'Mammalium Rodentium exoticorum,' in 'Mém. Acad. Sci. St. Petersburg,' 6th Series, iii., pp. 357—442; and the 'Beiträge zur nähern Kenntniss der Säugethiere Russlands,' in 'Mém. Acad. Sci. St. Petersburg,' 6th Series, ix., pp. 2—365 (1855), as being an excellent account of the rodents, but more especially of the beaver. The last two papers are fully illustrated with figures.

BRANDT, or BRANT, SEBASTIAN, a lawyer and satiric poet, was born at Strasburg, about the year 1458. He prosecuted his legal and classical studies at Basel, where in 1484 he obtained licence to teach, and in 1489 took his doctor's degree. The administrative ability which he exhibited attracted general attention, and procured for him the appointment, in 1501, to the Syndicate, and two years after to the chancellorship, of his native city. He likewise received from the Emperor Maximilian the honour of being a councillor and Count Palatine. He died at Strasburg on the 10th of May, 1521.

Notwithstanding his able discharge of various public offices, he is chiefly known as the author of a work entitled the Ship of Fools, 'Narrenschiff, oder das Schiff von Narragonia,' 4to, Basel, about 1494, a German poem in iambic verse, in which he lashed the prevailing vices and follies of his time in a series of over a hundred chapters, each of which was devoted to the portrayal of a group of representative fools. The author describes a vessel laden with all sorts of absurd persons, though, it has been said, he seems to have no end in view but to bring them into one place, so that they might be described, as the beasts were marshalled before Adam in order to be named. The 'Narrenschiff' was neither brilliant in its poetic genius, nor scathing in its satire; yet as a book of sound morality and knowledge of human nature, it achieved an immense popularity, not only in its original German, but in the languages of France, Holland, and England. The English version, entitled the 'Ship of Fools,' which was published in folio, London, 1608 and 1670, was executed by the Rev. Alexander Barclay, who professedly translated it from the Latin version of James Locher, 'Navis Stultifera Mortalium, [e] vernaculo ac vulgari sermone in Latinum conversa,' 4to, Basel, 1488, a date which would be more correctly read as 1498. Before the end of the fifteenth century, the book was current in all the dialects of Germany; and Geiler von Kaiserberg, a friend of the author, made the 'Narrenschiff' the text or basis of a series of 'Sermons,' 4to, 1511. Among the most recent editions of the 'Narrenschiff' is that published, with a life of the author, by Strobel, 8vo, Quedlinburg and Leipzig, 1839, and that which is esteemed the best of all, 8vo, Leipzig, 1854. In addition to his great work, Brandt is more restrictedly known as the translator and editor of some of the classics; and as the author of various works in theology and devotion, in law, and in Latin verse.

BRASSAVOLA, ANTONIO MUSA, a physician, born in 1500 at Ferrara, then a celebrated school of science. Antonio studied under masters of repute, and became celebrated in public disputations at Ferrara, Padua, and Bologna. At the age of 25 he was appointed first physician to Hercules II., hereditary prince and afterwards duke of Ferrara. After visiting France and other countries in the service of the prince, he became professor of dialectics and natural philosophy in the university of his native town. He also studied botany with success, and established the first botanic garden of modern times. His 'Examen omnium Simplicium Medicamentorum,' published in 1536 (written in the Platonic form of dialogue), though based on the study of nature, has, according to Cuvier, the character of a commentary on the ancients. Brassavola was consulted by several sovereigns, and received permission from Francis I. of France to add the lilies to his arms. He died July 6, 1555.

BRATHWAITE, RICHARD, whose surname varies as Brathwait, Braithwaite, and Braithwaite, a pastoral poet of the reign of James I., was born in 1588, the second son of Thomas Brathwaite, of Warcop, near Appleby, the representative of a respectable landed family in Westmoreland. In 1604 he was entered a commoner of Oriel College, Oxford, and, according to Wood, "while he continued in that house, which

was at least three years, he avoided, as much as he could, the rough paths of logic and philosophy, and traced those smooth ones of poetry and Roman history, in which at length he did excel. Afterwards he removed to Cambridge, as it seems, where also he spent some time for the sake of dead and living authors, and then receding to the north parts of England, his father bestowed on him [the estate of] Barnside, where living many years, he became captain of a foot-company in the trained bands, a deputy-lieutenant in the county of Westmoreland, a justice of peace, and a noted wit and poet. . . . In his latter days he removed, upon an employment, or rather a second marriage, to Appleton, near Richmond, in Yorkshire, where dying on the 4th day of May, 1673, was buried in the parish church of Catherick, near that place; leaving then behind him the character of a well-bred gentleman and a good neighbour." Brathwaite was an exceedingly prolific writer. His works comprise 'The Golden Fleece, whereunto bee annexed two Elegies, entitled Narcissus' Change and Æson's Dotage,' 8vo, London, 1611; 'The Poet's Willow, or the Passionate Shepherd: with sundry delightful and no less Passionate Sonnets, describing the Passions of a discontented and perplexed Lover,' 8vo, London, 1614, written in lyric and Anacreontic measures; 'The Prodigal's Tears, or his Farewell to Vanity: a Treatise of Sovereign Cordials to the Disconsolate Soul,' &c., 8vo, London, 1614; 'The Scholar's Medley, or an intermixt Discourse upon historical and poetical relations,' 4to, London, 1614; 'A Strappado for the Devil; Epigrams and Satires alluding to the Time, with divers measures of no less delight,' 8vo, London, 1615, the second part of which is entitled 'Love's Labyrinth, or the True Lovers' Knot, including the disastrous Falls of two Star-crost Lovers, Pyramus and Thisbe. A subject heretofore handled, but now with much more Propriety of Passion, and variety of Invention; 'Solemn Jovial Disputation, theoreticke and practicke, briefly shadowing the Law of Drinking, &c., &c., Oenozythopolis, at the Sign of Red-Eyes, 1617, and 'The Smoking Age, or the Man in the Mist, with the Life and Death of Tobacco, &c. Oenozythopolis, at the Sign of Tear-nose,' 8vo, 1617, one of the scarcest books in England, the plates of which are the earliest production of Marshall, the engraver; 'The Good Wife, or a rare one amongst Women. Whereto is annexed an Exquisite Discourse of Epitaphs, including the Choicest thereof, Ancient or Modern,' 8vo, London, 1618, and in the same volume, with a fresh title-page, 'Remains after Death, including by way of Introduction divers memorable Observances occasioned upon Discourse of Epitaphs and Epycedes, their Distinction and Definition seconded by approved Authors,' a volume which, taken altogether, Dr. Bliss thinks "one of the most curious as well as one of the scarcest books of the period to which it belongs;" 'A New Spring shadowed in sundry Pithy Poems,' 4to, London, 1619; 'Essays upon the Five Senses, with a Pithy one upon Detraction,' 8vo, London, 1620, and 12mo, 1635; 'Shepherds' Tales,' 8vo, London, 1621, a continuation of which was printed with 'Nature's Embassy, or the Wild Man's Measures, danced naked by twelve Satyrs,' 8vo, London, 1621, with which were also incorporated 'Divine and Moral Essays,' 'Omphale, or the Inconstant Shepherdess,' and 'Odes, or Philomel's Tears; 'Time's Curtain Drawn, or the Anatomy of Vanity: with other choice Poems, entituled Health from Helicon,' London, 8vo, 1621; 'The English Gentleman: containing sundry excellent Rules or exquisite Observations, tending to Direction of every Gentleman of selecter Rank and Quality, how to demean, or accommodate himself in the Management of public or private Affairs,' 4to, London, 1630, 1633, a third edition in 1641, entitled 'The English Gentleman and Gentlewoman, with a Lady's Love-lecture, and a Supplement lately annexed, and entituled The Turtle's Triumph,' and a fourth edition which, with a new title-page and a few additions, was published under the title of 'Time's Treasury, or Academy for Gentry,' folio, London, 1652; 'The English Gentlewoman, drawn out to the full Body, expressing what Habiliments do best attire her, what Ornaments do best adorn her, what Complements do best accomplish her,' 4to, London, 1631 and 1633, and a third edition, incorporated, as already stated, with the 'English Gentlewoman,' folio, London, 1641; 'Whimzies, or a new Cast of Characters,' 12mo, London, 1631; 'Mercurius Britannicus, or the English Intelligencer,' 4to, and 2nd edition 4to, 1641, a political "tragic comedy," on the subject of ship-money; 'Anniversaries upon his Panarete' (Mrs. Frances Brathwaite), 8vo, London, 1634, of which a continuation appeared the following year; 'The Arcadian Princess, or the

Triumph of Justice,' 18mo, London, 1635, which is a translation from Mariano Silesio, a Florentine, interspersed with various Poesies; 'Lives of all the Roman Emperors,' being exactly collected, from Julius Cæsar unto the now reigning Ferdinand the Second,' 12mo, London, 1636; 'A Spiritual Spicery, containing sundry sweet Tractates of Devotion and Piety,' 12mo, London, 1638, a rendering of a work by Jacobus Gruythrodus, a German, with which was published 'A Christian Dial,' written by Joh. Justus Lanspergius, a Carthusian; 'Psalms of David, the King and Prophet, and of other holy Prophets, paraphrased in English,' 12mo, London, 1638; 'Ar't asleep, Husband! a Bolster Lecture, &c., 12mo, London, 1640, by "Philogenes Pandonius"; 'Muster Roll of the Evil Angels embattled against S. Michael,' 24mo, London, 1655, and in 1659, with a new title-page, 'Capital Hereticks,' &c.; 'Lignum Vitæ. Libellus in quatuor partes distinctus,' &c., 12mo, London, 1658; 'Honest Ghost, or a Voice from the Vault; an Age for Apes,' 12mo, London, 1658; 'Congratulatory Poem to his Majesty upon his happy Arrival in our late discomposed Albion,' 4to, London, 1660; and various others. But what is at present of the greatest interest with regard to Brathwaite's literary activity, is the fact that we are at length enabled to identify him as the author of 'Barnabee's Journal, and Bessy Bell, both in Latin and English, by Corymbæus,' London, about 1648 or 1650. A second edition, to which an index and some introductory matter were added, repeated in the numerous subsequent ones, was published as 'Drunken Barnaby's four Journeys to the North of England, in Latin and English verse, &c., to which is added Bessy Bell,' 8vo, London, 1716, third edition, 8vo, London, 1723, 8vo, Dublin, 1762, fourth edition, 8vo, London, 1776, fifth edition, 8vo, London, 1805, with seven new vignettes and tail-pieces, and having an advertisement prefixed relative to the then supposed author, Barnaby Harrington, and his Journal, sixth edition, 8vo, London, 1808, and seventh, 1818. A new edition with four lithographic prints appeared in 12mo, London, 1822. But the final touch to the Barnaby bibliography was given by the publication of an excellently edited reprint, of which only 125 copies were printed, entitled 'Barnabæ Itinerarium, or Barnabee's Journal, with a Life of the Author, a Bibliographical Introduction to the Itinerary, and a Catalogue of his Works. Edited from the first edition, by Joseph Haslewood,' 2 vols. 12mo, London, 1820. It is to Mr. Haslewood that we are indebted for the fact of having traced 'Barnaby's Journal' to its proper author.

*BRAUN, ALEXANDER, a celebrated German botanist, who has been long engaged in teaching his favourite science at the High Schools of Freiburg and Giessen, and as professor of botany at Berlin. His papers, which are seventy-two or more in number, and his separate works, are chiefly devoted to the cryptogams, to organogeny, or to philosophical observations on plants in general. One of the lines of study which he has done much to develop is the law which regulates the position of leaves on the branches, or phyllotaxis. The first great step was made by Schimper in 1829, and his observations directed Braun's attention more particularly to the subject, and led to his several papers on it, the most important being the 'Vergleichende Untersuchung über die Ordnung der Schuppen an den Tannenzapfen, als Einleitung zur Untersuchung der Blattstellung überhaupt,' in 'Nova Acta Acad. Cæs. Leop.' xv. pp. 199—401 (1831), and 33 plates; and 'Beschreibung der Symphytum Zeyheri,' in 'Geiger's Magazine,' xxviii. He has given special attention to the *Characeæ*, no fewer than eleven of his papers being devoted to this group alone. He took an active share in the discussion as to the possibility or rather actual occurrence of parthenogenesis in plants. Several examples have been adduced of the fertilisation of female flowers without the aid of pollen, but all, with the exception of those relating to *Celebogyne ilicifolia*, have been disproved or reasonably doubted. In the case of the plant just named, three plants, all female, were sent from Australia to Kew Gardens, where they flowered and ripened their seeds, although they were the only specimens known to exist in this country. This led to the case being thoroughly examined by Braun, Schenck, Regel, Baillon, and other eminent continental botanists. Braun's principal contribution to the subject is 'Ueber Polyembryonie und Keimung von *Celebogyne*,' in the 'Abhandlungen der Königlichen Akad. Wissen. Berlin,' p. 109—263 (1859), in which he made the important observation that a pollen grain was found on the stigma. His experiments were conducted with the scrupulous care and rigorous method which he is known to bring to all his inquiries, and these experiments, although not absolutely conclusive, still, so far as they

went, supported the view that parthenogenesis is possible in plants. Later, however, Karsten discovered that hermaphrodite flowers are developed during the early summer months, and as his observation seems to be trustworthy, it is almost certain that *Calebogyne* can only be fertilised by pollen, as is the case with all other flowers. The work by which Braun is best known in this country is the 'Betrachtungen über die Erscheinung der Verjungen in die Natur,' 1851, of which an English translation was issued by the Ray Society for the year 1853, and which Professor Hensley pronounces to be one of the most important contributions to the philosophy of botany. It consists chiefly of a clear outline of the morphology of plants, more especially as regards leaves; and of one of the best accounts we possess of the phenomena of cell structure and cell growth.

BRAUN, AUGUST EMIL, German archaeologist, was born April 19, 1809, and studied successively at the gymnasium of his native place, at Göttingen, and at Munich. His attention having been directed strongly to art and aesthetics, after staying some time at Dresden, where he had the benefit of Rumohr's guidance, he went to Berlin, and thence in 1833 to Rome. Here he was appointed librarian of the Archaeological Institute; later succeeded Gerhard as secretary; in 1834 became editor of its 'Bulletino,' and in 1837 of its 'Annali.' Constantly engaged in investigating the antiquities of the city, he came, from his wide range of knowledge and connection with the Institute, to be regarded as the leading authority on everything connected with the topography and archaeology of ancient Rome. He did not, however, confine his attention to the past. He was greatly interested in the novel applications of scientific processes to artistic purposes, and was the founder of a galvanoplastic establishment, which had for its object the reproduction of works of classic times, and which, as is said, mainly through Braun's persevering efforts, succeeded in producing metal statues (like that of Hahnenmann, erected at Leipzig in 1851) of heroic size. In addition to many monographs in Italian and German, illustrative of particular works of Greek and Roman antiquity, he wrote 'Antike Marmorwerke,' with 24 plates, fol. Leipzig, 1843; 'La Passione de Gesù Christo nella Cattedrale di Siena dipintura di Duccio di Bino della Buoninsegna,' &c., with 27 plates, oblong folio, Rome, 1847, with German text, Leipzig, 1850; 'Die Apotheose des Homer in Galvanoplastischer Nachbildung,' 4to, Leipzig, 1848; 'Specimens of Ornamental Art, selected from the best models of the classical epochs, 80 coloured plates by L. Gruner,' large folio, London, 1850; 'Die Ruinen,' &c., 'The Ruins and Museums of Rome: a Guide-book for travellers, artists, and lovers of antiquity,' German and English versions, 8vo, Brunswick, 1854, London, 1855, the best book of the kind that had then been published; 'Vorschule der Kunst Mythologie,' with 100 plates, 4to, Gotha, 1854; 'Introduction to the Study of Art Mythology,' an English translation, by J. Grant, Gotha, 1856. Dr. Braun died at Rome, September 12, 1866.

BRAY, THOMAS, celebrated for his labours in the propagation of the gospel, was born in 1656 at Marton in Shropshire, the residence of his parents, who were persons of good reputation, but of no considerable means. He was early sent to Oswestry school, whence, after completing his preparation for the university, he removed to Hart Hall, Oxford. Here he attained considerable proficiency in languages and divinity; and soon after taking his B.A. degree, was admitted into holy orders. He became successively curate of a parish near Bridgenorth and chaplain in the family of Sir Thomas Price, of Park Hall, Warwickshire, who gave him the donative of Lea Marston. Soon after he was presented by Lord Digby to the vicarage of Over-Whitacre; and in 1690, by the same patron, to the rectory of Sheldon, which last preferment he held until three months before his death, when his advanced age and infirmities induced him to resign. He took his M.A. degree on the 12th of December, 1693. Whilst at Sheldon he produced the first volume of his 'Course of Lectures on the Church Catechism,' folio, Oxford, 1696. The publication of these lectures, and the reputation he thereby acquired, recommended him to Dr. Compton, Bishop of London, as a proper person to be entrusted, as Commissary of Maryland, with the modelling and establishment of the church in that colony. Mr. Bray, yielding to the attractions of an arduous field of usefulness, postponed the fulfilment of a natural wish to complete the publication of his catechetical lectures, and threw all his energies into the duties of the office with which he charged himself, as a useful preliminary to which he proceeded to his degrees of B.D. and D.D. together by accumulation, December 17th, 1696. In conformity with his idea of forming

libraries, and of giving directions to missionaries for the prosecution of their theological studies, he published 'Bibliotheca Parochialis; or, a Scheme of such theological Heads, as are more peculiarly requisite to be well studied by every pastor of a parish. With a Catalogue of Books, which may be profitably read on each of those points,' part i. 4to, London, 1697; second edition, 8vo, London, 1707. He published also a sermon entitled 'Apostolic Charity, its Nature and Excellency considered, in a Discourse upon Daniel xii. 3; preached at St. Paul's, December 19th, 1697, at the Ordination of some Protestant Missionaries to be sent to the Plantations. To which is prefixed, A General View of the English Colonies in America, in order to show what provision is wanting for the Propagation of Christianity in those parts; together with proposals for promoting the same, to induce such of the Clergy of this Kingdom as are persons of sobriety and abilities to accept of a Mission,' 4to, London, 1699. Other publications of Dr. Bray's, about the time of his delivery of this sermon, were his 'Short Discourse on the Doctrine of our Baptismal Covenant,' 8vo, London, 1697; and 'An Essay towards promoting all necessary useful Knowledge, both divine and human,' 4to, London, 1697. After the acceptance of office as Commissary of Maryland, Dr. Bray waited for some time in the expectation of procuring a public fund for the propagation of the Gospel in foreign parts; failing of which he succeeded in forming a voluntary society, "both to carry on the service already begun for the Plantations, and to propagate Christian knowledge, at home and abroad." The first labours of this society were to send libraries abroad, to distribute books to soldiers and sailors, and to further the cause of education. Dr. Bray was also instrumental in founding lending libraries for the parochial clergy, in the various rural deaneries throughout the kingdom. About this time he refused two offers of preferment—as sub-almoner, and as incumbent of the donative of Aldgate, in the city, feeling reluctant to accept any office that was inconsistent with his going to Maryland, as soon as circumstances should render his visit expedient. The time at length came; and having already provided Maryland and many other colonies with a competent number of ministers, and furnished them with good libraries, he set sail from the Downs on the 20th of December, 1699, and, after a tedious and dangerous voyage, arrived in Maryland on the 12th of March, 1700. Before leaving this country he commenced his plan of instituting clerical libraries at our sea-ports, by establishing or reviving sea-port libraries for the use of missionaries, sea-chaplains, and others, at Gravesend, Deal, and Plymouth.

Arrived in Maryland, he addressed himself to the question of the settlement and maintenance of the parochial clergy, and preached sermons in various parts, calculated to incline the country to the establishment of the church and clergy; which, indeed, was voted by the colonial Assembly. Dr. Bray opened his first general visitation as commissary on the 22nd of May, 1700, at Annapolis: at the close of which it was judged expedient that he should proceed to England in order to procure the sanction of the Home Government for the Acts passed by the provincial Assembly in favour of an ecclesiastical establishment, as against "the expected opposition of Quakers and Papists." This opposition was not without effect, although the final action of the Home Government was in favour of the establishment and maintenance of the church in Maryland. Dr. Bray's literary activity about this time was represented by the 'Acts of his Visitation held at Annapolis, in Maryland, May 23rd, 24th, and 25th, anno 1700,' folio, London, 1700; 'Memorial of the Present State of Religion in North America,' folio, London, 1700; and 'Several Circular Letters to the Clergy of Maryland, subsequent to their late Visitation,' folio, London, 1701. On the 9th of June, 1701, Dr. Bray had the satisfaction, in answer to a petition presented in the preceding month to King William III., of laying before the members of his voluntary propagation society the royal letters patent by which they were incorporated as "The Society for the Propagation of the Gospel in Foreign Parts." The honour of the foundation of this useful and venerable society belongs, therefore, to Dr. Bray, whose agitation for the kindred object of supplying the literary wants of the parochial clergy received legislative sanction in an Act passed in the 7th year of Queen Anne "for the better preservation of parochial libraries in the part of Great Britain called England." Dr. Bray had the reputation of being well skilled in the Romish controversy; and in 1712 he published, in folio, his 'Martyrology, or Papal Usurpation,' a compilation of scarce treatises of various celebrated authors. He was prevented in his design of publishing a second volume, and at his death left his collection of 'Martyrological

Memoirs,' both printed and in manuscript, to Sion College. He devoted much time and property to the furtherance of a scheme for the evangelisation of the negroes, and assembled in his church of St. Botolph without Aldgate—the presentation to which he had accepted in 1706—the young divines who had offered themselves as missionaries, in order to give them advice and to put them through a special catechetical exercise. His own opinion was, that in missionary effort, civilisation should precede conversion. In 1726 Dr. Bray published his 'Directorium Missionarium,' and his 'Primordia Bibliothecaria,' in which are several schemes of parochial libraries, and some other tracts of a like kind. He also reprinted the 'Ecclesiastes' of Erasmus, a work on the pastoral office, which Dr. Bray valued very highly. In 1727 he began to busy himself for the secular and the spiritual advantage of persons confined in various prisons of the metropolis; but, feeling the infirmities of advancing age, was anxious to share the burden of his multifarious beneficence with a company of men of like mind with himself. These persons, who constituted a society by the name of the Associates of Dr. Bray, have given forth at intervals many Reports of their proceedings, of which the last that has come under our notice bears the date 1853, and is for the year 1851–52. Dr. Bray's universal philanthropy led him to take part in establishing the Society for Reformation of Manners, and the Society for the Relief of poor Proselytes. He also instituted several charity schools; and indeed most of the religious Societies in London in the 18th century owed grateful acknowledgments to his memory, and were in a large measure formed on the plans he projected. To his great objects he contributed the whole of his slender fortune, and closed a course of usefulness rarely equalled, on the 15th of February, 1730, in his 73rd year.

BRAYLEY, EDWARD WILLIAM, F.R.S. [E. C. vol. vi. col. 952]. This laborious investigator of physical phenomena, died of disease of the heart on the 1st of February, 1870. To the Biographical Division of the English Cyclopædia Mr. Brayley contributed the lives of several men of science; and to the Arts and Sciences Division the articles Meteors, Correlation of Physical Forces, Refrigeration of the Globe, Seismology, Waves and Tides, Winds, and others on cognate branches of physics. He also wrote the elaborate papers on the 'Physical Constitution and Functions of the Sun' in the Companion to the Almanac for the years 1864, 1865, and 1866, and that on 'the Periodical Meteors of November' in the volume for 1868.

BRÉGUET, ABRAHAM LOUIS, French horologist and philosophical instrument maker, was born at Neuchâtel, on the 10th of January, 1747. After the death of his father, in 1757, Bréguet's mother married a clockmaker, to whom the boy was soon afterwards apprenticed, but not much to his own satisfaction. He went to Paris in 1762, placed himself under a clockmaker at Versailles, and made a rapid advance at his trade, becoming widely known for his skill, and winning the good opinion and friendship of his employer. Devoting a portion of his time to the study of mathematics under the Abbé Marie, he soon commenced business on his own account, and then prosecuted an uninterrupted series of successful labours for the rest of his life. In 1780 he completed a so-called 'perpetual clock,' intended to wind itself up and keep perpetually going—an achievement now admitted to be impossible, but to which he applied mechanism more beautiful than had before been adopted for such attempts. He made watches to mark seconds, some of them so perfect that they did not require to be opened for cleaning or adjustment for eight years. It is related that the Duc d'Orléans on one occasion, when in London, showed one of Bréguet's watches to Arnold; the latter was so struck with admiration at its excellence, that he went to Paris to see Bréguet; the two eminent horologists became friends, and Bréguet consigned his son to Arnold for instruction. Driven into exile by the Revolution, Bréguet afterwards returned to Paris, and became the most noted of French horologists. He was appointed clockmaker to the Marine Department, member of the Bureau de Longitude, and member of the Academy of Sciences. Besides watches and clocks, he made exquisite instruments for navigation, astronomy, and the physical sciences. Repeating-watches, before his time, had openings left in the cases to render the sound audible, whereby dust speedily entered and disarranged the works; but he rendered the tone clear and sonorous within a perfectly close case. This led to an extensive and profitable manufacture, not only of repeating watches, but of musical snuff-boxes, &c. He made great improvements in the manufacture of chronometers and marine clocks; invented a new escapement; devised wholly new and beautiful tools for

watch-making; introduced a highly curious sympathetic pendulum for regulating watches; invented a 'comptoir militaire' for regulating the march or step of troops; contrived a 'comptoir astronomique,' which, introduced in the tube of a telescope, rendered one-hundredth part of a second of time appreciable and measurable; made double-cased ladies' watches only one-eighth of an inch in thickness, with the time-indications *tangible* on the edge as well as *visible* on the surface; invented metallic thermometers more sensitive to changes of temperature than the instruments before in use; constructed the mechanism for Chappe's government semaphores (now superseded by the electric telegraph); and greatly improved the jewellery of watches, by extending the use of rubies in pivot-holes. Bréguet, who was an estimable and much-respected man, died on the 17th of September, 1823.

BREHM, CHRISTIAN LUDWIG, German ornithologist, was born Jan. 24, 1787, at Schönaue near Gotha. He studied theology at Jena, and in 1813 became the minister of the small village of Renthendorf on the river Orla in Saxe-Weimar, where he remained till his death, which happened on the 23rd of June, 1864. The leisure time that was spared to him from his pastoral duties was devoted to the study of natural history, but more especially of the birds of Europe, and to the production of numerous books and papers. A full list of the latter is given in the Royal Society's 'Catalogue of Scientific Papers,' comprising 125 items. His principal separate works are—'Die Lehrbuch der naturgeschichte aller europäischen Vögel,' 1823, 1824; 'Handbuch der naturgeschichte aller Vögel Deutschlands, etc.' 1831, in which upwards of 900 species are noticed; 'Beiträge zur Vögelkunde in vollständigen Beschreibungen seltener . . . deutschen Vögel,' 1820–1822, which is perhaps his best work, containing a large amount of information as to the plumage of birds at different seasons and ages, derived from personal observation; it is in three volumes, and he had the assistance of W. Schelling, whose name, however, appears in the third volume only. Another group of his works is devoted to the description, treatment, and capture of domesticated and semi-domesticated birds. Amongst them may be cited the 'Handbuch für die Liebhaber der Stuben-Haus- und aller der Zahnung-werthen Vögel,' 1832, which is mainly based upon the experience of Count Gourcy Droitaumont, who kept 80 species of cage and domestic birds in the course of 18 years; 'Die Kunst, Vögel als Balge zu bereiten, aufzustopfen, aufzustellen, aufzubewahren, nebst einer kurzen Anleitung Schmetterlinge und Käfer zu fangen, zu präparieren,' 1842, a guide to bird preserving; 'Der vollständige Vögel-fang,' 1855, an amplified and remodelled form of a treatise he wrote in 1836: it is a synopsis of all the European birds, with indications as to how they may be caught—there are also notes on some new species obtained by his sons from Africa, and on the bird-catching contrivances of the Africans; and 'Die Wartung, Pflege, und Fortpflanzung der Canarien-vögel, Sprosser, Nachtigallen,' etc., 1855, which is a guide to the treatment of cage birds, and the modern substitute for Bechstein's well-known work. He was the editor of 'Ornis,' a periodical for facts connected with birds, but it ceased after a few parts only had been published. He also edited a 'Monographie der Papageien,' 1842–1855, which was discontinued after 34 species had been treated: if it had been carried to completion the work would have been bulky and costly, but not superior to Levaillant's monograph, with its continuations; the species noticed have 60 pages of press and 75 large coloured plates devoted to them; while in 1855 nearly 300 species were known. In conjunction with some other naturalists, he formed one of the best collections of German birds yet brought together. His brother, Alfred Edmund Brehm, has written largely on natural history, and many of his works are of a popular character. His sons, Oscar and Reinhold, have also published a few ornithological memoirs.

* BREITHAUP, JOHANN AUGUST FRIEDRICH, a German mineralogist, was born May 16, 1791, at Probstzella, near Saalfeld. His education was completed at Freiberg, in the mining academy of which town he became an assistant professor and inspector of precious stones, and in 1827 professor of oryctognosy in the same institution. He has written many papers for scientific periodicals, and several separate works. Amongst the latter the most important are his 'Vollständigen Handbuch der Mineralogie,' 1836–1847, 3 vols.; and "Vollständige Charakteristik der Mineral Systems," which reached a third edition in 1832. He was the first describer of many species of minerals, and he has in various other ways contributed to the advancement of mineralogical science.

BREITKOPF, JOHANN GOTTLOB IMMANUEL, an eminent printer and type-founder, and writer on these arts, was born at Leipzig, November 23, 1719. He was the son of Bernhard Christian Breitkopf, who had established a large printing office in that city. After studying languages, history, and philosophy, the young Johann became acquainted with Albert Dürer's attempts to improve the shapes of printing-type, and this led him to pursue a similar course with great ardour. He made many improvements, both in the forms of the letters and in the composition of the alloy. In 1755 he re-introduced, with many improvements in detail, the use of moveable metal types for music, in which the notes were cast in separate types, with ledger-lines attached to them. About 1720 those early forms of type had been superseded by engraved plates, printed at a copper-plate press; and afterwards by a kind of stereotype plate of notes cast in sand. Breitkopf revived the old plan, but with the ledger-lines cast by themselves in separate types. Reinhard afterwards devised a mode of combining Breitkopf's cast types with engraved plates of the ledger-lines. It may be added that both systems (plates printed at the copper-plate press, and types printed at the common press) are adopted at the present day. Breitkopf next made an attempt to introduce moveable types for printing geographical maps, and others for printing in the Chinese language; but these were not commercially successful. In 1774 appeared his *Essay on the History of the Invention of Printing*, 'Über die Geschichte der Erfindung der Buchdruckerkunst,' Leipzig. Several years later he wrote a work on the origin of playing cards, the introduction of linen-rag paper, and the adoption of wood engraving, 'Versuch den Ursprung der Spielkarten, die Einführung des Leinwandpapiers, und den Anfang der Holzschnidekunst in Europa zu erforschen,' Leipzig, 4to, 1784—1801. The first part of this work was published during the lifetime of Breitkopf; but the second part was posthumous. He commenced, but did not finish, a larger 'Geschichte der Buchdruckerkunst.' He established and carried on, in 1780—82, a 'Magazin für Kunst-und-Buchhandel.' Two other works of his were 'Exemplum typographiæ Sinicæ figuris characterum et typis mobilibus compositum,' Leipzig, 1789, 4to; and 'Über die Bibliographie und Bibliophilie,' 1793. Breitkopf, who became the most noted type-founder in Germany, and who was much respected both in his trade and among literary men, died on the 28th of January, 1794.

BREMER, FREDERIKA [E. C. vol. i. col. 914]. From the period at which the above brief biography had arrived, Miss Bremer continued actively engaged in the promotion of the various benevolent schemes on which she had fixed her thoughts, especially on those which had for their object the improvement of domestic life, and the social, moral, and intellectual elevation of her sex. She continued to write, and produced in succession 'Herttha,' in 1856, in which she made the story subservient to her philanthropic purpose; and 'Fathers and Daughters,' 1859, in which a similar intention was visible. She also travelled, and mostly alone, in Switzerland, Greece, and Palestine, and gave the results of her observations to the public in 'Two Years in Switzerland,' 1860; 'Travels in the Holy Land,' 1862; and 'Greece and the Greeks,' 1863, all of which have been translated into English. At length, wearied in body and depressed in spirit, she resolved to retire in the summer of 1865 to the quiet of Arta, and there seemed to gain strength and cheerfulness, when she took cold in going to church on Christmas Day, and died on the 31st of December, 1865, having shortly before completed her 64th year. Her 'Life, Letters, and Posthumous Works,' including a brief autobiography and some short poems, mostly pathetic in tone, have been published by her sister, Charlotte Bremer, and translated into English (8vo, 1868), the prose by Frederick Milow, the verse by Emily Nonnen.

BRENTANO, CLEMENT, a German author of considerable versatility, was born at Frankfurt-on-the-Main in 1777, and was the brother of the celebrated Elizabeth (Bettina) von Arnim, the friend of Goethe. After completing his studies at Jena he resided successively at that city, at Frankfurt, Heidelberg, Vienna, and Berlin. Later in life he embraced catholicism, and withdrew for purposes of seclusion to the abbey of Dülmen, in Münster. He died on the 28th of June, 1842. He is the author of romances, novels, satires, comedies, dramas, and miscellaneous poems, in the course of which he manifested talents and characteristics of such an order as to claim for him a prominent place amongst the writers of the romantic school. His principal works are satires and poetical diversions, 'Satiren und poetische Spiele,' 8vo, Leipzig, 1800, published under the pseudonym of Maria, a name which he also adopted in connec-

tion with his Godwi, &c., 'Godwi, oder das Steinerne Bild der Mutter,' 8vo, Bremen, 1801—2; an opera called the Jolly Musicians, 'Die Lustigen Musikanten,' 1803; 'Ponce de Leon,' a comedy, Göttingen, 1804; a humorous drama in two parts and in verse, entitled 'Viktoria und ihre Geschwister, mit fliegenden Fahnen und brennender Lunte,' 8vo, Berlin, 1817; 'Geschichte vom braven Kaspar und dem schönen Annerl,' which was translated into English by T. W. Appell, with the title of 'Honor; or the Story of the brave Caspar and the fair Annerl.' With an Introduction and a biographical notice of the Author, 16mo, London, 1847. The works of Clement Brentano were edited by Christian Brentano, with the title of 'Gesammelte Schriften,' 8vo, Frankfurt, 1852, &c.; and a volume of poems appeared two years later, 'Gedichte. In neuer Auswahl,' 16mo, Frankfurt, 1854. Portions of the correspondence of Clement Brentano with Elizabeth von Arnim were likewise published in 8vo, Charlottenburg, 1844.

BRENTZ, JOHANN, a German reformer, whose name varies as Brentius, Brentz, and Brentzen, was born at Weil, in Suabia, on the 30th of June, or the 24th of July, 1499. He was educated at the school and university of Heidelberg, and took his doctor's degree in 1518. Being admitted to orders a short time after, he became popular as a preacher, and in his parish of Hall, in Suabia, and in various other places, endeavoured to further the progress of the reformation. In 1530 he assisted at the peace conferences at Augsburg, and marrying soon after, was invited by Ulric, Duke of Wirtemberg, to undertake the joint direction of the University of Tübingen. He made himself obnoxious to the imperial displeasure by his refusal to subscribe the famous *Interim*; and when the Spanish troops were at Hall, in 1547, he was compelled to seek safety first in concealment and afterwards in flight. After many wanderings he found an asylum, in 1552, at Stuttgart, in the castle of Duke Christopher, the son and successor of Ulric, by whom he was charged to draw up the Confession of Wirtemberg, for presentation at the Council of Trent; and shortly after was appointed to the vacant pastorate of Stuttgart, which he held for the remainder of his life. He was one of the principal actors in the ecclesiastical events of his time. In 1557 he attended the conferences at Worms, and died at Stuttgart on the 11th of September, 1570. His opinions coincided in general with those of Luther; but on the subject of the Eucharist he held the doctrine of the absolute omnipresence, *ubiquitas absoluta*, of the body of Christ, on which account he and his followers were called Ubiquitarians. The works of Brenz, 'Brentii Opera,' most of which had been published separately during his life, and several of which had been translated into English, were published collectively in 8 vols. folio, Tübingen, 1576—1590, and Amsterdam, 1666. Recent publications conversant about Brenz are:—Johann Brenz. From printed and unprinted sources, 'Johann Brenz. Nach gedruckten und ungedruckten Quellen,' 2 vols. 8vo, Hamburg, 1840—42; Johann Brenz: his Life and Select Writings, 'Leben und ausgewählte Schriften,' Elberfeld, 1862; and Anecdotes of Brenz, &c., 'Anecdota Brentiana. Ungedruckte Briefe und Bedenken von J. Brenz,' 8vo, Tübingen, 1868.

BRÉQUIGNY, LOUIS-GEORGES OUDARD-FEUDRIX DE, a French historian and antiquary, was born at Granville, in 1716. His first literary production was an interesting memoir which he prepared for the Académie des Inscriptions, upon the 'Établissement de l'Empire et de la Religion de Mahomet,' which was some time after followed by other contributions to Arab history and chronology, and by dissertations which found a place in the 'Mémoires de l'Académie des Inscriptions,' to the membership of which he was admitted in 1759, whilst in 1772 he became a member of the Académie Française. At the peace of 1763, Bréquigny was commissioned by his Government to proceed to England for the purpose of investigating such records in the Tower of London and in other places as were conversant about the history and institutions of France. He spent about three years in this labour, the result of which was seen in his publication, jointly with F. J. G. de La Porte du Theil, of 'Diplomata, Chartæ, Epistolæ, et alia Monumenta ad Res Francicas spectantia, ex diversis regis archivis eruta,' 3 vols. folio, Paris, 1791, &c. Between the years 1769 and 1783, Bréquigny published three volumes of a work which he had prepared, jointly with G. J. Mouchet, and which he designed as a supplement to the Bibliothèque of P. Lelong, entitled 'Tables chronologiques des Diplomes, Chartres, Titres, et Actes imprimés, concernant l'Histoire de France,' folio, Paris. He was next commissioned, jointly with M. Mouchet, to continue the 'Mémoires concernant l'Histoire, les Sciences, les Arts, les Mœurs et les Usages des

Chinois,' 15 vols. 4to, Paris, 1776—91, which had been commenced by the missionaries to Pekin, MM. Amyot, Bourgeois, &c. Bréquigny, who died on the 3rd of July, 1795, is the author of several works of minor interest and importance, amongst which may be mentioned his 'Histoire des Révolutions de Gênes,' 3 vols. 12mo, 1750; 'Vies des anciens Orateurs grecs,' &c., 2 vols. 12mo, 1752, which proceeded no further, and embraced only the lives of Isocrates and Dio Chrysostom; 'Strabonis Rerum Geographicarum, Libri XVII.,' of which only one volume appeared, 4to, Paris, 1763; and 'Catalogus Manuscriptorum Codicum Collegii Claromontani,' 8vo, 1768.

BREWSTER, SIR DAVID [E. C. vol. i. col. 915]. In the obituary notice contributed by Dr. J. H. Gladstone to the Proceedings of the Royal Society, it is stated that Sir David made a telescope when he was only ten years of age, entered on his university course at twelve, "devoted one of the longest of lives to discoveries in optics, and at last, laden with academic and scientific honours, sank peacefully to rest on the 10th of February, 1868."

The notice in the E. C. gives a list of these honours, and also the titles of the separate works issued by Sir David; but few persons were aware, until after his death, how largely he contributed to scientific and periodical literature. The 'Catalogue of Scientific Papers' now in course of publication by the Royal Society records the titles of 299 papers by him, besides 5 in which his name is conjoined with the names of other inquirers. He has 30 papers in the Phil. Trans. He contributed 28 articles to the 'Edinburgh Review,' 5 to the 'Quarterly,' 2 each to 'Meliora' and the 'Foreign Review,' and no less than 76 to the first thirty-nine parts of the 'North British Review.' The subjects of this vast collection of papers are not always strictly scientific, for the author aspired to literary as well as scientific fame. Indeed, it has been remarked that Sir David felt a desire to write a review of every book that he read.

It may reasonably be supposed that so prolific a writer was neither very profound nor original. Dr. Gladstone's estimate of his scientific character is just. "It was as a laborious observer and ingenious experimenter that he excelled; he cared rather to collect a multitude of facts than to deduce from them general laws. Wonderful proofs of perseverance are his Tables of Refractive Indices, of dispersive powers, and of the polarizing angles of various reflecting bodies; and he seems to have submitted to optical examination every mineral that came in his way."

To this estimate we must add some further remarks. Sir David's name has been connected with all the great optical discoveries of the present century, and as he has often been the historian of his own fame, his share in those discoveries has not been underrated. During many years Sir David had a kind of monopoly in the scientific optics of this country. He contributed most of the optics to the 'Edinburgh Cyclopædia,' of which he was editor during the twenty-two years occupied in its publication; he performed the same service for the new editions of the 'Encyclopædia Britannica,' for 'Lardner's Cyclopædia,' and for the 'Library of Useful Knowledge,' to say nothing of the large number of essays and reviews on optical subjects contributed to various periodicals, to three of which, 'The Journal of Science,' 'The Edinburgh Journal of Science,' and the 'Philosophical Magazine,' he was wholly or partly editor. When, however, Whewell published his 'History of the Inductive Sciences,' the great optical discoveries of this century were given not to Brewster alone, but to Malus, Fresnel, Biot, and others. In reviewing Whewell's work in the 'Edinburgh,' Brewster entered some energetic protests against what he termed this "Lethæan method of writing history;" and in his communications to the Royal Society he accused Biot of plagiarism. Biot was a contributor to the 'Edinburgh Cyclopædia,' and Brewster, in writing to Biot on the subject of his articles, was, he says, in the habit of jotting down in a postscript any scientific results he had obtained in the course of his current researches. The hints thus given were, it is charged, improved upon by Biot, and published by him as original discoveries. The communications to the Royal Society became so controversial, that, instead of marking the progress of science, they referred too much to personal disputes; and the Society rejecting one of these papers, the author withdrew in 1841, and did not again communicate with the Royal Society except on one occasion, and that was in company with Dr. Gladstone on the lines of the solar spectrum.

It is not intended by these remarks to undervalue the great and important services rendered by Sir David to science during nearly three-quarters of a century. It is difficult to estimate a man's work with rigid justice, and if we incline to the opinion

that Sir David as a scientific optician has been somewhat over-estimated, his great influence on the science, education, and intellectual progress of the century will not soon pass away. In 1821 he founded the Scottish Society of Arts; from 1838 to 1859 he was principal of the United Colleges of St. Salvador and St. Leonards at the University of St. Andrews; and during the last eight years of his life he was Principal of the University of Edinburgh.

Sir David was twice married: first to the daughter of James Macpherson, M.P., of Belleville, the so-called translator of 'Ossian;' the second time, late in life, to Jane Kirk, second daughter of the late Thomas Purnell, Esq., of Scarborough. To this lady, upon the death of Sir David, a pension of 200*l.* per annum was granted from the civil list fund, "in recognition of her late husband's eminent services to science." Sir David Brewster had himself for some years enjoyed a pension of 300*l.* per annum.

* BRIGHT, SIR CHARLES TILSTON, civil and telegraphic engineer, was born in 1832. After professional study he became engineer to the English and Irish Magnetic Telegraph Company, and was employed in laying down the first cables which connected Great Britain with Ireland. In 1856 he was one of the original projectors of the Atlantic Telegraph, and was appointed electrical engineer to the company soon afterwards formed. The temporary success of the cable of 1858 led to the conferring of the honour of knighthood on Mr. Bright. Since that time Sir Charles Bright has been actively engaged in the construction or laying of many electric cables in various seas. When the Red Sea Cable failed in 1859—60, Sir Charles and Mr. Latimer Clark were called in as advisers concerning the best mode of laying another cable in that reef-beset sea. These two engineers, in 1864, superintended for the government of India the construction and laying of the Persian Gulf cable, from Bushire to the Indian Ocean, and thence to Kurrachee, at the westernmost mouth of the Indus. Sir C. Bright has since been engaged in laying other important telegraphic lines, and is at present (June, 1870) directing the submersion of the West Indian and South American (Panama) telegraph cable. Most submarine cables have the gutta percha sheathing laid on in three or four coatings, alternating with layers of a glutinous composition; one such composition is Bright and Clark's Compound, so named from the inventors. Among other professional papers, Sir Charles Bright has written 'On the Measurement of Electrical Insulation and Resistance,' published in the 'Electrician' in 1862; and 'Report of the Committee on Standards of Electrical Resistance,' published in the 'Proceedings of the British Association for the Advancement of Science' in 1863. He was member of parliament for Greenwich from 1865 to 1868.

* BRIGHT, RT. HON. JOHN [E. C. vol. i. col. 921]. Mr. Bright's persistent opposition to the policy which led to the war with Russia, and to the continuance of that war, lost him his seat for Manchester at the general election in April, 1857; but he was returned to the House of Commons as member for Birmingham in the following August, and he has sat for Birmingham ever since. During the life of Mr. Cobden, Mr. Bright was his closest and most steadfast associate and supporter, alike in parliament and on the platform, and perhaps his independent power was hardly adequately recognised by the general public. But his range of view was wider and his grasp of thought more comprehensive and statesmanlike than Mr. Cobden's, and year by year he was steadily making his way in the House, and beyond any other member he came to be sustained by the adherence of all grades of the more advanced Liberals throughout the country. The Earl of Derby hardly overrated his position when in the Electoral Reform debates he spoke of Mr. Bright as "the real leader of the Opposition." Within the House he never assumed that position, but his will governed the movement of the Opposition, and out of the House it was supreme. His early speeches, as was almost inevitable from the circumstances of his election, were very much directed to the questions of free-trade, finance, and peace; but as time wore on, their range widened so as to include nearly the entire field of national policy. Of electoral reform, the redistribution of seats, and the ballot, Mr. Bright was one of the most constant and strenuous advocates, and the Reform Bill by which Lord Derby "dished the Whigs," in 1867, was in the main adopted from Mr. Bright, though he would have accepted probably a less sweeping measure. Administrative reform; financial reform; the question of the distribution of land and its occupancy, have also been among the great matters of home politics on which he has dwelt often and earnestly in his speeches in Parliament and

in his public addresses; and in connection with the land question and that of the condition of the agricultural labourer, he has given a prominent place to the character and effects of game preservation and the game laws. The abolition of church rates, the admission of Jews to parliament, and generally all those measures which had for their avowed object the removal of all liabilities and disabilities on account of creed or religious distinctions, were earnestly supported by him, whilst in reference to education his reiterated demand has been that the State should not interfere with voluntary exertions, unless prepared "to offer this great boon to all classes of the people without favour or distinction." Colonial questions generally, but particularly matters connected with Canada and its relations with the mother country and the United States, have likewise occupied much of his attention; and some of his most elaborate and highly wrought disquisitions have related to our Indian empire and Indian policy. The other great matter which he seems to have most deeply considered, and one to which he has returned again and again in the House of Commons, is that of the condition of Ireland. He had often addressed the House on the subject and put forth propositions conducive, as he thought, to its pacification, and he was consequently prepared to give his warmest support to Mr. Gladstone when, in the session of 1868, he brought forward his resolution for dis-establishing the Irish Church. When Mr. Gladstone was called upon, December 4, 1868, to form an administration, it was generally felt that Mr. Bright's presence in it was essential to its stability. Mr. Gladstone fully recognised the necessity, and the proposition met with the cordial acquiescence of the Queen. Mr. Bright was offered the position of Secretary of State for India. But his health had suffered grievously from the exertions of previous years. For two years he had been "cut off from public labours," the duties of the Indian department if properly performed he knew to be exceedingly heavy, and he felt, as he stated, that he "was not justified in accepting it unless there were some great probability of some useful result which could not be accomplished under any other chief of that office." He felt, moreover, that it "would be unseemly in him, with the views which he had held from his youth upwards, to connect himself distinctly with the conduct of the military departments of the great Indian government." But "when the private and personal, came to be weighed against the apparent public reasons, then the private and personal yielded to the public," and whilst he "felt it his duty to decline the particular proposition," he added that "if he were to accept any seat in the Government he would prefer to take the office of President of the Board of Trade." This was of course agreed to; he became a member of the Cabinet, was sworn in of the Privy Council; and was able to render powerful service in the passing of the Irish Church Bill—in the discussions on which he gained the admiration of opponents as well as friends by the moderation and generous spirit, as well as earnestness and evident sincerity of his advocacy. Towards the end of the session his health again gave way, and he has since been entirely precluded from official and public labour. In these circumstances Mr. Bright wished to resign his post, but was induced to retain it in the hope that a season of rest may restore him to activity.

Mr. Bright's 'Speeches on Questions of Public Policy,' revised by himself, were published under the editorship of Prof. J. E. Thorold Rogers, in 2 vols. 8vo, 1868, and are, apart altogether from their political opinions, remarkable as compositions for clear and compact argument and purity and force of style. Conjointly with Prof. Rogers Mr. Bright undertook to edit 'Speeches on Questions of Public Policy,' by Richard Cobden, 2 vols. 8vo, 1870, but after he had "revised the speeches in the first volume . . . and given the same assistance to a few sheets in the second, he was unhappily seized with illness, and was unable to give his further supervision to the work." (Preface, vol. i. p. xv.)

BRIGHT, RICHARD, M.D., was born at Bristol in 1789; entered as a student at Edinburgh University in 1808, and in 1812 graduated in medicine. He then resided for some time at Cambridge; visited the Continent, and after the battle of Waterloo, hurried to the assistance of the overtasked military staff in the hope of at once alleviating suffering and being able to study the effects of the surgical treatment of wounds. Returning to England, he commenced practice as a physician in London; was in 1820 elected assistant physician to Guy's Hospital; acquired marked distinction as a teacher in the medical school there, and rapidly secured the confidence of the profession. Thenceforward his career was that of a successful

London physician; he came to be regarded as the leading authority in renal diseases, dropsy and the like; was appointed physician extraordinary to the Queen; was elected Fellow of the Royal Society in 1821, and later member of various learned societies on the Continent as well as in England. He died December 16, 1858. Dr. Bright's claim to permanent remembrance is derived from his 'Original Researches into the Pathology of Diseases of the Kidney,' one of the most valuable contributions to medical science of the age. A formidable series of these diseases, characterised by uniformity of structural change and the presence of albumen in the urine, and hence designated Albuminuria, or granular disease of the kidney, was first distinctly pointed out by him and its diagnosis and treatment indicated; and his memory is somewhat dubiously honoured by the appellation "Bright's Disease," now universally given to it. [E. C., ARTS AND SCIENCES DIV. vol. v. col. 53.]

BRILLAT-SAVARIN, ANTHELME, the Corypheus of gourmandism, was born at Bellay, on the 1st of April, 1755. He filled various secondary and departmental offices prior to 1793, when he quitted France on account of the revolutionary excesses, and travelled first in Switzerland and afterwards in America. In 1796 he returned to his native place, re-entered the court of cassation, obtained promotion, and thenceforth, laying aside all concern for politics, divided his days between the discharge of his magisterial functions, the gratifications of his tastes, and the preparation of his book—the true labour of his life. The 'Physiologie du Goût' was published in two small 8vo volumes, in 1825; and the author, his work accomplished, died on the 2nd of the following February. Brillat-Savarin was eminently the author of one book. He wrote, indeed, 'Vues et Projets d'Economie Politique,' 8vo, Paris, 1802; an 'Essai historique et critique sur le Duel,' 8vo, 1819; a dissertation, 'Sur l'Archéologie du département de l'Ain,' 1820, and one or two other trifles; but his one work remains the 'Physiologie du Goût,' a work that has rendered his name grateful to every cultivated lover of good living, and immortal in France. The book itself deserves its celebrity. It is charmingly written, accomplishes all that it professes, exactly meets the tastes and satisfies the capabilities of the wide circle to which it is addressed: is lively, genial, racy, and just sufficiently seasoned with well-told and timely anecdotes.

BRINKLEY, JOHN, Bishop of Cloyne, a distinguished mathematician and astronomer, was born at Woodbridge, in Suffolk, in 1763. After receiving a preparatory education at the grammar school of his native town, he entered Caius College, Cambridge, where, in 1788, he became senior wrangler and senior Smith's prizeman. He received the degree of M.A. in 1791. In 1792 he was appointed Andrews Professor of Astronomy at Trinity College, Dublin, and was placed at the head of a well-appointed observatory at Dunsink, near Dublin. In this office, which he held for twenty-four years, he made numerous astronomical observations, and meanwhile published many mathematical and astronomical papers. In 1806 the degree of D.D. was conferred upon him. Calculations which he made concerning the parallax of the fixed stars became the subject of controversy between him and Mr. Pond, the Astronomer Royal, in 1813–14, and conducted towards the completion of more rigorous determinations by later astronomers. In 1813 appeared his 'Elements of Astronomy,' 8vo, Dublin; a useful outline of the science, consisting of a summary of the lectures given by him at Trinity College. In 1826 Dr. Brinkley was appointed Bishop of Cloyne, not for any ecclesiastical or theological services which he had rendered, but on account of the high estimation in which he was held. This appointment was a loss to science; the bishop resigned his professorship, ceased to make observations and to write papers, and attended wholly to the duties of his diocese. He died on the 14th of September, 1835. His funeral was attended by the principal members of Dublin University and of the Royal Irish Academy. Bishop Brinkley was a fellow of many learned societies in the United Kingdom, and a corresponding member of the Institute of France. His chief mathematical papers, published in the 'Memoirs of the Royal Irish Academy,' and in the 'Philosophical Transactions,' are the following:—'General Demonstration of the Theorem of Cotes, deduced simply from the Properties of the Circle,' 1797; 'General Demonstration of the Theorems for the Sines and Cosines of Multiple Circular Arcs,' 1797; 'On the Expression of Variable Quantities,' 1798; 'On Orbital Revolutions,' 1801; 'On Spherical Superficies,' 1801; 'On Kepler's Problem,' 1802; 'On Oblique Cylindrical Superficies,' 1802; 'On Newton's Solution of the Relation between Resistance and Gravity,' 1807; 'On Finite

Differences,' 1807; 'On Arbitrary Constants,' 1817. His astronomical papers were more numerous; they were published, between 1808 and 1828, in the 'Memoirs of the Royal Irish Academy,' the 'Philosophical Transactions,' the 'Quarterly Journal of Science,' the 'Memoirs of the Astronomical Society,' and the 'Astron. Nachrichten.' They relate to the Apparent Distance of the Sun and Moon; the Parallax of α Lyrae; the North Polar Distances of 47 Fixed Stars; the Parallax of Fixed Stars; Astronomical Refractions; the Mean Motion of the Lunar Perigee; the Elements of Cometary Orbits; the Obliquity of the Ecliptic; the Aberration of Light; Lunar Nutation; the Modes of Finding Latitudes; Solar Nutation; the Paramatta Observations; Kater's Floating Collimator; Luni-Solar Precession; Culminations observed at Dublin; and the Precession of the Equinoxes.

BRINVILLIERS, MARIE MARGUERITE, MARQUISE DE, who obtained infamy as a poisoner in the time of Louis XIV., was the daughter of Dreux d'Aubrai, a lieutenant civil, or judge having a certain limited jurisdiction, at whose hands she received a careful education. In 1651, whilst still very young, she became the wife of the Marquis de Brinvilliers, with whom she resided at her father's house, in Paris. Her husband, who was colonel of the *Régiment de Normandie*, entertained at his house a young officer of cavalry of the *Régiment de Tracy*, named Gaudin de Sainte-Croix, a native of Montauban, and the illegitimate member of an illustrious family. He was unprincipled enough to encourage the unlawful passion which the marchioness conceived for him; and her father, in consequence, procured in 1663 a *lettre de cachet* against Sainte-Croix, who underwent a year's incarceration in the Bastille. During his confinement he learned from a fellow-prisoner, an Italian named Exili, the art of preparing subtle poisons; a secret which, upon his enlargement, he communicated to his mistress, who determined to poison her father and the other members of her family. Having first wantonly essayed her art upon the patients of the Hôtel-Dieu, she proceeded, with the aid of a servant named Jean Amelin, or La Chaussée, to take the lives of her father, her two brothers, and her sister. This feat she accomplished gradually between the years 1666 and 1670. More than once she poisoned her husband; but Sainte-Croix, whose prudence shrank from the obligation of marrying the terrible widow, each time preserved the life of the Marquis by the administration of an antidote. Sainte-Croix died suddenly in July, 1672, in the act, it is said, of compounding a subtle poison, against the effects of which he was left unprotected by the accidental fracture of a glass mask which he wore as a defence against the fumes of his deadly drugs. As no relative came forward to claim his property, it was taken possession of by the public authorities, who, instead of complying with the written instructions of Sainte-Croix, dated May 25th, 1672, that a particular casket should be delivered to Madame de Brinvilliers, examined it, together with above thirty letters which he had received from her. There was also found a promise on her part to pay Sainte-Croix a sum of 30,000 livres, bearing the date of June 20th, 1670, eight days after the poisoning of the "lieutenant civil," her father. The casket proved to be full of packets of various poisons, to each of which was affixed a label indicating the peculiar effects it was calculated to produce. The Marchioness, fatally compromised by these and other circumstances, sought safety in flight, repairing first to England, then to Germany, and finally to Liège, where she was apprehended. Being taken to Paris, she denied her guilt; but after her condemnation made a confession, in which, and in a kind of autobiography, she charged herself with more and greater horrors than had seemed possible to rumour or suspicion. She was executed at seven o'clock on the evening of the 16th of July, 1676, being first beheaded and afterwards burnt. As her application and use of poison, which went by the name of *poudre de succession*, seemed to be growing prevalent, Louis XIV. instituted a special court for the investigation and punishment of this species of crime.

The exploits of Madame de Brinvilliers have attracted a literature of their own; as, for instance, the 'Mémoire du procez extraordinaire contre la Dame de Brinvilliers, prisonnière en la Conciergerie du Palais, accusée,' &c., 4to, Paris, 1676, an English translation of which was published in 4to, London, 1676; the 'Factum pour Dame de Brinvilliers: avec le mémoire du procez extraordinaire contre la dite Dame de B.; et l'arrest de la cour de Parlement, contre la dite,' &c., by M. Nivelles, which finds a place in the 'Archives curieuses de l'Histoire de France, depuis Louis XI. jusqu'à Louis XVIII.' &c.; a manuscript of 150 pages folio, by Edme Pirot, entitled

'Les Vingt-quatre dernières heures de la Marquise de Brinvilliers, ou, la Relation de sa Mort;' and the story, by the late Albert Smith, which he describes as a "Romance of Old Paris," and entitles 'The Marchioness of Brinvilliers, the Poisoner of the Seventeenth Century.'

* BRISTOW, HENRY WILLIAM, geologist and mineralogist, was born in 1817, and educated at King's College, London, of which institution he was appointed a Fellow in 1863. In 1842 he joined the Geological Survey of Great Britain as assistant geologist, and was subsequently raised to the rank of geologist. He became an F.G.S. in 1843, and an F.R.S. in 1862. In connection with the geological survey he has had a hand in the preparation of various maps, sections, and memoirs; amongst the latter the most important is 'The Geology of the Isle of Wight,' &c., 1862. He assisted largely in drawing up 'A Descriptive Catalogue of the Rock Specimens in the Museum of Practical Geology,' of which a third edition appeared in 1862. He arranged and described most of the specimens illustrating the secondary and tertiary strata, as also most of the volcanic and plutonic rocks. He contributed mineralogical and lithological articles to Ure's 'Dictionary of Arts, Manufactures, and Mines,' 3rd edition; and to Brande's 'Dictionary of Literature, Science, and Art,' 4th edition. In 1861 he published 'A Glossary of Mineralogy,' which is in common use as a ready reference book; and in 1869 he translated Simonin's 'La Vie Souterraine.'

BRITTON, JOHN [E. C. vol. i. col. 928]. This industrious compiler and antiquary died on the 1st of January, 1857, in his 86th year.

* BROCA, PAUL, an eminent surgical operator, anatomist, and anthropologist, was born in 1824. He commenced his professional career as a student in the hospitals in 1843, and rapidly attained promotion from one post to another. In 1849 he obtained his degree of doctor of medicine, in 1861 he was appointed surgeon to the hospital of Bicêtre, and in 1863 surgeon to the hospital of the Salpêtrière. He is a member of various societies both French and foreign. In 1857 he became secretary to the Société de Chirurgie, general secretary in 1858, and honorary general secretary in 1863. From 1859 to 1863 he was also secretary to the Société d'Anthropologie, and from 1863 up to the present time he has been general secretary to the same society. He has contributed largely to scientific literature, but the greater proportion of his writings consists of papers in various journals and periodicals. Up to 1863 the items amounted to more than 170 in number. We will allude to a few of these, in order to indicate the range and character of his works. We are indebted to him for some valuable observations on the diseases of arteries. In 'Des anévrysmes et de leur traitement,' 1856, pp. 930, he gives an account of the phenomena presented by aneurisms, and describes all the methods which have been employed to remove them. In his 'Recherches thermométriques applicables au diagnostic des obliterations artérielles,' published in the 'Bulletins de la Soc. de Chirurgie,' 2nd series, vols. ii. and iii., he shows how the seat of the injury as well as its extent may be determined by observations on the temperature of the surrounding parts; and in another paper published in vol. ii. of the same 'Bulletins' he indicates how Marey's sphygmograph may be employed for the same purpose. Another subject which has much engaged his attention, and on which he has thrown much light, is cancer. His 'Mémoire sur l'anatomie pathologique du cancer,' which appeared in 'Mém. de l'Acad. de Médecine,' vol. xvi. pp. 453—820, 1852, won for him the Portal prize, awarded by that academy in 1850. In this memoir he follows out in great detail all the phases which cancer goes through, and demonstrates that all of them may be discriminated by the unassisted eye; he also shows that the classification which is based upon visual observation harmonizes with that which is founded upon the microscopical examination of the tissues. The same subject was treated in a large work—'Traité des tumeurs,' 2 vols. 1863, *et seq.* In his 'Recherches sur la pathologie des cartilages articulaires,' which appeared in the 'Bulletins de la Soc. Anat.' for the years 1848—1851, he opposes the notion, which had previously prevailed, that those cartilages and tissues which were not permeated by vessels were without vitality, and establishes the fact that, while vascularity is essential to the nutrition of the more complicated tissues, those of the simplest character receive the nutritive materials necessary for their maintenance by imbibition only. Another group of papers treats of rickets. In the most important of these a 'Mémoire sur l'anatomie pathologique du rachitisme,' published in the 'Bulletins de la Soc. Anat.' for 1852, he demonstrates that the affection is not due to any special morbid

influence, but results from imperfect ossification. Amongst his anthropological papers the more noteworthy are 'Recherches sur l'Ethnologie de la France,' in 'Mém. de la Soc. d'Anthropologie,' vol. i.; 'Mémoire sur l'hybridité et sur distinction des espèces animales,' in 'Journ. de Physiologie,' vols. i. and ii.; 'Mémoire sur les phénomènes d'hybridité dans le genre humain,' in 'Journ. de Physiologie,' vols. ii. and iii., both of which are incorporated in a separate volume entitled 'Recherches sur l'hybridité animale en général et sur l'hybridité humaine en particulier,' 1860; 'Sur des crânes, provenant d'un cimetière de la cité antérieure au xiii^e siècle,' in 'Bull. de la Soc. d'Anthropologie,' vol. ii. p. 501; 'Sur la capacité des crânes parisiens des diverses époques,' in the 3rd volume of the last-mentioned 'Bulletins'; this volume also contains his paper 'Sur les caractères du crâne des Basques,' and the fourth volume contains a second paper on the same subject. These 'Bulletins' also contain many remarks made by him in the course of discussion, his reports on the progress of anthropological science in France, and his instructions on general anthropology. His latest work is 'L'Ordre des Primates. Parallèle anatomique de l'Homme et des Singes,' 1870.

(*Exposé des Titres et Travaux Scientifiques de M. Paul Broca*, 1863.)

BRODERIP, WILLIAM JOHN [E. C. vol. i. col. 932], was born Nov. 21, 1789, and was stimulated to natural history pursuits in his earliest years by his familiarity with the conchological collection which his father had formed. Although in after life his avocations prevented his spending much time in the country, yet his papers indicate that one of the prominent features in his character was an intense interest in the habits of animals; and the few opportunities which were afforded him of indulging his taste in this respect indicate how well he could observe, and how graphically he could describe what he saw. His 'Account of the Manners of a Tame Beaver,' published in 'The Gardens and Menagerie of the Zoological Society,' vol. i. p. 167, is an illustration of his powers; and his frequent visits to the house of his friend Professor Owen, in Richmond Park, for the purpose of observing the habits of the tenants of the neighbouring rookery, or of some newly-arrived migrant, manifest his enthusiasm. His coadjutor in conducting the secretarial labours of the Geological Society from 1826 to 1830 was Sir Roderick Impey Murchison. He died February 27, 1859.

BRODIE, SIR BENJAMIN COLLINS, BART. [E. C. vol. i. col. 932]. In 1858 Sir Benjamin Brodie was elected President of the Royal Society in succession to Lord Wrottesley, and this honourable position he retained with the general esteem of the fellows till failing health compelled him to resign it shortly before his death, which occurred at his seat, Brome Park, Betchworth, Surrey, October 21, 1862. The 'Autobiography of Sir Benjamin C. Brodie, Bart.,' a very interesting little volume, with the memoir continued to his death, was published in 1865. His eldest son,

*SIR BENJAMIN COLLINS BRODIE, BART., was elected Fellow of the Royal Society in 1849 in consequence of his investigations as to the nature of wax, which he first satisfactorily explained ('Phil. Trans.,' 1848—9). He has also published many papers on chemistry, such as on the peroxides of the radicals of the organic acids, on the theory of the organic peroxides; and he has recently undertaken the herculean task of reforming chemical nomenclature and notation in an elaborate paper entitled 'The Calculus of Chemical Operations,' being a method for the investigation, by means of symbols, of the laws of the distribution of weight in chemical change; Part I., on the construction of chemical symbols, 'Phil. Trans.' part ii., 1866. Sir B. C. Brodie was appointed Professor of Chemistry at Oxford University in 1865.

BROECK, CRISPIN VAN DEN, a distinguished Flemish painter, was the son of Jean Van Den Broeck, an artist at Malines, where he was born about 1530. Many contrary dates are given for the leading occurrences of his life; those really ascertained are, that having served his apprenticeship with the elder Floris, he was in 1555 admitted master, and in 1575 full member of the Guild of St. Luke, Antwerp; in 1559 burgess of Antwerp; and he is known to have been engaged in his profession in 1593. He died in or about 1601. Broeck painted scriptural, devotional, and historical subjects. His pictures were greatly admired, and many of them were engraved by the best engravers of the time. His finest remaining work, 'The Last Judgment,' now in the Museum, Antwerp (No. 213), was engraved by his daughter BARBE (born 1560), who acquired considerable reputation as an engraver of her father's works. C. Van Den Broeck engraved several series

BIOG. DIV.—SUP.

of plates from his own designs. He is said to have been an architect also, but we know none of his buildings.

BROFFERIO, ANGELO, a celebrated Italian lawyer, politician, and author, was born at Castelnuovo d' Asti, in North Italy, December 6, 1802. At Turin, where he had been sent to complete his literary education and to study law, he was attracted by the theatre, and wrote a five-act tragedy, 'Eudoxia,' and other plays, some of which are still acted. After travelling awhile about Italy and France, he returned to Piedmont, was called to the bar, and commenced with success his career as an advocate. But like most Italians of his age, he had by this time become an ardent politician, and wrote and spoke with a freedom that drew upon him prosecution and an imprisonment of several months (1830), during which he occupied his enforced leisure in composing a volume of patriotic songs in the Piedmontese dialect, 'Canzone Piedmontero,' which had great popularity, a fifth edition having been reached in 1858. The accession of Carlo Alberto brought his release, and he started a journal advocating the entire enfranchisement of Italy. The king would have secured his services, but his views went beyond those which Carlo Alberto could venture to adopt, and he preferred to hold an independent position. His demand was for a constitution, freedom of the press, education, the suppression of the Jesuits: his ardent desire was to see Italy united and free. When, in 1848, a part of his programme was worked out, Brofferio was elected deputy to the Piedmontese Assembly, and at once took his place as the leader of the democratic constitutional party; and he rapidly attained the reputation he held to the end of his life, of being the most powerful and brilliant orator on his side of the house, if not the best parliamentary speaker in Italy. A strenuous Liberal, he yet steadily opposed the measures of Cavour, and this for a time lost him his popularity. When Italy obtained a parliament of her own, he became, as he had been in the parliament of Turin, the recognised leader of the Left, a position he occupied till his death in May, 1866. Brofferio had for some time before his death ceased to conduct a journal, but he had continued his literary labours, and throughout his career he had maintained his practice as an advocate, and conducted with success many important political and criminal cases. His principal literary works are his History of Piedmont from 1814 to the present time, in 5 volumes, 8vo, 1849—52; and a series of contemporary memoirs, 'I Miei Tempi,' 20 vols. 1857—61, in which he was assisted by various literary friends. He also wrote 'Tradizioni Italiani,' in 7 vols., and 'Antica e nuova Grecia,' a richly illustrated work in 2 vols. 4to, Turin, 1844—46. Not long before his death he composed a national battle song, 'Viva il Rè,' which as set to a stirring air by Brizzi, became immediately popular throughout Italy, under the name of Brofferio's Hymn.

BRONN, HEINRICH GEORGE, palæontologist, was born at Ziegelhausen, near Heidelberg, March 3, 1800. He was educated at the university of Heidelberg, and from it he obtained the doctorate of medicine in recognition of an excellent work on botany, 'De formis plantarum leguminosarum primitivis et derivatis,' which he published when only 22 years of age. In 1822 he became a teacher, and was connected with the mineral office at Heidelberg. In 1828 he was appointed extraordinary professor, and in 1835 ordinary professor, of zoology and applied natural history in the Heidelberg University. Before, however, he had attained full titular rank he had published several works of acknowledged merit, such as those entitled 'Ergebnisse der meiner naturhistorisch ökonomischen Reisen,' 1826—31; 'System der vorweltlichen Konchylien durch diagnosen,' 1824; and 'System der vorweltlichen Pflanzen,' &c., 1825. In 1835 his first great work, 'Lethæa Geognostica,' began to appear. It was written in conjunction with Ferd. Roemer, and had a marked influence in advancing geological science. This work attained a third edition in 1851—56. Encouraged by the reputation which the 'Lethæa' obtained for him, Bronn prepared for a greater effort, which resulted in the 'Geschichte der Natur,' a work manifesting the immense scope of his knowledge, an indefatigable industry in searching through books, and remarkable skill in arranging in a systematic order the facts so obtained. In this work he was assisted by H. von Meyer and Göppert, but by far the greater portion was executed by himself. In it he supported the view that species were specially created, and that the mutations they have undergone have only sufficed to originate races, varieties, and sub-species. The work is not without its defects, which are most noticeable in the numerical estimates of species. In 1858 he published a fuller development of his views on organic life in 'Untersuchungen über die Entwicklungs-gesetze

der organischen Welt während der Bildungszeit unserer Erdoberfläche,' a memoir which obtained for him the prize awarded by the Academy of France. The general purport of the paper will be found under PALEONTOLOGY, E. C. S. NAT. HIST. Div. cols. 693—700; but here we may state that he describes the general sequence of events in the organic and inorganic worlds, and attempts to prove how the increasing complexity of physical conditions on the earth's surface has proceeded harmoniously and in connection with the increasing complexity of organic structure. His views as to the amount of variation in species differ somewhat from those he had previously maintained, since in this later work he admits that it may have been so great as to amount to a generic difference. His last work, 'Die Klassen und Ordnungen der Thier-reichs,' 1859, *et seq.*, was another grand conception, and, although unfinished, is an excellent example of the highest compilatory skill. His part of the work embraces the first and second volumes, together with upwards of 800 pages of the third volume, the remaining 700 pages of which were executed by W. Keferstein. This brings the work in the ascending order to the end of the *Mollusca*. The *Articulata* and the *Vertebrata* have been undertaken by Drs. Keferstein, Gerstäcker, Steindachner, and others. His death occurred suddenly, July 5, 1862. He was a member of numerous scientific societies, and was co-editor with K. C. von Leonhard of the 'Jahrbuch für Mineralogie,' &c., 1830—32; and of the 'Neues Jahrbuch,' &c., 1833—62. He has also written several books and many papers, which we are unable to notice here.

BROOKE, SIR JAMES [E. C. vol. i. col. 937]. After having passed through the ordeal of adverse criticism, and rebutted the charges upon which it was sought to censure his conduct towards the Dyaks, he returned to Sarawak in 1853, and established the bishopric of Labuan. In 1857 his life and the peace of the settlement were endangered by an insurrection of the Chinese, who were offended at his efforts to suppress the smuggling of opium into Sarawak. His library was destroyed, his house ransacked, and he himself compelled to escape from Kuching, where he resided. He collected a small native force, retook the town, drove the Chinese out, but killing most of them in the process, and expelled them from the neighbouring villages. In 1858 he returned to England, but was soon after incapacitated by a stroke of paralysis. Public interest was excited in his favour, subscriptions were collected, and with the proceeds an estate was purchased for him at Bunator, in Devonshire. In 1861 he again went to Sarawak, suppressed a rebellion which had broken out on the north-west coast of Borneo, and returned to England. Soon after he was again called upon to quell some disturbance affecting his government, which he succeeded in doing. He obtained the recognition of his sovereignty by the British Government, and retired to his Devonshire estate, where he died June 11, 1868. He was succeeded as Rajah by his nephew, Charles Brooke. The general condition of the country is given under SARAWAK, GEOG. Div. E. C. S. cols. 1190—1195.

BROOME, WILLIAM, a poet and clergyman, the son of Randle Broome, a farmer at Haslington, in the parish of Barthomley, Cheshire, was baptized at Haslington chapel on the 3rd of May, 1689. He was sent to Eton, where he was educated upon the foundation; but after being captain of the school for a whole year, during which period it happened, most unusually, that no vacancy occurred by which he might have obtained a scholarship at King's College, Cambridge, he was superannuated, and at the age of 19 was sent to St. John's, in the same university, by the contributions of his friends. He was entered as a sub-sizar on the 3rd of July, 1708; matriculated as sizar on the 10th of the same month; took his B.A. degree in January, 1712, and his M.A. in 1716. He received the degree of LL.D. in 1728, on the occasion of the king's visit to the university, when a large number of complimentary degrees were conferred. While at Cambridge he was for some time a chamber-fellow of the well-known Ford, who spoke of him as being at that time a "contracted scholar and a mere versifier, unacquainted with life and unskilled in conversation." Subsequent intercourse with the world, however, cleared him, even in Ford's judgment, from great part of his scholastic rust. Having received holy orders, he became rector of Sturston, in Suffolk, where, on the 22nd of July, 1716, he married Mrs. Elizabeth Clarke, "a wealthy widow," by whom he had two sons and two daughters, all of whom were born at Sturston, and, with one exception, buried there. In 1728, Dr. Broome was presented by the crown to the rectory of Pulham, which, contrary to the erroneous informa-

tion of Dr. Johnson, he continued to hold until his death. It is in this rectory that he is said to have written the Notes to Pope's Homer; and from it addressed to Viscount Townshend the dedication of the second edition, "with large alterations and additions," of his 'Poems on Several Occasions,' 8vo, London, 1739. Broome was chaplain to Lord Cornwallis, Baron of Eye, by whom he was successively presented to the livings of Oakley Magna and Eye, both in Suffolk. He died "of an asthma" at Bath on the 16th of November, 1745, and his remains are deposited in the Abbey church of that city, but without a monument to mark the spot where he lies. As a divine, Broome is the author of a sermon preached on the 20th of October, 1722, being the anniversary of the king's coronation, which he published with the title of 'The Duty of Publick Intercession and Thanksgiving for Princes,' 8vo, London, 1723; and of a 'Sermon preached at the Assizes in Norwich,' 4to, Norwich, 1737. Dr. Johnson says of Broome that "he appeared early in the world as a translator of the Iliad into prose, in conjunction with Ozell and Oldisworth. How their several parts were distributed is not known. This is the translation of which Ozell boasted as superior, in Toland's opinion, to that of Pope: it has long since vanished, and is now in no danger from the critics.

When the success of the Iliad gave encouragement to a version of the Odyssey, Pope"—to whom Broome had been formerly introduced, whilst the former was on a visit to Sir John Cotton, at Madingley, near Cambridge—"weary of the toil, called Fenton and Broome to his assistance; and, taking only half the work upon himself, divided the other half between his partners, giving four books to Fenton and eight to Broome. To the lot of Broome fell the 2nd, 6th, 8th, 11th, 12th, 16th, 18th, and 23rd, together with the burthen of writing all the notes. . . . The price at which Pope purchased this assistance was, 300*l.* paid to Fenton, and 500*l.* to Broome, with as many copies as he wanted for his friends, which amounted to 100*l.* more. The payment made to Fenton I know not but by hearsay; Broome's is very distinctly told by Pope, in the notes to the Dunciad." Broome did not approve of this disproportionate scale of remuneration, and he charged his employer with avarice; which Pope avenged by abusing Broome in the 'Dunciad,' and by quoting him as a proficient in the 'Art of Sinking.' It would seem that a formal reconciliation, the heartiness of which was open to suspicion, afterwards took place. Broome took his leave of poetry by the translation in English verse of several of the Odes of Anacreon, which appeared in the 'Gentleman's Magazine,' where the first instalment occurs in the number for November, 1730. These Odes were professedly translated by "Charles Chester, M.D." Whatever is written above in supply of the omissions, or in correction of the mistakes, of previous biographers, is due to the minute researches of T. Worthington Barlow, F.L.S., &c., the author of a 'Memoir of William Broome, LL.D.: the Associate of Pope in the Translation of Homer's Odyssey, with Selections from his Works,' 8vo, Manchester and London, 1855.

BROSSARD, SEBASTIEN DE, a French musical writer, was born in 1660. He is supposed to have received his musical education at Paris, from whence he went in 1689 to Strasbourg, where he filled in succession the offices of prebend, deputy choir-master, and chapel-master, at the cathedral. In 1700 he went to Meaux, where he was appointed grand chaplain and maître de musique. He remained in this last-named city till his death, which took place August 10th, 1730. His most notable work was his 'Dictionnaire de Musique,' folio, Paris, 1703. An octavo edition appeared in 1705; and afterwards another at Amsterdam. The work gives explanations of all the musical terms in Greek, Latin, Italian, and French; treats of the history and theory of music, composition, playing, and vocalisation; and contains a list of 900 writers on music. It has been superseded by better dictionaries, but it was the first dictionary of music published in France, and was a work of learning and research. He also wrote a dissertation on the new manner of writing plain-chant; and collected extensive materials for a Bibliography of Music and a Biography of Musicians, which were deposited unfinished in the Imperial (then Royal) Library at Paris, where they now are. Some of his own compositions are included in his 'Prodromus Musicalis,' folio, Paris, 1702.

BROUGHAM, HENRY, LORD, [E. C. vol. i. col. 940]. When the memoir just cited was published Lord Brougham had already completed his 78th year, but his intellectual and physical activity was yet far from being exhausted. He collected and published his 'Essays contributed to the Edinburgh Review,' 3 vols. 8vo, 1857; and his 'Critical, Historical,

and Miscellaneous Works,' 10 vols. 8vo, 1855—58. In 1858 (May 17 and 31) he read before the Academy of Paris a long and elaborate paper in French on the Construction of the Cells of Bees, '*Recherches analytiques et expérimentales sur les Alvéoles des Abeilles*,' which was published in vol. xvi. of the '*Comptes Rendus*;' somewhat later he delivered an ample discourse on occasion of uncovering the statue of Sir Isaac Newton at Grantham, and in 1859 one of a more academical character on his election to the chancellorship of Edinburgh University; and in the course of the year, by a rearrangement of the old, and the addition of some new, chapters of his '*Political Philosophy*,' he transformed it into '*The British Constitution: its History, Structure, and Working*.' In 1860 he presided at the first congress of the Association for the Promotion of Social Science, and he not only gave a long opening address, but took a share in the proceedings; and he was re-elected president, and spoke at several of the succeeding annual sessions. He also, though with increasing rarity and brevity, attended and spoke in his place in the House of Lords. For several years his winters were spent at Cannes, and of late he mostly resided there, in a villa near the town, where he died on the 7th of May, 1868, in the 90th year of his age. A plain massive granite cross marks his grave in the cemetery of Cannes. Lord Brougham was undoubtedly one of the most remarkable men of an age rife in remarkable men: but his career is as much a warning as an example. No regular biography of him has been published or announced. Lord Campbell's posthumous life (in '*Lives of Lord Lyndhurst and Lord Brougham, Lord Chancellors and Keepers of the Great Seal of England*,' 8vo, 1869,) is a laboured effort to lower the moral and intellectual reputation of his former rival: reckless in statement and base in spirit, the book is in every way dishonourable to the writer.

BROWN, JOHN, D.D. [E. C. vol. i. col. 949]. Dr. Brown survived a little over two years the celebration of the 50th anniversary of his ministry; he died on the 13th of October, 1858.

BROWN, ROBERT [E. C. vol. i. col. 951], was born Dec. 21, 1773, and died June 10, 1858. A general sketch of his works has already been given. Fully to appreciate his influence in advancing our knowledge of plants would necessitate the writing the history of many botanical problems. Most of the eminent botanists of the present century have acknowledged how deeply they have been indebted to his observations and conclusions. It was observed of his works in the obituary notice of him in the presidential address delivered to the Royal Society in 1858—"In perusing them we are struck with the evident completeness of the investigation, and next with the wonderful sagacity with which the ascertained facts are brought to bear upon the question at issue. And these distinguishing qualities are equally obvious throughout the wide range of objects treated of, whether in the anatomy, the physiology, the classification, the description, the distribution, or the affinities of plants, and in the examination both of recent and fossil structures. Among the most important anatomical and physiological subjects of which they treat, particular mention is due to the discovery of the nucleus of the vegetable cell, and of the circumscribed circulation in the walls of particular cells; the development of the stamina, together with the mode of fecundation in *Asclepiadaceæ* and *Orchidaceæ*; the development of the pollen and of the ovulum in phænogamous plants, with the peculiarities of the latter in *Coniferae* and *Cycadeæ*, and the bearing of these facts upon the general subject of impregnation; the origin and development of the spore of mosses; and the discovery of the peculiar motions which take place in the 'active molecules' of matter when seen suspended in a fluid under the microscope. Of structural investigations, the most important are those which establish the relation of a flower to the axis from which it is derived, and of the parts of a flower to each other, as regards both position and number; the analogy between stamina and pistilla; the neurulation of the corolla of *Compositæ*, their æstivation and inflorescence; and the structure of the stems of *Cycadeæ* both recent and fossil."

A complete edition of his works has been recently published by the Ray Society.

BROWN-SÉQUARD, CHARLES ÉDOUARD [SÉQUARD, C. E. BROWN, E. C. S.].

BROWNING, ELIZABETH BARRETT [E. C. vol. i. col. 960]. In the autumn of 1856 Mrs. Browning published her longest and most ambitious poem, '*Aurora Leigh*,'—startling in its passion, power, and originality, full of noble feeling and earnestness; but wayward, unequal, incomplete as a design, imperfect in execution. '*Poems before Congress*,' 1860, seemed

to be a wild wail wrung from her by long brooding over the wrongs and hopes of Italy. Her sympathy with Italy, her yearnings for Italian freedom, appeared indeed to increase in fervour and intensity, as her feeble frame yielded slowly to the ceaseless growth of her fatal malady. She died on the 29th of June, 1861, at the Casa Guidi, Florence, where, owing to the state of her health, she had lived for some years in comparative seclusion. A marble tablet on the front of the house records that in it wrote and died Elizabeth Barrett Browning, who by her song created a golden link between Italy and England, and that in gratitude Florence has erected this memorial. Her '*Last Poems*,' 1862, include much noble verse both on English and Italian themes.

BRUCE, JOHN, F.S.A., was born in London in 1802, and completed his education at the Grammar School, Aberdeen. He was brought up to the law, but retired from practice about 1838, in order to give his undivided attention to historical and antiquarian inquiries. Mr. Bruce was one of the most active members, and for some years director, of the Society of Antiquaries, and contributed many valuable papers to the '*Archæologia*.' One of the founders, the original treasurer, and for the last 19 years of his life the director of the Camden Society, it was in a great measure to his exertions that the society owed and maintained its high position. Besides numerous contributions to its '*Miscellany*,' Mr. Bruce edited for the society no fewer than 13 volumes, including such works as '*The Annals of Elizabeth*,' '*The Leycester Correspondence*,' '*Letters of Elizabeth and James VI.*,' and '*Verney's Notes on the Long Parliament*,' and he enriched each of them with a valuable preface and notes. Mr. Bruce was also an active member of the Archæological Institute, and contributor to its journals. For the Parker Society he edited the '*Correspondence of Archbishop Parker*,' and the '*Works of Roger Hutchinson*;' '*Archbishop Laud's Benefactions to Berkshire*' for the Ashmolean Society; and he was for some time editor of the '*Gentleman's Magazine*.' His great work, however, was the '*Calendar of State Papers, Domestic Series, of the Reign of Charles I.*;' preserved in Her Majesty's Public Record Office, of which he edited 12 vols. 8vo, 1858—69, and of which the 13th vol., bringing down the series to 1638, was passing through the press at the time of Mr. Bruce's death. The great value of the work is not more generally recognised by historical students, than is the assistance rendered by the editor's comprehensive introductions and notes, the work, as all feel, not merely of a man of unusual learning and research, but of scrupulous accuracy. Mr. Bruce, whilst walking in Montague Square, October 28, 1869, fell as though in a fit, and was found to be dead when carried to St. Mary's Hospital. A '*Life of Prynne*,' on which he had been for some time engaged, remained unfinished.

*BRUGSCH, HEINRICH KARL, a distinguished Egyptologist, was born on the 18th of February, 1827, at Berlin, where he received his early education. Whilst still a student he published as the first result of his studies of the ancient Egyptian monuments, an essay entitled '*Scriptura Ægyptiorum Demotica*,' 4to, Berlin, 1843; which was soon followed by '*Numerorum apud veteres Ægyptos Demoticorum Doctrina*,' folio, Berlin, 1849; '*Sammlung Demotischer Urkunden*,' 4to, Berlin, 1850; and others which attracted the attention of the learned world, and particularly of Alexander von Humboldt and King Friedrich Wilhelm IV. of Prussia. In 1853 he undertook, at the expense of the latter, a scientific journey to Egypt, whence he returned in 1854, and was appointed Conservator of the Egyptian Museum. In 1857—8 he made a second journey to the Nile; and the literary and archæological results of the two appeared in an Account of a Journey to Egypt, '*Reiseberichte aus Ägypten*,' 8vo, Leipzig, 1855; '*Monuments de l'Égypte*,' Berlin, 1857; '*Recueil de Monuments égyptiens*,' 4to, Leipzig, 1862, &c. In 1860 he went to Persia with the Prussian Embassy, under Baron von Minutoli, upon whose death Brugsch assumed the direction of affairs. Returning home in June, 1861, he published his Journal of the Prussian Embassy to Persia, '*Reise der königlichen preussischen Gesandtschaft nach Persien*,' 2 vols., Leipzig, 1862—63. In 1863 he established a journal in the interests of Egyptian philology and archæology, '*Zeitschrift für ägyptische Sprach und Alterthumskunde*,' 4to, Leipzig, the editing of which was transferred to Lepsius, upon the appointment of Brugsch in the autumn of 1864, to be Prussian Consul at Cairo. Amongst other unmentioned works, Brugsch has published a translation of the '*Liber Metempsychosis veterum Ægyptiorum*,' 4to, Berlin, 1851; '*Nouvelles Recherches sur la division de l'Année chez les*

anciens Égyptiens,' 8vo, Berlin and Paris, 1856; 'Grammaire démotique, contenant les principes généraux de la Langue et de l'Écriture populaires des anciens Égyptiens,' 4to, Berlin, 1855; 'Geographical Inscriptions of the ancient Egyptian Monuments,' 'Geographische Inschriften altägyptischer Denkmäler,' 3 vols. 4to, Leipzig, 1857—60; 'Histoire de l'Égypte, dès les premiers temps de son existence jusqu'à nos jours,' 4to, Leipzig and Berlin, 1859, &c.; 'Matériaux pour servir à la reconstruction du Calendrier des anciens Égyptiens,' 8vo, Leipzig and Berlin, 1864, &c.; 'Aus dem Orient,' 2 vols. 8vo, Berlin, 1864; 'Wanderung nach den Türkis-Minen und der Sinai-Halbinsel. Mit drei Tafeln sinaitischer Inschriften,' 8vo, Leipzig, 1866; and 'Dictionnaire Hiéroglyphique et Démotique,' &c., 4 vols. Leipzig, 4to, 1867—8.

BRUNEL, ISAMBARD KINGDOM [E. C. vol. i. col. 976]. Mr. Brunel lived to complete the Great Eastern steamship mentioned in the original memoir as then in progress; but the exposure to inclement weather during the prolonged ineffectual attempts to launch it, and the great anxiety consequent on the various operations, brought on an illness from which he never recovered. He died on the 15th of September, 1859. Like other of Mr. Brunel's great engineering achievements, this vast vessel was perhaps conceived on too colossal a scale for commercial profit; but the manner in which it has behaved under the extraordinary trials to which it has been subjected has sufficiently justified Brunel's prescience and daring. The bridge over the Tamar, also mentioned in the memoir, the last great work he lived to finish, and one of the most remarkable, has proved to be in all respects successful.

* **BRUNLEES, JAMES**, civil engineer, was born in 1816 at Kelso, Roxburghshire. He studied engineering under Mr. Adie, of Edinburgh, and then assisted him in the engineering of the Bolton and Preston Railway. He afterwards served in a similar capacity under Messrs. Locke & Errington, in laying down the Caledonian Railway; and then for six years under Mr. Hawkshaw, for whom he was Acting Engineer of the Lancashire and Yorkshire Railway. Commencing as civil engineer on his own account in 1850, Mr. Brunlees constructed the Bangor and Carnarvon Railway, and half of the Londonderry and Coleraine line. In 1852 he undertook the Lancaster and Ulverstone Railway, a difficult work, seeing that the line had to cross a wide expanse of shifting sands under tidal influence, by a series of viaducts and sea embankments; this was finished in 1857. The Londonderry and Coleraine line had required some such management, in the construction of four miles in the tidal waters of Lough Foyle. Two of the works executed by Mr. Brunlees have involved the ascent of very steep gradients. One is the San Paolo Railway in Brazil, 86 miles long; comprising a special series of inclines to overcome a very abrupt ascent of 2600 feet—the difference between the sea-level and that of the general interior of the province. The viaducts are numerous, one having a height of 185 feet. Some of the inclines, up to Jundiahi, are as steep as 1 in 10. A centre-rail for a clip break was adopted, to prevent the too rapid descent of trains. These works were constructed between 1860 and 1866. A second railway for mountain use was the Mont Cenis Summit Railway, from Lanslebourg in Savoy to Susa in Piedmont. The centre-rail is here in like manner adopted; but the works generally are light, the line being carried up and down nearly on the surface of the mountain; the rails at the highest point are 6700 feet above the sea-level. A railway similar in some of its features to the Lancaster and Ulverstone and the Londonderry and Coleraine, though of less magnitude, has lately been constructed by Mr. Brunlees across the Solway Frith. Other railways constructed by him are the Spalding and Bourne, the Lynn and Sutton (across the tidal waters of the Nene and Ouse), and the Cleveland (including a viaduct 170 feet high). As government engineer, he is constructing the Honduras Inter-oceanic Railway, to connect the Atlantic and Pacific Oceans. The engineering works by Mr. Brunlees also comprise the Alexandra Dock at King's Lynn, 6½ acres, opened in 1869; the Avonmouth Dock near Bristol, 14 acres (not yet finished); a pier and landing-stage in the Severn at Avonmouth; a pier on the sands at Southport, nearly a mile long, and lately made available for steam-boat traffic; piers and landing-stages in the Mersey at New Ferry and New Brighton; and a system of sewerage and water supply at Kelso. Mr. Brunlees was elected Member of the Institution of Civil Engineers in 1852, and was Member of the Council in 1856. He has contributed several scientific and engineering papers to the Transactions of the Institution.

BUCHANAN, JAMES, fifteenth President of the United

States, was born at Stony Batter, Pennsylvania, in April, 1791. His father, who had emigrated from Ireland in 1783, had him educated at Dickinson College, where he graduated in 1809. After studying the law, young Buchanan was admitted to the bar in 1812; and, being successful as an advocate, acquired a fortune which enabled him to retire from the profession in comparatively early life. In 1812 he joined a volunteer corps, and made speeches against the English, with whom the States were at that time at war. In 1814 he was elected to the Pennsylvania legislature, and in 1820 to Congress, where he took a prominent part in the leading discussions, as later he did in calling for the acquisition of Cuba. When General Jackson became President, in 1828, Mr. Buchanan was chosen to succeed Daniel Webster as head of the Judiciary Committee of Congress. In 1831 he went as ambassador to St. Petersburg, where he negotiated the first commercial treaty between America and Russia. On his return, in 1834, he was elected to the Senate, and engaged eagerly in the slavery debates, taking the side of the South. From 1845 till 1849, under Polk's Presidency, Mr. Buchanan was Secretary of State, and was much engaged in the annexation of Texas, the war with Mexico, the annexation of California, and the endeavour to settle boundary disputes with England. Contending unsuccessfully with Pierce for the presidency in 1852, he was in 1853 appointed Ambassador to England, where he rendered himself somewhat unpopular by the part he took in the "Ostend Congress," a secret scheme for obtaining Cuba from Spain without the approval of England and France. In 1856 he became President, defeating Fremont. His four years term of office was marked by boundary disputes with England, and by the troubles in Kansas. His participation in the slavery question, in all its aspects, hastened the re-action which placed Abraham Lincoln in the presidential chair in 1860, and which led to the civil war. From his quitting the White House, Mr. Buchanan lived in retirement till his death, which occurred on the 1st of June, 1868.

BUCKLAND, THE VERY REV. WILLIAM [E. C. vol. i. col. 997]. This eminent geologist died August 14, 1856. His eldest son,

* **FRANCIS TREVELYAN BUCKLAND**, born in 1826, has attained distinction as a naturalist. Educated at Winchester College and at Christ College, Oxford, he adopted the medical profession, and served as house surgeon to St. George's Hospital, and as assistant surgeon to the 2nd Life Guards, from 1854 to 1863, when he retired from practice. For several years he has devoted himself to various natural history pursuits, and more particularly to the artificial cultivation of fishes. He is editor of 'Land and Water,' the author of 'Curiosities of Natural History,' and of 'Fish Hatching,' the founder and maintainer of the Museum of Economic Fish Culture in the gardens of the Royal Horticultural Society at South Kensington, and an inspector of the salmon fisheries of this country.

BUCKLE, HENRY THOMAS, known as the historian of civilization, the son of a wealthy merchant in Mark Lane, London, was born at Lee, in Kent, on the 24th of November, 1822. For a short time he attended Dr. Holloway's school, Gordon House, Kentish Town, but his health being delicate, he experienced neither the restraints nor the advantages of a regular education. In fact, from the age of 14, he was, at his own request, left to educate himself. Being an indefatigable reader, he stored up an immense mass of various information. By the death of his father, which took place in Mecklenburg Square, on the 24th of January, 1840, he was set free from the commercial career to which he seemed destined, and being in possession of an ample fortune, he was enabled to devote himself exclusively to literature. His great recreation was the game of chess, in which he became so skilful as to overcome, amongst others, the celebrated chess-player Löwenthal. He enjoyed the friendship of Hallam and Bunsen, who recognised his extraordinary talents, and exerted a great influence upon his mental development. About the age of 18 his multifarious studies began to converge towards one focus—to wit, the intellectual progress and civilization of mankind. As soon as the idea of such a work presented itself distinctly to him, its fulfilment became the object of his life. Twenty years of labour, at the stated rate of ten hours a day, with scarcely an interval of rest, were devoted to it; and at the end of this period he published the first volume of his 'History of Civilization in England,' 8vo, London, 1857; second edition, 1858; third, 1861; fourth, 1864, &c., of which a German translation was produced by Dr. Arnold Ruge, 'Geschichte der Civilisation in England,' 2 vols. 8vo, Leipzig, 1860—62. The

volume, which was in fact but a part of the preface or introduction to his work, the completion of which was contemplated in fourteen volumes, was received at first with indifference; but it speedily aroused curiosity, and next no small degree of indignation and alarm. In 1861 was published the second volume, in which the religious habits and the ecclesiastical history of Scotland were unreservedly attacked. Considerable bitterness was the result; and the storm had scarcely subsided when the effects of the unflagging toil of a sedentary kind to which Mr. Buckle had subjected himself, combined with the grief he felt at the painful illness and the death of his mother—to whom he dedicated his first volume, and to whose memory he inscribed the second—forced him abroad for the recovery of his shattered health. Accordingly, in October, 1861, he left England, and spent the winter in Egypt. Here he became so much better that in the beginning of March he left Cairo for Sinai and Petra; and in the course of a six weeks' journey in the Desert, his health seemed to himself to be perfectly re-established. He caught cold, however, whilst exploring the ruins of Palmyra, and died of typhus fever at Damascus, on the 29th of May, 1862, and was buried on the same day.

Mr. Buckle left great parts of the special 'History of Civilization in England' in manuscript, in a fit state for publication, as well as outlines of essays on the 'Ultimate Causes of the Interest of Money'; 'On Bacon,' chiefly on Method; 'On Shakspeare'; and 'On the Influence of Northern Palestine on the Origin of Christianity.' These essays, if he had lived to complete them, were intended by the author to be collectively published with the papers he had contributed to 'Fraser's Magazine,' one of which had appeared in April, 1858, after having been delivered as a lecture on the 19th of March previous, at the British Institution, on the 'Influence of Women on the Progress of Knowledge'; and the second of which had appeared in May, 1859, as a review of Mr. Mill's essay 'On Liberty.' Whatever the faults and shortcomings of the published instalments of the work which Mr. Buckle contemplated, it is allowed that they compose into a great and noble book; and it is possible that in the historical sequel, an experience more mature and a larger insight might have supplied or corrected much that in the Prolegomena is crude or rash, inaccurate or incomplete. There is no lack of dogmatism and bold inference, and from his excessive generalisation, the author labours under the charge of being a one-sided doctrinaire, who knew books rather than men; who forgot the humanity and good-citizenship of the clergy in his hatred of their professional anathemas; and who in his strictures on national character employs an intellectual standard only, ignoring or overlooking the moral compensations for imperfect knowledge. The three principal theses of Mr. Buckle's book were summed up as follows in a letter in the 'Times' of June 18th, 1862, written by his friend and fellow-traveller, Mr. J. S. Stuart Glennie:—(1) Political economy—the science of wealth—is the deductive science through which the investigation of natural is connected with that of social phenomena, and thus the way prepared for one universal science. (2) The laws of society are different from those of the individual; and the method of averages, with which has to be compared the mathematical theory of probabilities, is that by which the former is to be investigated. (3) In social phenomena the intellectual, in individual the moral, laws are chiefly or alone to be considered; all moral social changes are thus preceded by intellectual changes.

BULL, JOHN, DR., a musical composer of the Elizabethan times, was born in Somersetshire in 1563. When about eleven years old he began to study music; and afterwards Blitheman, organist of the Chapel Royal, taught him composition and organ-playing. He received the degree of bachelor of music, Oxford, in 1586, and that of doctor in 1592. He succeeded Blitheman as organist of the Chapel Royal in 1591. In 1597, when appointed professor of music at Gresham College, he published a Discourse entitled, 'Oration of Maister John Bull, Doctor of Musick, and one of the Gentlemen of Her Majestie's Royal Chappell,' &c.; it was in praise of music, coupled with a panegyric of Sir Thomas Gresham. In 1602, his health being bad, he went on a tour to Germany, France, and Spain, and was received with much distinction, having many musical posts offered him. Returning to England, he was appointed special organist to James I. in 1607. He went to the Netherlands in 1613, and spent the rest of his days there; succeeding Waelrant as organist of Antwerp Cathedral in 1617. He died at Antwerp on the 12th of March, 1628.

Dr. Bull was a voluminous composer. In Ward's 'Lives of the Gresham Professors' is given a list of no less than 120 com-

positions by him for the organ and virginal. Burney regarded him as inferior to Tallis and Bird; Hawkins took a higher estimate of his merit. A prolonged controversy has been carried on as to the part which Dr. Bull took in the composition of the National Anthem, 'God Save the King (Queen).' The tune was attributed to Purcell, Handel, and many other composers of note; when, towards the close of the last century, a claim was put in for Henry Carey, great-grandfather of Edmund Kean. Mr. Chappell ('Music in the Olden Time'), Dr. Fink ('Leipsic Musical Gazette'), and many writers in 'Notes and Queries,' have examined the subject closely in recent years; they have arrived at a conclusion that the tune *grew up gradually*. Mr. Clark, who published a pamphlet concerning the origin of the National Anthem early in the present century, offers reasons for the belief that Bull composed the music; but Mr. Chappell and other recent writers are not satisfied with the evidence, nor with the evidence in support of a theory that "the National Anthem is a mere transcript of a Scottish anthem preserved in a collection printed in 1682." Dr. Arne and Dr. Burney both believed that the tune was composed in the time of James II. The general conclusion now is, that the germ of the tune existed two, if not three centuries ago, and that Henry Carey gave it its modern form in 1740; but that no direct connection of Dr. John Bull with the composition can be traced.

BULLINGER, HEINRICH, a Swiss reformer, a friend and disciple of Zwingli, was born at Bremgarten, a village near Zurich, on the 18th of July, 1504. He was educated at the school of Emmerich, in the duchy of Cleves, and at Cologne, where he studied logic, and commenced B.A. at 16 years of age. He took his M.A. degree in 1522, and returning to his father's house, remained there for a year, pursuing his studies privately. Being called by the Abbot of Kappel, a Cistercian abbey near Zurich, to teach in that place, he did so with great reputation for four years. Many persons resorted to his lectures, and to them he read the New Testament, portions of Erasmus, and Melancthon's Common-places. In 1527 he was sent by his abbot to Zurich, where he attended for five months the preaching and lectures of Zwingli, while he prosecuted the study of Greek and Hebrew. On his return to Kappel he prevailed with the abbot and his monks to adopt the reformation of Zwingli, to which they had been before inclined. In 1528 he accompanied Zwingli to the religious conference at Berne, which resulted in the reformation of that canton. In the year following he was made pastor of the reformed church at his native place of Bremgarten; and married Anna Adlischwyler, who had been a nun, by whom he had a family of six sons and five daughters, and who died in 1564. Bullinger met with great opposition from the Papists and Anabaptists in his parish, but disputed publicly, and wrote several books against them. The victory of the Catholic party at the battle of Kappel forced him in 1531 to take refuge at Zurich, where in 1532 the great council chose him to be minister of the cathedral. In the disputes on the Lord's Supper with Luther he was remarkable for his fairness and moderation; and he hospitably received the German divines who took refuge in Switzerland from the effects of the *Interim*. He died on the 17th of September, 1575. His printed works are very numerous, doctrinal, practical, and controversial, and many of them were in his own time extremely popular in England, especially a volume entitled 'Fiftie Godlie Sermons, divided into five Decades, conteyning the chiefe Pointes of Christian Religion. Translated out of Latine,' &c., 4to, London, 1577, which was held in such high estimation in this country that in 1586 Archbishop Whitgift, in full convocation, procured an order to be made that every clergyman of a certain standing should obtain a copy of it, read one of the sermons contained in it every week, and make notes of the principal matters.

BUNNING, JAMES BUNSTONE, City architect, was born in London, October 6, 1802. He was articled to Mr. George Smith, and learnt from him the mechanical part of his profession. By his private connections he obtained an excellent business, being appointed successively surveyor to the Foundling Hospital, the Haberdashers' Company, the London and County Bank, the Chelsea Waterworks, the Thames Tunnel Company, and other corporate and commercial bodies; but he was first brought into public notice by his success in the competition for the City of London School. This building, which was completed early in 1837, was regarded as a wonderful example of Gothic architecture, and secured his fortune in the City. He had, however, some five or six years to wait before obtaining his civic appointment, during which time he built for the London

and County company several country banks, carried out extensive alterations and improvements on the New Cross and Hatcham estates of the Haberdashers' Company, and erected many semi-public and private buildings.

In 1843 he was elected Clerk of the City's Works, an ancient title exchanged in 1847 for that of City Architect. Holding this office for just upon twenty years, it fell to his lot to design and carry out many important metropolitan improvements, and though exception must be taken to their artistic character generally, it will be admitted by all who study them that they are for the most part well planned, and always executed in a thoroughly workman-like manner. One of his first great works was the formation of New Cannon-street, from King William-street, London-bridge, to St. Paul's-churchyard—a broad and handsome street, but so contrived as just to miss having St. Paul's as the western and the Monument as the eastern termination of the vista. Victoria-street, now called Farringdon-road, the broad street leading from Farringdon-street to Clerkenwell; the widening of Gresham-street; the opening of Bank-buildings, and several similar but minor improvements were carried out under his direction. A few of the principal buildings and markets designed by him for the City of London may be particularly noticed. The Coal Exchange, Lower Thames-street, completed in 1849, is a curiously decorated Italian edifice, the exterior feature being a semi-circular portico of the Roman Doric order, above which rises a tall tower, with Ionic columns and entablature, crowned with a conical roof and gilt ball; of the interior, a rotunda, 60 feet in diameter, having three tiers of projecting galleries, and covered by a glazed dome, the apex of which is 74 feet from the pavement. This building is of Portland stone. Billingsgate Market, opposite to it, completed in 1853, Mr. Bunning constructed chiefly of red brick. Like the Coal Exchange, the architect described the style as Italian, but it was even more anomalous and equally inappropriate: both buildings were, however, noteworthy for the ingenuity shown in economising space, and in the adaptation of subsidiary appliances. The City Prison, Holloway, completed in 1852, is an immense structure of what Mr. Bunning termed Castellated Gothic, chiefly remarkable externally for its extrayagant and curiously misplaced array of mediæval military arrangements, which would have been useless in any past or possible system of military attack, whilst they have no picturesque value or architectural propriety. Still, though artistically absurd, the building is said to be conveniently arranged. The City Lunatic Asylum, Stone, near Dartford, Kent, another enormous structure, was left incomplete at his death, and was, we believe, somewhat materially altered from his designs. His most successful City work was the Metropolitan Cattle Market, Pentonville, opened in 1855, of which the central architectural feature is an Italian clock-tower, or campanile, 100 feet high. In the Cattle Market more effect might perhaps have been obtained by a designer gifted with an artistic eye and hand; but the primary point was convenience, suitableness, and in this Mr. Bunning is allowed to have succeeded. It is the largest and costliest cattle market in the kingdom, but at the time of its construction it was also by far the most complete in its arrangements, and the best adapted to its purpose. Besides erecting new, Mr. Bunning had to alter several old buildings. Thus he entirely rebuilt the Courts of Law, Guildhall; remodelled the interior of Newgate; altered the state-rooms of the Mansion House, &c.; he had also to design the temporary structures and fittings required for extraordinary civic festivities or ceremonials. Although mainly engrossed during his later years by his official engagements, Mr. Bunning found time to erect a few other works of a partly public character, such as the Freemasons' Orphan Schools and Rogers' Almshouses, Brixton, and several private buildings. He died November 2, 1863.

BUNSEN, CHRISTIAN KARL JOSIAS, BARON. [E.C. vol. i. col. 1008.] Baron Bunsen survived, in very feeble health, his retirement to Germany, only till the 28th of November, 1860. The English version of his great work, 'Egypt's Place in Universal History,' 5 vols. 8vo, has been completed since the author's death by Mr. H. Cottrell, under the supervision of S. Birch, LL.D., who has largely added to the concluding volume. His other great work, 'God in History,' 3 vols. 8vo, has also appeared in an English version by Miss S. Winkworth, 1868—69. In 1868 was published 'A Memoir of Baron Bunsen . . . drawn chiefly from Family Papers. By his Widow, Frances Baroness Bunsen,' 2 vols. 8vo. A German translation, with some additional documents, by Prof. Friedrich Nippold, of Heidelberg, was issued a few months later. The

Baroness Bunsen, whose beautifully-written biography is the noblest memorial of her husband, was married, as Miss Frances Waddington, to Bunsen in 1817. Their second son, Ernest De Bunsen, born 1819, took orders in the English Church, and is the author of 'The Hidden Wisdom of Christ and the Key of Knowledge; or, the History of the Apocrypha,' 2 vols. 8vo, 1864; and 'The Keys of St. Peter; or the House of Rechab, connected with the History of Symbolism and Idolatry,' 8vo, 1867.

BUNSEN, ROBERT WILHELM, was born March 31, 1811, at Göttingen, where his father was professor of Oriental literature. He studied zoology, chemistry, and physics at the University of his native town, and also in Paris, Berlin, and Vienna. In 1836 he was appointed to the chair of chemistry at the Polytechnic Institute at Cassel, and in 1838 became Professor at the University of Marburg and in 1841, Director of the Chemical Institute of that town. In 1851 he became professor at Breslau, and next year at Heidelberg. He has published a large number of papers in various departments of physics, chemistry, and geology, but is popularly known for his association with Kirchhoff in researches on spectrum analysis, and also for his discovery of an antidote to arsenic in the hydrated oxide of iron.

BUONTALENTI, BERNARDO, distinguished as a painter, sculptor, architect, and engineer, was born at Florence in 1536. His father lived on the banks of the Arno, in a house which, in 1547, was destroyed in a sudden rising of the river, when all the family were drowned, except Bernardo. The Grand Duke, Cosmo I., adopted the child thus saved as by a miracle, and, as he showed a lively imagination and a liking for art, had him taught painting by Salviati and Bronzino, miniature by Clovio, sculpture by Michelangelo, and architectural design by Vasari; and the pupil of many masters succeeded so well as to become the favourite of princes and sovereigns, and win the reputation of being a universal genius. Of his skill in painting the best known examples are his own portrait in the famous Gallery of Painters at Florence, and a miniature, 'The Holy Family,' in the Royal Gallery. A marble crucifix at Borgo-San-Friano, and some other works, are cited as illustrations of his ability as a sculptor; but it is as an architect he is perhaps best known. Among his works at Florence were the Casino, behind St. Mark's, a very handsome and well-planned structure; the Acciajuoli palace, and the fronts of the Strozzi, Martelli, and Riccardi palaces; the Villa Bratonilo, which he erected for the Grand Duke Francis I.; a new front to the hospital of Sta. Maria Nuova, and alterations of the interior of the church of Santa Maria Maggiore. At Pisa he erected the Arsenal Mediceo, the Logge di Banchi, and the façade of the church of S. Stefano; at Pistoja the Sozzifanti; and at Siena the grand-ducal palace. Having been nominated engineer in chief of Tuscany, he constructed the celebrated fortress of the Belvedere at Florence; the new citadel at Livorno (Leghorn), the enceinte of Pistoja, and various other works. So celebrated did he become in this line, that he was called to design important works at Porto Ferrajo, in the Isle of Elba, and elsewhere. He also erected several bridges, constructed various extensive hydraulic works, and is said to have greatly improved military engineering, and to have been one of the first to suggest the use of bombs in warfare. His skill and tact in devising the arrangements, scenery, and theatrical machinery for the triumphal processions and other public fêtes then so much in vogue, obtained for him the cognomen Delle Girandole. He died, according to Bottari, in 1608; but some authorities say, in 1606.

BURCHELL, WILLIAM JOHN, traveller, was born about 1781 at Fulham, where his father pursued the occupation of a nurseryman. In 1810 he went to the Cape of Good Hope, and for the next four years prosecuted those explorations with which his name is associated, and of which a partial account has been given in his 'Travels in the Interior of Southern Africa,' 2 vols. 1822—24. He traversed more than 4500 miles, and collected upwards of 63,000 natural history objects. This work indicates a very observant and intelligent mind, anxious to record every noteworthy fact that passed within its ken. He kept a constant record of the temperature and other climatal phenomena, and records a great many observations on the natural history of the district. In his anxiety to be as accurate as possible he made his own sketches on the wood, and constructed his own map, for which latter purpose he made numerous astronomical observations. From 1825 to 1830 he made a similar exploration of Brazil, and formed an immense collection of objects belonging to almost every branch of natural history. A short account of this

journey appeared in volume ii. of Hooker's 'Botanical Miscellany,' in which he says he had gathered 15,000 species of plants. He died at Fulham, March 23, 1863.

BUREN, MARTIN VAN, 8th President of the United States, was born at Kinderhook, in the State of New York, December 5th, 1782. The son of a farmer, he received a plain education in his native village, began in 1796 to study the law, and was admitted to the American bar in 1803. In 1808 he filled the office of Governor Surrogate in Colombia County, New York State. In 1812 he was elected representative to the Senate in the New York State legislature; and in 1815 Attorney-General of that State. His political career may be dated from 1818, when he commenced a new organisation of the party known at that time as the Democrats of New York State. He entered the Senate of the United States in 1821, a position he resigned in 1827, when elected to the Governorship of New York. He was appointed Secretary of State in 1829 by President Jackson; in 1831 he exchanged this post for that of American ambassador at the Court of St. James's; but, owing to an excited state of feeling at the time concerning Anglo-American disputes, the appointment was disallowed by the Senate of the United States, and annulled. In the following year he was elected Vice-President of the Republic, and, as a consequence, President of the Senate. On the termination of the presidency of General Jackson in 1836, Mr. Van Buren was elected to succeed him, defeating Harrison and Daniel Webster. His term of office was, however, a troubled one; it was a period of great financial difficulty, and the measures which he took to maintain the credit and improve the position of the country brought him into disfavour with a large body of his former supporters. Consequently, when he again competed for the presidency, in 1840, he was defeated by Mr. Harrison. Mr. Van Buren then retired for a time to his estate at Kinderhook. In 1844 he made one more attempt to regain his high office; but the Democratic National Convention of Baltimore, with whom the nomination on his side in party politics rested, selected Mr. Polk as their candidate. In 1848, when an attempt was made by the Southern interest to introduce slavery into the territories won from Mexico during the war, Mr. Van Buren refused to aid the democratic party in the manoeuvre, and assisted to bring in Taylor instead of Cass as President. In 1853—55 Mr. Van Buren made a prolonged tour in Europe, and then settled down permanently into private life. He died at Kinderhook, July 24, 1862, in the midst of the Civil War between North and South.

BURETTE, PIERRE JEAN, who combined in a remarkable degree the knowledge of a physician with a large amount of learning on musical subjects, was born at Paris on the 21st of November, 1665. He commenced life as a teacher of music; but out of the money thereby acquired he purchased books and paid for instruction in Latin, Greek, philosophy, and medicine, and he received the degree of doctor of medicine at the age of twenty-five. He was nominated physician to the *Charité des Hommes* in 1692; professor of *materia medica* in 1698; Latin professor of surgery in 1701; member of the *Académie des Inscriptions* in 1705; and professor of medicine at the *Collège Royal* in 1710. For about a third of a century, from 1706 to 1739, he was one of the editors of the '*Journal des Savans*,' in which he wrote largely. His medical papers, on various matters relating to the treatment of disease, were mostly published in this work; but those relating to the ancient literature of music, and allied subjects, appeared in the '*Mémoires de l'Académie des Inscriptions*.' Among them were thirteen papers on the Gymnastics of the Greeks, in relation to art and to amusement, as well as to health. Other papers by him, in the *Mémoires*, were on '*La Symphonie des Anciens*,' '*Le Rhythme des Anciens*,' '*La Mélodie de l'Ancienne Musique*,' and '*Les Ouvrages Modernes touchant l'ancienne Musique*.' He wrote a series of seven critical papers on Plutarch's *Dialogue on Music*; and others on the relative characteristics of ancient and modern music—all of which display much erudition. Burette died on the 19th of May, 1747.

BURKE, ROBERT O'HARA, who lost his life during an exploring journey in Australia, was born at St. Clerans, in Ireland, in 1812. He was educated partly in Belgium, and obtained a captaincy in the Radetzky regiment in the Austrian service, which he relinquished in 1848. For some time he had a command in the Irish mounted constabulary, which he resigned in 1853, and emigrated to Australia, where he became acting inspector of police at Melbourne and other places. In 1860, a donation of 1000*l.* was anonymously offered, through the Melbourne *Argus* newspaper—to be made up to 3000*l.* from

other sources—for defraying the expenses of an exploratory journey into the interior of Australia, to complete the researches commenced by Leichardt, Sturt, Eyre, Mitchell, and Oxley. The money being promptly subscribed, the expedition was placed under the command of Mr. Burke, who took with him Mr. Wills and about a dozen other persons. Well provided with camels, horses, stores, and instruments, the expedition started from Melbourne on the 20th of August, 1860. A difference of opinion led to the early return of all the men except Burke, Wills, King, and Grey, who, with six camels, a horse, and three months' provisions, recommenced the journey northward. Disappointment in meeting with supply parties, the death of the camels through exhaustion, and the loss of provisions, placed the party in great peril; nevertheless, they succeeded in reaching the Gulf of Carpentaria, on the north coast of Australia, and three of them found their way back to Cooper's Creek on April 21, 1861—Grey having died on the way. For months these men were entirely dependent on friendly natives for scanty supplies of food, having neither animals nor bodily strength sufficient to travel far from the Creek. At length Burke died through hunger, illness, and exhaustion, and Wills a few days afterwards, but King had no exact record of the dates. An exploring party, headed by Mr. A. W. Howitt (son of William and Mary Howitt) met with King on the 15th of September, living with some friendly natives. After burying the bodies of Burke and Wills, the party returned south, taking King with them. From the field-books of Burke and Wills, recovered by Mr. Howitt's party, it appears that they really crossed Australia from south to north, from Melbourne to the Gulf of Carpentaria, but that their scanty resources and weakened condition rendered them unable to make many scientific observations.

BURKITT, WILLIAM, who has a considerable reputation as a popular commentator on the New Testament, was born on the 25th of July, 1650, at Hitcham, in Suffolk. His father was the Rev. Miles Burkitt, of Edmund Hall, Oxford, who at that time held the living of Hitcham, of which he was deprived at the Restoration in favour of the former incumbent. He was ejected for nonconformity from the united benefices of Netishead and Irstead, to which Bishop Reynolds subsequently presented him, and afterwards lived privately at Monks Ely, upon an estate which he had purchased there. His son William received his earliest education with Mr. Gosse, of Bilston; afterwards successively at schools at Stow-Market and Cambridge, and was admitted, at 14 years of age, at Pembroke Hall. Having taken his degree, and received ordination from Dr. Edward Reynolds, Bishop of Norwich, he became domestic chaplain at Bilston Hall, and so continued for several years. With the duties of this position, it would seem that he at first combined those of a schoolmaster and curate of Milden, and that he subsequently held the living. He interested himself greatly for the relief of the French Protestants in Suffolk and Essex, and in the six years, 1687—1692, collected between two and three hundred pounds in their behalf. In December, 1692, Burkitt was appointed to be vicar and lecturer of Dedham, in Essex, where he continued until his death on Sunday, the 24th of October, 1703. Burkitt's conduct seems to have been in every respect estimable. His works comprise a *Funeral Sermon* on the death of the Rev. William Gurnall, entitled, '*The People's Zeal provoked to an holy emulation by the pious and instructive example of their dead Minister*,' 4to, 1680; '*An Argumentative and Practical Discourse of Infant Baptism* : in which (1) the Lawfulness of Infant Baptism is demonstrated; (2) the Objections against it are answered; (3) the usefulness of the Ordinance is asserted; (4) the sinfulness of Re-baptizing manifested; (5) the non-necessity of Dipping evidenced; (6) the Practical Use of Infant Baptism urged and enforced,' 8vo, London, 1695, 3rd edition, 1703; '*The Poor Man's Help*, and the *Young Man's Guide*,' a small but pious and useful book, which serves as a guide and incentive to godliness; '*Family Instruction* ; or, the Principles of Religion necessary to be known by family governors,' &c.; and last, and most important of all, his '*Expository Notes, with Practical Observations on the New Testament of our Lord and Saviour Jesus Christ* ; wherein the Sacred Text is at large recited, the sense explained, and the instructive example of the Blessed Jesus and his holy Apostles to our imitation recommended. The whole designed to encourage the Reading of the Scriptures in Private Families, and to render the daily perusal of them profitable and delightful.' The nature of this work, which has gone through many editions, is sufficiently indicated in the title; it is popular, perspicuous, and of great practical utility, but it is not critical, scholarly, or learned.

*BURMEISTER, HERMANN, zoologist, was born at Stralsund in 1807, and is the son of a tax-collector. He was educated at Stralsund, Griefswalde, and Halle. At the last-mentioned town he became acquainted with Nitzsch, who stimulated him to the study of zoology. In 1829 he was made a doctor of science, and in 1830 published his first work, a 'Lehrbuch der Naturgeschichte.' He then made a short stay at Hamburg, and proceeded to Berlin, where he gave lectures up to 1842, in which year he succeeded Nitzsch as professor of zoology at Halle. In 1848 he took a part in the political proceedings of the day, but his health failing, he travelled for two years in Brazil, and then resumed his post at Halle. In a subsequent visit to South America he gave his attention more particularly to the Argentine Confederation. These two journeys have given rise to many of his most important papers and works. Amongst the latter may be mentioned, 'Reise nach Brasilien,' 1853; 'Reise durch die La Plata Staaten,' 1861, and 'Erläuterungen zur Fauna Brasilien,' &c., 1856. His writings are numerous, and refer to all classes of the animal kingdom. Among the most prominent may be mentioned—'Die Organization der Trilobiten,' 1843, which was translated for the Ray Society; a 'Handbuch der Entomologie,' 1832, &c.; 'Grundriss der Naturgeschichte,' of which an 8th edition appeared in 1852. The list of his articles in the Royal Society's 'Catalogue of Scientific Papers' is 71.

BURNELL, GEORGE ROWDEN, born in 1814, was educated as a civil engineer. He was for some years employed in various branches of his profession in America, Belgium, and Holland, in the latter countries studying closely the great works connected with river engineering, sea defences, and the reclamation of land, in which the genius of the engineers of the Netherlands has been so conspicuous, and in which he attained an extent and accuracy of information possessed by few English engineers. Later he spent six or seven years in France, occupied as assistant engineer on the Paris and Rouen Railway, and as superintending engineer in the construction of the Havre Docks. Returning to England in 1848, and not finding readily an opening for active professional practice, he was led to turn his attention to the literature of his profession, to which he made in the course of the following years many valuable contributions, mainly, however, in the form of essays in the journals. One of his first independent works was 'The Rudiments of Hydraulic Engineering,' 8vo, London, 1852. For 'Weale's Rudimentary Series,' he wrote Treatises on 'Acoustics: the Elements, Practice, and Distribution of Sound in Public and Private Buildings;' 'On Well-sinking, Boring, and Pump-work;' 'On Hydraulic engineering;' 'On River Engineering;' 'On Fluids;' and 'On Limes, Mortars, Concrete, &c.' Having been called in as consulting engineer by some of the great gas-companies, he was led to pay particular attention to the manufacture of gas, and was for several years closely connected with the 'Journal of Gas-lighting,' which contains many valuable papers by him. He also contributed to the 'Builder,' and edited for several years the 'Engineer and Architect's Pocket Book,' and the 'Builder's and Contractor's Price Book.' As an active member of the Institute of British Architects, he contributed to its proceedings numerous sessional papers, some of a practical kind, as those on 'Building Materials employed at Paris and the Valley of the Lower Seine' (1852), on the 'Influence of some External Agents on the Durability of Materials' (1854); 'Observations on Pile Driving' (1855), &c.; and some of a more general order as 'Notes of an Excursion in the South-West of Galicia, Spain' (1852); 'Sixty Years Since, or Improvements in Building Materials and Construction during the Present Century' (1860); 'Operations lately carried on at Bayeux and Chichester Cathedrals' (1861); and 'Present Tendencies of Architecture and Architectural Education in France' (1865); as well as some articles to the 'Architectural Dictionary' of the Institute. To the Arts and Sciences Division of the ENGLISH CYCLOPEDIA he was a valued contributor. The elaborate articles on constructive architecture, on canals, river engineering and sea defences, tidal harbours, coffer-dams, the strength of materials, roads, drainage, sewers, reservoirs, water-supply, tunnels, gas-engineering, and the like, were written by him, and are admirable examples of special knowledge, conscientious accuracy, and terseness of expression. Of late his professional practice had been drawing more and more towards architecture, and he constructed several buildings of more or less importance. Perhaps the most noteworthy was the Equity and Law Life Office, on the north side of Lincoln's-inn-fields—a good English Renaissance edifice, remarkable for its structural character and the rare knowledge shown in the selection of materials. This knowledge led to Mr. Burnell's appointment as

a member of the Royal Commission of inquiry into the best means of preserving the stone of the Houses of Parliament. The earnest labour of so many years seemed to be bringing its reward, when his overtasked brain yielded, and he died on the 23rd of July, 1868, in his 54th year.

BURNET, JOHN [E. C. vol. i. col. 1042]. In his 75th year, being in feeble health and reduced circumstances, the services rendered to art by this eminent engraver and writer were rewarded by the Government of Lord Palmerston by a pension of 75*l.* from the Civil List. He lived to enjoy it just seven years, dying on the 29th of April, 1868.

*BURNOUT, EMILE LOUIS, was born at Valognes on the 25th of August, 1821. He studied successively at the Lycée St. Louis and the École Normale; became docteur-es-lettres in 1850, and was afterwards appointed professor of Ancient Literature to the faculty of Nancy. He is the author of theses entitled 'Des Principes de l'Art d'après la Méthode et les Doctrines de Platon,' and 'De Neptuno, ejusque cultu, præsertim in Peloponneso,' 8vo, Paris, 1850; 'Extraits du Novum Organum,' 12mo, Paris, 1850; 'Méthode pour étudier la langue sanscrite, sur le plan des Méthodes de J. L. Burnout,' 8vo, Paris and Nancy, 1859, the joint production of MM. Emile Burnout and L. Leupol; 'De la Nécessité des Études Orientales,' 8vo, Nancy, 1861; a translation of the 'Bhagavad-Gîtâ,' 8vo, Paris and Nancy, 1861; 'Essai sur le Véda, ou études sur les Religions, la Littérature, et la Constitution Sociale de l'Inde,' &c., 8vo, Paris, 1863; and a work in which he was also assisted by M. Leupol, 'Dictionnaire Classique Sanscrit-Français,' 8vo, Paris and Nancy, 1863—64. He has contributed some excellent papers to the 'Revue des Deux-Mondes' and other important journals.

BURNOUT, JEAN LOUIS, a celebrated French philologist, was born at Urville, in the department De la Manche, on the 14th of September, 1775. He was for a short time a pupil at the Collège d'Harcourt, which he left to enter a house of business, first at Dieppe and afterwards at Paris. In his leisure hours he studied Greek and Latin, with so much success that he was appointed in 1808 an assistant-professor at the Lycée Charlemagne. This institution he soon afterwards quitted in order to fill the chair of rhetoric at the Lycée Imperial, which he vacated in 1826 on being appointed inspector of the Academy of Paris. He acted as president of the École Normale from 1811 to 1822, and was named professor of Latin Eloquence at the Collège de France in 1817. One of the results of his labours in comparative philology is his 'Méthode pour étudier la langue grecque,' 8vo, Paris, 1814, which tended all over France to facilitate and to popularise the study of Greek, and which has by this time gone through more than fifty editions. M. Burnout passed the last years of his life in attempting to do for Latin what he had already done for Greek; and during his various avocations found time to edit and to translate several classical authors, especially Sallust, portions of Cicero, and, between 1828 and 1833, the whole works of Tacitus. In 1830 he was appointed inspector-general of studies; and on his resignation of this post in 1836, was made librarian to the university. He died suddenly on the 8th of May, 1844.

BURNOUT, EUGENE, son of the above, was born at Paris on the 12th of August, 1801. He was at first devoted to the study of law, and upon taking his degree in 1824, produced a remarkable thesis, entitled 'De Re Judicata.' Soon, however, he began to give undivided attention to the Oriental languages, which he studied under MM. de Chézy and Abel Rémusat, and in which he achieved distinction almost from the first. In 1826 he published an 'Essai sur le Pali, ou Langue Sacrée de la presqu'île au delà du Gange,' 8vo, Paris, 1826; and in the following year 'Observations grammaticales sur quelques passages de l'Essai sur le Pali,' 8vo, Paris, 1827. His researches in Sanskrit, carried on at the same time, resulted in numerous contributions to the 'Journal Asiatique' and the 'Journal des Savans.' His greatest distinction is his recovery of the knowledge of the Zend language, which he effected by means of the MS. which Anquetil-Duperron had brought from the east and deposited in the Bibliothèque-Royale. He caused one of the books of Zoroaster, the 'Vendidad-Sadé,' with a Sanskrit commentary, to be faithfully lithographed, and published in folio, Paris, 1829—1843. On the death of M. Champollion the younger, in 1832, he was elected to his place as a member of the Académie des Inscriptions et Belle-lettres, and in the same year he succeeded M. de Chézy in the chair of Sanskrit in the Collège de France. The principal works contributed by M. Burnout to the various departments of Oriental learning are, besides those already mentioned, 'Commentaires sur le Yaçna, l'un des

Livres liturgiques des Perses, 4to, Paris, 1833—35; a Sanskrit text, with a French translation of the 'Bhagavata Purāna, ou Histoire Poétique de Krichna,' 3 vols. folio, Paris, 1840—47; 'Introduction à l'Histoire du Bouddhisme Indien,' 2 vols. 4to, Paris, 1844, &c., a work explaining the dogmas and the origin of Buddhism, and which was followed by a translation from the Sanskrit of 'Le Lotus de la bonne Loi,' 4to, Paris, 1852, one of the most important of the canonical books of the Buddhists of India, which the translator accompanied with a 'Commentaire et vingt et un Mémoires relatifs au Bouddhisme.' Whilst this volume was in the press, its author was prematurely cut off on the 28th of May, 1852, and it was brought out by M. Théodore Pavie at the end of the year. During his short and fatal illness M. Burnouf was elected, fourteen days before his death, by the Académie des Inscriptions to be their perpetual secretary.

* BURNSIDE, AMBROSE EVERETT, one of the generals engaged in the American civil war, was born at Liberty, State of Indiana, May 23rd, 1824. He entered as a cadet at West Point Military Academy when about eighteen. After being second lieutenant in the 2nd Artillery, he filled the same post in the 3rd, with which he served in Mexico in Paterson's column. He was next engaged as first lieutenant in Captain Bragg's battery on frontier service in New Mexico. Quitting the service in 1853, he attended to the manufacture of a breech-loading rifle invented by himself; but the enterprise proving unsuccessful, he entered the service of the Illinois Central Railway Company, in which he remained till the breaking out of the civil war. When President Lincoln called for volunteers in April, 1861, Burnside was placed in command of the 1st Rhode Island Regiment. This was one of the first volunteer regiments to reach Washington. An army of North-Eastern Virginia being quickly organised under General McDowell, Burnside, with the rank of colonel, was appointed to the command of one of the brigades. This post was soon afterwards exchanged for that of brigadier-general of volunteers. General McClellan selected him to command the expedition to Pamlico Sound, known as the Burnside Expedition; he defeated the Confederates at Beaufort and Fort Macon; and his success won for him the rank of major-general of volunteers, and the presentation of a sword from the State of Rhode Island. He next commanded the 9th Army Corps in the army of the Potomac; then joined the forces near Washington; afterwards served in Maryland, where he distinguished himself at the battle of Antietam; and then commanded one half of McClellan's army in Virginia. In November, 1862, Burnside succeeded McClellan in command of the army of the Potomac, and made a forced march upon Fredericksburg. A crushing defeat in an attempt to take that place by storm in the following month led him to resign his post. In 1863 he was mostly engaged with the army under Rosencranz, and farther to the west; and in 1864 he commanded a corps of reserve under General Grant. He had a large number of negro troops under him; and a failure in some of the operations which he conducted led to his being superseded in the command. General Burnside was appointed Governor of Rhode Island in 1865.

* BURTON, RICHARD FRANCIS, a distinguished explorer and geographer, the son of Colonel Joseph Netterville Burton, was born in 1820 at Tuam, in Galway, Ireland. Entering the service of the East India Company, he obtained a lieutenancy in a native regiment, in the Bombay Presidency. In 1843 he served in Sindh, under Sir Charles Napier; and was employed in that country for some years in the survey conducted by Colonel Walter Scott, of the Bombay Engineers. Gifted with a remarkable facility for acquiring languages and accommodating himself to the manners of various countries, he took advantage of his stay in this province to study its geography and populations, and published his observations in three works—'Sindh, or the Unhappy Valley,' 2 vols. 8vo, London, 1850; 'Falconry in the Valley of the Indus,' 8vo, London, 1850; and 'Sindh and the Races that inhabit the Valley of the Indus,' 8vo, London, 1851. He published also 'Goa and the Blue Mountains; or Six Months of Sick Leave,' 8vo, London, 1851; but before this he had contributed to comparative philology his 'Grammar of the Mooltanee Language,' and 'Critical remarks on Dr. Dorn's Chrestomathy of the Pushtoo, or Affghan Dialect.' His minute and colloquial knowledge of Arabic now suggested to him the possibility of visiting Medina and Mecca, where no European had penetrated since Burckhardt. With this view he visited England in the latter end of 1851, in order to receive the instructions of the Geographical Society, under whose auspices he proposed to make the journey. He embarked at Southampton in April, 1853, and having, after his arrival at Suez, adopted the habits of an Affghan

BIOG. DIV.—SUP.

pilgrim, succeeded in penetrating to the two holy cities and in accomplishing a safe return to Cairo. The particulars of this expedition are recorded in a 'Personal Narrative of a Pilgrimage to El Medinah and Meccah,' 3 vols. 8vo, London, 1855—57. Lieutenant Burton's next adventure was the expedition to the Somanli country, the first attempt to penetrate Eastern Africa in that quarter, which led the way indirectly to the Nile expeditions which lasted from 1856 to 1859. In this exploration, which it was impossible to prosecute beyond Harar, he was accompanied by Lieutenants Stroyan, Speke, and Hern, the first of whom was killed, whilst Burton himself was severely wounded. The account of this expedition was published under the title of 'First Footsteps in East Africa; or, an Exploration of Harar,' 8vo, London, 1856, a volume which contained a grammar of the language of Harar. At the end of 1856 Lieutenants Burton and Speke set out on a mission to verify the existence of an inland sea announced by the Arabs and the missionaries of the coast of Zanzibar. The result was the discovery of the vast lake of Tanganyika, of which an account is given in a work entitled 'The Lake Regions of Central Africa,' 2 vols. 8vo, London, 1860. Speke penetrated to the Lake Nyanza. Burton returned to England in May, 1859, and was immediately promoted to the rank of captain. Finding his health impaired by the African climate, he embarked for the United States, which he traversed from the Atlantic to the Pacific, but especially devoted himself to an investigation of the phenomena of Mormon life and character, which he defended with an eccentric and paradoxical vivacity in a volume entitled 'The City of the Saints, and across the Rocky Mountains to California,' 8vo, London, 1861. In 1861 Captain Burton was appointed British Consul for Fernando Po and the Bight of Biafra, and volunteered to visit Agbome; but as the measure did not seem at that time advisable, his journey thither was deferred till the latter part of 1863, when he received instructions to proceed as commissioner to Dahomy. From his residence at Fernando Po as a base, Captain Burton conducted several explorations, as is indicated by the titles of the following works which belong to this period of his life:—'Abeokuta and the Camaroons Mountains,' 2 vols. 8vo, London, 1863; 'A Mission to Gelele, King of Dahome. With notices of the so-called "Amazons," the Grand Customs, the Yearly Customs, the Human Sacrifices, the present State of the Slave Trade, and the Negro's Place in Nature,' 2 vols. 8vo, London, 1864; and 'Wit and Wisdom from West Africa; or a Book of Proverbial Philosophy, Idioms, Enigmas, and Laconisms,' 8vo, London, 1865. On the 4th of April, 1865, Captain Burton was entertained, previous to his departure for the duties of the consulate in Brazil, at a farewell dinner given by the Anthropological Society, London, of which he was senior vice-president. Lord Stanley presided at this banquet; and it was to this nobleman, as an anthropologist and Secretary of State for Foreign Affairs, that Captain Burton dedicated from Santos, São Paulo, July 23, 1868, his 'Explorations of the Highlands of the Brazil,' 2 vols. 8vo, London, 1869. To see this book through the press was one of the principal reasons which induced Mrs. Burton, who had resided with her husband for three years in Brazil, to pay a visit to England. After a residence of three years and a half in Brazil, Captain Burton has been lately transferred to the consulate of Damascus. His last work, the result of his Brazilian experience, is entitled 'Letters from the Battle-Fields of Paraguay,' 8vo, London, 1870. Captain Burton is a gold medallist of the Geographical Societies of London and Paris, and a member of various learned and scientific corporations.

BURY, RICHARD DE. [RICHARD DE BURY, E. C. vol. v. col. 90.]

BUSBY, THOMAS, a voluminous writer on music, was born in Westminster, in December, 1755. After studying five years under Jonathan Battishill, he was appointed organist to St. Mary's, Newington, in 1780. In 1800 he was admitted Doctor of Music at Cambridge; and, in the same year, received the appointment of organist to St. Mary's, Woolnoth. Works relating to music proceeded rapidly from his pen. In 1786, he contributed the historical portion to Arnold's 'Musical Dictionary.' In 1788 he began the publication of the 'Divine Harmonist,' a collection of sacred music. In 1790 appeared his 'Melodia Britannica, or the Beauties of British Sacred Song.' In 1792, he commenced the 'Monthly Musical Journal.' In 1800, was published his 'Musical Dictionary,' 1 vol. 12mo (a work distinct from that which he wrote in conjunction with Dr. Arnold). In 1809, appeared the 'Musical Grammar,' 8vo; and, in 1820, a second work on the same subject, the 'Grammar of Music,' 12mo. In 1819, appeared a 'General History of Music,' 2 vols. 8vo,

mostly condensed from the larger works by Burney and Hawkins; this was translated and published in German, in 1820. In 1828 he added to his other works, a 'Musical Manual,' 12mo. There also appeared from his pen a 'Life of Mozart,' and numerous musical papers in the 'Monthly Magazine,' of which he was for some time musical editor. Dr. Busby's original compositions were not of much note. They comprised (1) 'The Prophecy,' an oratorio, 1799; (2) 'Comala,' an opera founded on Ossian, 1800; (3) 'Joanna,' another opera, in the same year; (4) 'Britannia,' an oratorio, 1801; (5) 'The Tale of Mystery,' a musical melodrama, 1802; (6) the 'Fugitive Fairies,' an opera, 1803; (7) 'Rugantino,' a musical melodrama, 1805; besides a musical setting of 'Gray's Ode to Poesy,' and 'Pope's Ode for St. Cecilia's Day.' Dr. Busby died at Islington on the 28th of May, 1838.

BUSNOIS, BUSNOYS, or BUSNE, ANTOINE DE, a French or Belgian musical composer in the 15th century, whose year of birth is not known, entered the service of Charles the Bold, Duke of Burgundy, as a singer, in 1467. In 1470, he became demi-chaplain at the ducal palace, and soon afterwards chaplain. He often accompanied the Duke on his travels; and when the Duchess Mary succeeded Charles as the ruler of Burgundy, Busnois retained his post at court. He filled various appointments of trust at Maastricht and Mons, and died in the last-named town either in 1480 or 1481. There are extant many 'Chansons Françaises à quatre parties,' and 'Motets à trois voix,' by Busnois, interesting to composers as denoting the state of musical composition in France and Belgium four centuries ago. Some of them are contained in a collection by Fossambrone; and others, translated into modern notation, in a collection by Kiesewetter. It is believed that one or more foreign libraries contain MS. music by Busnois, at present unknown; as well as a 'Treatise on Music for the Use of his Pupils.' The Bibliothèque Royale at Brussels contains a great quantity of MS. ecclesiastical music by him, characteristic of the rules of harmony and composition known in his day.

BUTLER, ALBAN, a learned hagiographer, second son of Simon Butler, Esq., of Appletree, in Northamptonshire, was born in 1710. When about eight years of age, he lost his father and mother, and was sent to the English college at Douay, where, after he had completed the usual course, he was admitted an alumnus of the college, and appointed successively professor of philosophy and of divinity. His goodness was eminent, and his practical charity exhibited itself especially in the solicitude he displayed for the English soldiers who were brought wounded and maimed to Douay, to be quartered there as prisoners, after the battle of Fontenoy, April 30, 1745. In this year he accompanied the Earl of Shrewsbury and his brothers, on their travels in various parts of the continent, of which he wrote an interesting account, published posthumously, under the editorial care of Charles Butler, his nephew and biographer, with the title of 'Travels through France and Italy, and part of Austrian, French, and Dutch Netherlands, during the years 1745 and 1746,' 8vo, Edinburgh and London, 1803. He now commenced the publication of his great work, 'The Lives of the Fathers, Martyrs, and other principal Saints, compiled from original Monuments and other authentic Records, illustrated with the Remarks of judicious modern Critics and Historians,' 5 vols. 8vo, London, 1745, &c. The first edition was published without the notes by which subsequent ones were enriched, on the advice of Mr. Challoner, the vicar-apostolic of the London district, who counselled their omission on the ground of greater economy and usefulness. The work has been extremely popular; and edition has followed edition, both in English and French, that published in 12 vols. 8vo, London, 1847, being considered the best and most complete. On his return from his travels, Mr. Butler was appointed a missionary in Staffordshire. He did not, however, long continue there, being invited to become chaplain to the Duke of Norfolk, and to superintend the education of Mr. Edward Howard, his nephew and presumptive heir, whom he accompanied to Paris, and it was during his stay in this city, that the 'Lives of the Saints,' a work on which the author had been engaged for thirty years, was completed. It is known as a curious storehouse of pious meditation and exhortation, and of ecclesiastical and secular learning; and even Gibbon allows it to be "a work of merit:—the sense and learning belong to the author; the prejudices are those of his profession."

Some time after Mr. Butler's return to England, he was chosen president of the English college at St. Omer, an office which, after some hesitation, he accepted, and the duties of which he accordingly assumed and discharged until his death, on the 17th of May, 1773, combining with them the functions of vicar-general

to the Bishops of Arras, St. Omer, Ypres, and Boulogne, and probably those of vice-president and professor of divinity in the English college at Douay. Butler's other works are, 'Remarks on the two first volumes of the late "Lives of the Popes" [by Archibald Bower], in Letters from a Gentleman to a Friend in the Country,' 8vo, Douay, 1754. This small production is most unaccountably said, by Mr. Charles Butler, to have been the first result of his uncle's literary activity; and in this assertion he has been followed by every biographer who has noticed the Letters on Bower's 'History of the Popes' at all. The absurdity is to be understood from the fact that the 'Lives of the Saints,' began to be published in 1745, whilst Bower's work, in 7 vols., began to be issued in 1748, and was completed in 1766, and could have been animadverted on by Butler only after, at least, partial publication. A volume on 'The Moveable Feasts, Fasts, and other Annual Observances of the Catholic Church,' which was left unfinished by the author, was published 'with a Continuation by a Catholic Priest,' and an edition was printed at Dublin, in 8vo, 1839. Mr. Charles Butler superintended the issue of his deceased uncle's 'Life of Sir Tobie Matthews,' 8vo, London, 1795; as the Rev. Mr. Jones did his 'Meditations and Discourses on the Sublime Truths and Important Duties of Christianity,' 3 vols. 8vo, London, 1791, 1792, and 1793. Of this last work, a new edition was brought out at Dublin, 1840, by Dr. Lanigan. Alban Butler made collections for the 'Lives of Bishop Fisher and Sir Thomas More;' and he aided Cardinal Quirini in his edition of 'Cardinal Pole's Letters.'

BUTLER, WILLIAM ARCHER, the first Professor of Moral Philosophy in the University of Dublin, was born in or about the year 1814, at Annerville, near Clonmel, in Tipperary, of an ancient family, and was brought up in the religion of his mother, who was a Roman Catholic. At nine years of age he was sent to the endowed school of Clonmel, where he soon attracted the attention of the principal, the Rev. Dr. Bell, for the sprightliness and amiability of his temper and the force of his genius. Although not a hard student in the ordinary course, he was a constant and discursive reader; and he applied himself to poetry and music with uncommon ardour and success. His studies in philosophy, principally that of Lord Bacon and of the Scottish school, were close and spontaneous. It was during his pupilage at Clonmel, that, after an examination of the questions at issue between Papists and Protestants, he elected to abide by the faith of the latter; and two years afterwards, entered Trinity College, Dublin, where he presently achieved a reputation as a wit and a versatile and accomplished scholar. Whilst still an undergraduate, he distinguished himself by his contributions to the 'Dublin University Magazine,' in poetry, speculation, and criticism. Butler was celebrated, also, for his rhetorical ability as a speaker at the College Historical Society, of which he was President in the year 1835; having in November, 1834, been the first to win, at his degree examination, the prize of the Ethical Moderatorship, then just instituted by Dr. Lloyd, the Provost of Trinity. For two years subsequent to his baccalaureate, Butler continued in residence as a scholar, when his connexion with the University—which reserved its fellowships as the rewards of excellence in the mathematical and physical sciences—must have determined, but for the intervention of Dr. Lloyd, through whose exertions a Professorship of Moral Philosophy was founded in 1837; and to this arduous post Butler was appointed on the expiration of his scholarship. The youthful Professor was now upon a field worthy of his endowments, and his lectures were as remarkable for their eloquence as for their solidity. Simultaneously with his academical appointment, Mr. Butler was presented by the Board of Trinity College to the prebend of Clondelhorky, in the diocese of Raphoe, and county of Donegal, and held it along with his Professorship till 1842, when he was re-elected to the chair of Moral Philosophy, and promoted by the Board of Trinity College to the rectory of Raymochy, in the diocese of Raphoe. In the summer of 1844, he visited Westmoreland as the guest of his friend, the Rev. Robert Perceval Graves, curate of Windermere, where he made the acquaintance of Mr. Wordsworth, Archdeacon Hare, and Sir William R. Hamilton.

During the year 1845, the Roman Catholic controversy seems to have much engaged the attention of Professor Butler; and he filled several manuscript volumes with collections on the subject. In December of that year he published in the 'Irish Ecclesiastical Journal,' to which he was a constant contributor, the first of his valuable series of 'Letters on Mr. Newman's Theory of Development,' collected and published under the editorial care of Mr. Woodward, with the title of 'Letters on the

Development of Christian Doctrine; a reply to John Henry Newman, D.D., 8vo, Dublin, 1850; 8vo, 1854; 8vo, 1856. During the famine of 1846-47, which raged with appalling intensity in the neighbourhood of Professor Butler's parish, his exertions were ceaseless; and for a time the duties of a relieving officer prevented his habitual devotion to literature, philosophy, and divinity. In the latter part of 1847, and for the first half of 1848, Professor Butler was mainly occupied with the preparation of a work on Faith; and in illustration of his subject had collected a vast mass of materials from the Fathers, the Schoolmen, the Continental Reformers, and the Anglican divines. Death came in suddenly in bar of his project, and no indication is left of the method to which the intended work would have been conformed. On Trinity Sunday, 1848, Butler assisted and preached the sermon at an ordination held in the church of Dunboe by the Bishop of Derry; and on the Friday after, whilst on his return to his home, which was only a few miles distant, he was stricken with a sickness which resulted in his death on Wednesday, the 5th of July.

Butler's most important works were of posthumous publication. The Rev. Thomas Woodward, who was appointed in 1856 to the Deanery of Down, edited a first series of 'Sermons, Doctrinal and Practical,' 8vo, Dublin, 1849; 3rd edition, 8vo, London, 1855; Philadelphia, 12mo, 1856. A second series appeared under the editorial care of Dr. Jeremie, Subdean and Canon of Lincoln, and Regius Professor of Divinity at Cambridge, 8vo, Cambridge, 1855; 8vo, Philadelphia, 1857. Finally, Butler's 'Lectures on the History of Ancient Philosophy,' 2 vols. 8vo, Cambridge, 1856; 2 vols. 8vo, Philadelphia, 1857, were edited from the author's MS., with Notes by the Rev. William Hepworth Thompson, M.A., Fellow of Trinity College, and Regius Professor of Greek in the University of Cambridge.

* BUTTERFIELD, WILLIAM, Gothic architect, was born in 1814. Having gone through the usual professional training, Mr. Butterfield made himself known from the commencement of his practice as an architect, by his decided mediævalism. Without being a follower of Pugin he seemed to have accepted Pugin's principles, and he has carried them out with remarkable consistency. In the active practice of over twenty years, he has necessarily designed and erected a variety of buildings, but those which are distinctive are his churches and collegiate buildings, and in both the employment by preference of brick instead of stone as the material. Of his churches, the best known are All Saints, Margaret Street, and St. Alban's, Baldwin's Gardens, London. Each of these comprises a group of ecclesiastical buildings, of which the church is the centre, but priests' houses, in the former schools, and other accessories, form an essential part of the composition. Yet in both the exterior, of ordinary stock bricks with stone dressings sparingly employed, is comparatively plain, the decoration being reserved for the interior of the church, which in each instance was more costly and richer in character than was then usual—fresco paintings forming in both the conspicuous decoration of the chancel, along with, especially in St. Alban's, coloured marbles and alabaster. St. Alban's church was further noteworthy as an attempt to produce a city church in which a large congregation might see as well as hear the service unobstructed by massive piers, the building at the same time being in accordance with the strictest ecclesiastical principles. Among Mr. Butterfield's other churches are those of Baldersby, near Ripon, Yorkshire, 1859; St. John the Evangelist, Hammersmith, 1860; St. John the Baptist, Bamford, Derbyshire; Newbury, Berkshire; Emery Down, Hampshire, 1864; the Holy Saviour, Hitchin, Hertfordshire, 1865; the fine cruciform church of Penarth, Glamorganshire, 1867; St. Mary the Virgin, Strathfieldsaye; and All Saints, Babbicombe, Devonshire, resplendent with the various marbles of the district. All these are more or less what is called ritualistic in character, and studiously symbolical in the arrangements and details, and all are, or are intended to be, splendid in the internal decorations and fittings. But we ought not to pass from his churches without mentioning that he has also erected a number of village and district churches of an inexpensive kind, in which he has sought to show how much effect can be imparted to such structures at little additional cost, by the employment of artistic taste and ingenuity: St. Ann's, Littleworth Common, Dropmore, a picturesque little building of timber, flint, and brick, may be cited as a type of the class. It was, however, not as a church-architect that Mr. Butterfield made his mark. The work by which he first became known was the Missionary College of St. Augustine, Canterbury,

erected and endowed by the munificence of Mr. A. J. Beresford Hope, in 1848. Mr. Butterfield took the desecrated remains of St. Augustine's Abbey as his model, but he executed the work with a thoroughness then rare in Gothic work, and not since surpassed. He has since erected at Oxford the new chapel of Balliol College, and the New Buildings of Merton, 1864, and his latest great work, Keble's College, opened in 1870. In this last, and the rarest of all opportunities which fall to the lot of an architect is that of building a new college in one of our University towns, Mr. Butterfield has entirely disregarded the traditions of the place. The building is of parti-coloured bricks, while all the old colleges are of stone, and the style is a Gothic quite unlike the Gothic of any other building in Oxford. Whether he has been as successful as he has been venturesome, it is not for us to decide.

BYRON, LADY. Anne Isabelle Noel, Baroness Wentworth, born May the 17th, 1792, was the daughter and heiress of Sir Ralph Milbanke, Bart., and Lady Judith Noel, sister and co-heir of Thomas Noel, Viscount Wentworth. She married Lord Byron on the 2nd of January, 1815; a daughter, Augusta Ada, was born to them on the 12th of the following December, and six weeks later, January, 1816, they parted never again to meet. Lady Byron (she became Baroness Wentworth in 1856, but continued to be addressed by the more familiar title) survived the separation forty-four, and the death of her husband thirty-six, years, dying at her residence, St. George's Terrace, Regent's Park, on the 16th of May, 1860, the eve of the completion of her 68th year. The earlier years of her widowhood were devoted to the education of her daughter; the rest of her life was passed in the active promotion of various benevolent purposes, especially such as were of an educational character. She founded in 1834 an industrial school for boys at Ealing, on the system of Fellenberg, and another at Leicester, a reformatory for girls, and some village schools. During her later years she was much concerned in the promulgation of her peculiar theological and spiritualistic views.

Here the record ought properly to cease. But though it is said by her friends, that her love for her husband endured to the end, and that ever before her during those last years was the image of her husband purified and ennobled, she has been made the means of inflicting a darker stain on his memory than his worst enemy could have imagined or desired. The hideous story can now, unhappily, hardly be left without distinct reference in a biographical cyclopædia, but it may be most fitly noticed, as far as notice is requisite, in connection with the lady who first made it known, who has since set forth the revolting details in all their amplitude, and with whose name it must henceforth be indelibly associated. [STOWE, HARRIET ELIZABETH BECHER, E. C. S.]

BYSTRÖM, JOHANN NIKOLAUS, an eminent Swedish sculptor, was born at Philipsteden in the province of Wermland, December 18, 1783; studied sculpture under Sergell at Stockholm; in 1809 gained the prize of the Stockholm Academy, and in the following year went to Rome, where he remained till 1815. A marble figure of an Inebriated Bacchante, and a colossal statue of the Prince Royal were much admired, and secured him the patronage of the Swedish court. He was nominated professor, and received commissions for colossal marble statues of the Kings Charles X., XI., XII., XIII., and XIV. From this time he continued to produce portrait-statues, busts, and imaginative pieces, chiefly classical in subject as well as style, and all found ready purchasers when they had not been previously commissioned. Byström's tastes were for the old classical subjects and the old manner of executing them, and he had a strong predilection for Rome, where the prevalent taste was so entirely in accordance with his own. Though esteemed and honoured at home, he constantly turned to Rome, removed there finally in 1844, and there died on the 13th of March, 1848. Byström is regarded as one of the greatest sculptors of Sweden, but his works are cosmopolitan rather than national. Besides those already named, he executed statues of Linnæus, and one or two other of his eminent countrymen, and many busts, but his chief works are representations of Juno, Apollo, Hercules, Loves, Nymphs, Bacchantes, and the like.

BZOVIUS, or BZOWSKY, ABRAHAM, was born at Proszowitz, in Poland, in 1567. He studied at Cracow, and became a Dominican, and the principal of a college of that order. He founded a fraternity of the Rosaria; consecrated a chapel to the image of St. Mary the Great, which he brought from Rome to Cracow; added a large number of books to the library of the Dominicans; pacified Poland; caused the Church of St.

Hyacinthus to be built in Warsaw, and rendered other services to his country, but especially to the Dominican order, to the interests of which he was attached with such exclusive devotion as to call up against him the bitter opposition of the Franciscans and the Jesuits. Bzovius is known as a singularly fertile writer; so that it has been seriously maintained that he composed more books than others have read. His chief work is his continuation of the 'Annals' of Baronius; a work extending to 9 folio volumes, of which the first eight appeared at Cologne, between 1616 and 1635. These brought down the history of the church from the end of the pontificate of Celestine III., when Baronius

concluded, to the year 1564. Another volume appeared in 1672, several years after the author's death, which continued the history to 1572. In his history, which is that of the Dominicans rather than that of the church, Bzovius is remarkable for his servile attachment to the court of Rome; so that when he visited Rome, he was received with distinction by the Pope, and lodged in the Vatican. A short time before his death, which took place in 1637, he retired from his residence in the Vatican to the convent of Minerva at Rome, having been terrified by the murder of one of his servants, and mortified by the loss of a large sum of money which the murderer carried off.

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* CABANEL, ALEXANDRE, a distinguished French painter, was born at Montpellier, September 28, 1823; studied in the atelier of M. Picot, and won the grand prize of Rome in 1845. A large picture of the 'Death of Moses,' a 'St. John,' and 'Velleda,' exhibited on his return to Paris in 1850, attracted much notice, and secured him numerous commissions. Among other works, he executed a series of twelve medallions of the Months at the Hôtel de Ville. Other commissions and purchases for the State followed; M. Cabanel was honoured with the especial patronage of the Emperor, and rose steadily in popularity till, by common consent, he took rank among the foremost painters of France. The range of his art is shown by the titles of the pictures already quoted, and such others as his 'Christian Martyr,' one of his most celebrated works; the 'Soir d'Automne,' 'Aglæa,' 'Othello Racontant ses Batailles,' and 'Michaelangelo.' But M. Cabanel has also painted many portraits, generally of persons of high social position, and he has succeeded in giving them an air of ease and distinction the mere portrait-painter seldom attains.

† The International Exhibition of 1862 contained two large and very famous paintings by M. Cabanel, which admirably illustrated his style, the 'Glorification de St. Louis,' the property of the State, a vast pompous theatrical composition; and a 'Nymph enlevée par un Faune,' the property of the Emperor, a life-size naked woman struggling in the arms of a brawny satyr, painted with surprising force and mastery, but meretricious to the verge of voluptuousness in design and treatment, and utterly unreal, though brilliant in colour; a picture bearing in it all the marks of a corrupt and declining school. To the Salon of 1870, M. Cabanel contributed another very large and very powerful picture, but equally unhealthy in subject and treatment, 'Mort de Francesca de Rimini et de Paolo Malatesta.' M. Cabanel received a medal of the 2nd class in 1852, and of the 1st in 1855. He was decorated in 1855, and made officer of the Legion of Honour in 1864. In 1863 he was elected member of the Academy in succession to Horace Vernet, and appointed professor at the École des Beaux-Arts.

CABET, ETIENNE [E. C. vol. ii. col. 2.] M. Cabet returned to Paris about the end of 1850, and seemed to be in a fair way of regaining his popularity with the working population, but the Coup d'État put an end to his hopes, and he rejoined his friends in Nauvoo. There he was for awhile again placed at the head of his partisans, but eventually his opponents gained the mastery, and he was forced to take refuge in St. Louis, Missouri, where he died on the 9th of December, 1856.

CÆSALPINUS, ANDREAS, was born in 1519 at Arezzo. Unfavourable accounts are given of the early years of this distinguished scientific reformer, owing to his great distaste for methodical study. His original and independent mind led him to put embarrassing questions to the Professors whose lectures he attended. He studied medicine and took his degree, and then, free from the trammels of the schools, he entered upon a career of philosophical observation which he continued to the age of 84. Taking the philosophical doctrines of Aristotle according to their true sense, he freed them from the pedantry of the schools, made science attractive by directly appealing to nature, and marked by his labours the first great epoch in botanical science. While treating the peripatetic with respect, he was constantly looking onwards towards a better philosophy. His 'Quæstiones Peripateticæ,' published at Florence in 4to, 1569,

produced a great sensation, raising up for him a host of friends and some enemies, the latter, in the true spirit of intolerance, seeking the aid of the Holy Inquisition in quenching the new light. Happily they did not succeed in putting down a man who was superior to the leading ideas of his time. In his 'Dæmonum Investigatio Peripatetica,' Florence, 1580, 4to, he fights against the follies of magic and sorcery. His friends also claim for him the discovery of the circulation of the blood, and the proofs of this anticipation of Harvey are, according to the friendly criticism of Bayle, quite clear, reference being made to the 'Quæstiones Peripateticæ,' lib. v. ch. 4, fol. 125; 'Quæstiones Medicæ,' lib. ii. ch. 17, fol. 234. See also, 'De Plantis,' lib. i. ch. 2.

The last named work is his "magnum opus"; it was published at Florence in 1583, and contains 16 books, 47 sections, and 940 chapters. After referring to the splendid multiplicity of the productions of nature, and the confusion hitherto prevailing among writers on the growing treasures of the botanical world, he says: "In this immense multitude of plants, I see that want which is most felt in any other unordered crowd. If such an assemblage be not arranged into brigades, like an army, all must be tumult and fluctuation, and this accordingly happens in the treatment of plants; for the mind is overwhelmed by the confused accumulation of things, and thus we have endless mistake and angry altercation." He then states his general view, which was adopted by his successors. "Since all science consists in the collection of similar and the distinction of dissimilar things, and since the consequence of this is a distribution into genera and species, which are to be natural classes governed by real differences, I have attempted to execute this task in the whole range of plants." He then goes on to mark the kind of plants by essential circumstances in the fructification. In the constitution of organs three things are insisted on; the number, the position, and the figure: for example—"some have under one flower one seed, as Amygdala; or one seed-receptacle, as Rosa; or two seeds, as Ferularia; or two seed-receptacles, as Nasturtium; or three, as the Tithymalum kind have three seeds; the Bulbaceæ, three receptacles; or four, as Murrubium, four seeds, Siler, four receptacles: or more, as Cicoraceæ and Acanaceæ have more seeds, Pinus, more receptacles."

"It will be observed," says Dr. Whewell (Hist. of the Inductive Sciences, 3rd edition, 1857, iii. 239), "that we have here ten classes made out by means of number alone, added to the consideration of whether the seed is alone in its covering, as in a cherry, or contained in a receptacle with several others, as in a berry, pod, or capsule. Several of these divisions are, however, further subdivided according to other circumstances, and especially according as the vital part of the seed, which he called the heart (cor), is situated in the upper or lower part of the seed."

Cæsalpinus was not a writer only, but a laborious collector of plants. His herbal is still preserved with veneration at Florence. It contains 768 dried species, to which are attached the names given by the collector, and also the names common to several parts of Italy. "During many years," he says, "I have been pursuing my researches in various regions, habitually visiting the places in which grew the various kinds of herbs, shrubs, and trees. I have been assisted by the labours of many friends, and by gardens established for the public benefit, and containing foreign plants collected from the most remote regions." He here refers to the Botanic Garden of Pisa, established in 1543, by order

of the Grand Duke, Cosmo I., the management of which was confided first to Lucas Ghini, and afterwards to Cæsalpinus.

Many botanists, especially Morison, took advantage of the labours of Cæsalpinus without acknowledgment, but so much was this great man in advance of his time, that before his method was generally adopted, there occurred a stationary interval, an interesting account of which is given by Whewell (loc. cit. 243).

What Cæsalpinus did for plants he also attempted for metals, but not with such happy effect. In his work, 'De Metallicis,' published at Rome, 1596 (and again at Nürnberg, in 1602), he was led by some of his general views to disbelieve in the fixity of the form of crystals. He says: "To ascribe to inanimate bodies a definite form, does not appear reasonable; for it is the office of organisation to produce a definite form;" "an opinion," says Dr. Whewell, "very natural in one who had been immersed in the general analogies of the forms of plants." Still, however, there are some striking views in this work. He defines metals as vapours condensed by cold, and distinguishes them from vegetables in not putrifying, and supplying no aliment for the development of animal structure. He accounts for the existence of fossil shells in rocks, by supposing that the sea formerly occupied the land, and in retiring, left traces of its presence. He even anticipated the discovery of oxygen, by noticing that the film which covers molten lead, by exposure to air, is due to an aerial body which increases the weight of the metal. He terms lead a soap which cleanses silver and gold by cupellation, and he also describes graphite.

Bayle remarks that the works of Cæsalpinus are not free from heresy, and expresses surprise that he escaped the censures of the Church; but possibly his office of first physician to Pope Clement VIII. proved his safeguard, although, according to Bayle, his principles scarcely differ from those of Spinoza.

Teissier, in his 'Eloge,' places Cæsalpinus among the greatest men of genius that have ever lived. He is said to have passed a sober active life, free from illness, and to have died at Rome, February 23rd, 1603.

CÆSAR, SIR JULIUS, was the eldest son of Dr. Cæsar Adelmare, a member of a noble family of Treviso, a city near Venice, who, having studied medicine at Padua, came over to England, where he received letters of naturalization, August 28th, 1558, and became physician successively to Queens Mary and Elizabeth. Julius was born at Tottenham, near London, in 1557, and enjoyed royal patronage from his infancy, Queen Mary being one of his sponsors. At his baptism he received the names of Julius Cæsar, the latter of which he seems very early, though not quite uniformly, to have substituted for that of his ancestors. He entered at Magdalen Hall, Oxford, and took his B.A. and M.A. degrees respectively in 1575 and 1578. He became a member of the Inner Temple in October, 1580; and, proceeding to Paris, graduated as doctor in both laws in 1581, in which degree he was incorporated at Oxford in 1583. He was appointed in October, 1581, to be "Justice of the peace in all cases of piracy," and Chancellor of the Master of St. Katherine's near the Tower. In 1583 he became counsellor to the city of London, and commissary of Essex, Herts, and Middlesex; and on the last day of April, 1584, was made Judge of the Admiralty Court. Thus preferred at an early age, he was still discontented; and the petitions he presented to the Queen for advancement and emolument were partially answered by his admission in October, 1588, to be one of the Masters in Chancery. On the 10th of January, 1591, he was appointed a Master Extraordinary, and on the 17th of August, 1595, one of the ordinary Masters of the Court of Requests. In 1593, without having passed through the grade of Reader, he was elected Treasurer of the Inner Temple; on the 8th of December in the same year, governor of the mine and battery works throughout England and Wales; and on the 17th of June, 1596, he succeeded to the Mastership of St. Katherine's, the reversion of which he had already secured by a bribe. In September, 1598, Queen Elizabeth paid him the expensive honour of a visit to his house at Mitcham; and on the 20th of May, 1603, he received knighthood from James I., who in the same year reappointed him Master of the Court of Requests, and Master of St. Katherine's. On the 11th of April, 1606, the important office of Chancellor and Under-Treasurer of the Exchequer was conferred upon him; and in the year following, he was sworn of the Privy Council. He became Master of the Rolls in 1614; a place which he continued to hold until his death on the 18th of April, 1636. The name of Sir Julius Cæsar is of very frequent occurrence in contemporary memoirs and historical documents, but he is now rather remarkable as a pluralist and

placeholder, than eminent on account of his legal or judicial superiority.

CAGNIARD DE LATOUR, CHARLES, BARON, physicist, was born at Paris, March 31, 1777. In 1794, he entered the Polytechnic School, and on leaving this two years afterwards, he joined the corps of Hydrographic Engineers, but soon left it again, in order that he might devote himself exclusively to scientific investigations. His labours relate to subjects connected with general physics and chemistry, but he is best known for his researches on sound. In 1809 he constructed a simple method of conveying gases beneath liquids. The machine became known as the *Cagniardelle*, and is nothing more than an Archimedean screw, in which the direction of revolution is from right to left. In 1818 he gave much attention to gas illumination, and materially assisted in bringing about its introduction into France. In the following year he invented the Syren, which is an instrument for propelling waves of air through holes in a disc, revolving at an ascertainable speed. A series of wheels and some dials indicate the number of vibrations corresponding to any given sound. By its means he discovered that peculiar quality of a note known as timbre, which causes the difference in notes of the same intensity and pitch, when produced by different instruments. He also made some lengthy investigations into the mechanism of the human voice, and, amongst other things, determined the pressure of the air during phonation, by experiments on a man with a tracheal fistula. As an engineer, his chief work is the Aqueduct of Crouzal, erected in 1826, which has a span of 650 feet between the points of suspension. He was the first to establish that fermentation is not a purely chemical phenomenon, but is mainly due to the influence of certain congeneric plants. A list of his papers is given in the Royal Society's Catalogue of Scientific Papers. His death occurred July 15, 1859.

CAHEN, SAMUEL [E. C. vol. ii. col. 23]. M. Cahen died on the 8th of January, 1862.

CAILLÉ, RENÉ, French traveller, was born Sept. 19, 1790, at Mauzé, in the department of Deux Sèvres. His education was of the simplest character, and when a mere youth, the perusal of 'The Adventures of Robinson Crusoe,' roused in him a strong desire to explore Africa. Accordingly, he started for Senegal when in his seventeenth year, and with only a few pounds in his pocket. Soon after his arrival, an expedition, under Major Gray, proceeded to explore the centre of Africa, but met with difficulties, owing to the exhaustion of the stock of merchandise. M. Partarieu was then sent back to Senegal to obtain further supplies, and Caillé offered to join him unconditionally. The offer was accepted, but before long the hard marching during the rainy season caused him to contract a severe fever, which compelled him to leave the expedition. In 1824 he returned to Senegal, and obtained a sufficient quantity of goods from the Governor of Senegal, to enable him to live with the Arabs, acquire their tongue, and prepare himself for his future work. Eight months were spent among the Braknabs, and he then endeavoured to obtain the means of making a voyage to Timbuctoo; but wherever he applied his requests were refused. His enthusiasm, however, was increased rather than diminished by the obstacles he met with, and in order to raise the funds required, he worked on an indigo plantation until he had saved about £80. With this sum he bought goods, and made the necessary preparations for his journey. In order to avert the suspicions of the natives, as well as to secure his own safety as far as possible, he assumed the dress of an Arab, and pretended that he was a young Egyptian about to return to his native country. He started from Kakundy on the 29th of April, 1827, and proceeded, first in an easterly direction, by Cambaya, Kankan, Timi, and Tangrera, and afterwards in a north-easterly direction, by Donasso to Galla, where he struck upon Park's tracks, through a country which had never previously been visited by Europeans. From Galla he passed over the same country as Mungo Park to Timbuctoo, which town was entered by him, April 20, 1828. During this part of his travels he had suffered great hardship from sore feet and fever; and when he left Timbuctoo, it was as a despised, ill-treated mendicant. He returned from Timbuctoo across the Sahara desert to Fez, and arrived in Toulon, September 27, 1828. He became for a while the lion of the day, and was especially noticed by the Geographical Society of Paris, who awarded him the special prize of £400 to the first traveller who could obtain exact information of Timbuctoo, in confirmation of Park's observations. He was further decorated with the Legion of Honour; his work, 'Journal d'un Voyage à Tombouctou et Jenné dans l'Afrique centrale, etc.,' 3 vols. 1830, was published at the public expense; and he himself was rewarded with a state

pension. He did not, however, live long to enjoy this, for he died on May 17, 1838, while still comparatively young.

* **CAIRD, REV. JOHN**, a minister of the Established Church of Scotland, celebrated for his pulpit eloquence, was born at Greenock in 1823, and educated at the University of Glasgow. In 1844, having taken his M.A. degree, and completed his theological studies, he received licence to preach, the canonical age being anticipated on account of the number of ministers who had left the Establishment in 1843, as adherents of the Free Church. At the end of his year of probation, he was ordained minister of the parish of Newton or Newtown-upon-Ayr, separated from the town of Ayr only by the river of that name. In the same year, 1845, he was transferred to Lady Yeater's Church, in Edinburgh; and in 1850, in order to avail himself of the comparative seclusion of a country charge, he became minister of Errol, in the county of Perth. It was whilst holding this living that he was called upon to preach before the Queen and Prince Consort, at the parish church of Crathie, upon which occasion he acquitted himself with so much ability, that the sermon was immediately published by royal command, with the title of 'Religion in Common Life,' 8vo, Edinburgh and London, 1855; reprinted at Hobart Town, 12mo, 1856; and translated into Gaelic, 8vo, Edinburgh, 1856. Besides a few minor literary labours, he has produced a volume of 'Sermons,' 8vo, Edinburgh, 1858; in which year he removed to Glasgow, to undertake the charge of West Park, where a handsome church was erected for him. In 1860 he received the degree of D.D., and was appointed Professor of Divinity in the University of Glasgow in 1862, soon after which he resigned his pastoral charge of West Park church.

* **CAIRNS, HUGH MAC CALMONT, BARON**, a lawyer and statesman, second son of the late William Cairns, Esq., of Cultra, co. Down, Ireland, was born in 1819, and educated at Trinity College, Dublin, where he was first class in classics, and obtained other honours. He became a member of the Middle Temple, and was called to the bar by that Society in 1844. He rose to considerable practice in the Court of Chancery, and was early regarded as a promising candidate for the higher honours of his profession. In 1852 he was returned for Belfast in the Conservative interest. He continued to represent this constituency until he became a judge, in 1866. In 1856, he was made a Queen's Counsel, and elected a bencher of Lincoln's Inn; and in March, 1858, on the return of Lord Derby to power, became Solicitor-general, receiving at the same time the honour of knighthood. When next the formation of a ministry fell to Lord Derby, in 1866, Sir Hugh Cairns was appointed Attorney-general; and on the 18th of October in the same year, was promoted to be one of the Lords Justices of Appeal. It was on the occasion of this preferment that his 14 years' connection with the electors of Belfast terminated. His elevation to the peerage as Baron Cairns of Garmoyne, in co. Antrim, appeared in the 'London Gazette' of the 23rd of February, 1867; and in the following year he achieved the highest professional honour of being made Lord Chancellor, a post which he vacated on the downfall of his party, and the accession of Mr. Gladstone to the Premiership. Lord Cairns is now an active member of the Judicial Committee of the Privy Council. His university distinctions embrace the honorary degrees of LL.D. of the University of Cambridge, in 1862; D.C.L. of Oxford, 1863; and the Chancellorship of the University of Dublin, 1867. His judgments, and his speeches, in Parliament and elsewhere, have been characterised by a masterly eloquence, and are largely conversant with ecclesiastical questions. His advocacy is understood to have been of so great an advantage to his party, that it was probably nothing but a state of health unequal to the position, which prevented him from retaining the leadership of the Conservative party in the House of Peers, which he held temporarily upon the demise of the late Lord Derby.

* **CALDERON, PHILIP, R.A.**, was born at Poitiers in 1833, the son of the Rev. Juan Calderon, and studied painting in the atelier of Picot, at Paris. A picture of 'The Jailer's Daughter,' exhibited at the Royal Academy in 1858, attracted notice by its force and freshness of style, and technical skill. He continued to send to each successive exhibition one or two such paintings, as 'Man goeth forth to his Labour,' 1859; 'Liberating Prisoners on the young Heir's Birthday,' 'Queen Katherine of Aragon and her Women at Work,' 1861; 'The British Embassy at Paris on the Day of the Massacre of St. Bartholomew,' 1863; and 'The Burial of Hampden,' 1864; and the evidence they afforded of originality of thought and sustained artistic power was recognised in the latter year by his election as A.R.A. 'Her most High, Noble, and Puissant Grace,' and 'Home after the Victory,' were

his chief contributions to the Exhibitions of 1866-67. In 1868 he was elected R.A. In that year he exhibited 'Enone,' and 'The Young Lord Hamlet'; in 1869, 'The Duchesse de Montpensier urging Jacques Clément to assassinate Henri III.'; and in 1870, 'The Orphans,' and 'Spring driving away Winter.'

CALVISIUS, SETHUS, a German writer on music and chronology, adopted this as the Latin form of his German name, **SETH KALLWITZ**. He was born at Groschleben, in Thuringia, on the 20th of February, 1556. Being the son of a peasant, he had but little early school education; nevertheless, he studied music for three years at Frankfurt, and was then admitted gratuitously to the public school at Magdeburg. Earning a little money as a music-teacher, he continued to support himself while studying ancient languages and the arts at Helmstadt and Leipzig. In 1582, he filled the post of cantor in the school at Pforte; and in 1592, he was appointed to a similar office at Leipzig, where he was nominated professor of music in 1594. He died at Leipzig; but there is a discordance of opinion as to the date of his death. Mattheson places it on the 23rd of November, 1615; Cöttinger on the 24th instead of the 23rd; while Walther and Forkel give the 23rd of November, 1617. The chief musical works written by Calvisius were the following:—(1) 'Melopœia seu Melodiæ condensæ ratio, quam vulgo musicam poeticam vocant, ex veris fundamentis extracta et explicata,' Erfurt, 8vo, 1582; this is a treatise on Counterpoint and Harmony, good for the period in which it was written; (2) 'Compendium Musicæ Practicæ,' Leipzig, 8vo, 1594; (3) 'Exercitationes Musicæ Duæ,' Leipzig, 8vo, 1600; the first part didactic, the second an abridged history of music; (4) 'Exercitatio Musica Tertia,' Leipzig, 8vo, 1611; a third portion of the same work, relating to solmisation; (5) 'Musicæ Artis Præcepta nova et facillima,' &c., Jena, 8vo, 1816; a work in which he recommends the syllables *bo, ce, di, ga, lo, ma, ni*, in solmisation, instead of *ut, re, mi, fa, sol, la, si*. The musical compositions by Calvisius comprise harmonised versions of old German hymns for four voices; sacred songs for three voices, to German words, mostly taken from the Psalms of David, with instrumental accompaniments; an arrangement of the 150th Psalm, for twelve voices, in three choirs; and a musical arrangement of the Psalter for four voices. Calvisius also paid some attention to the study of chronology and the Calendar, on which subjects he wrote the following and other works:—'Opus Chronologicum,' Leipzig, 4to, 1605, the best work on Chronology that had up to that time appeared; 'Elenchus Calendarii Gregoriani,' *ibid.*, 1612; and 'Formula Calendarii Novi,' *ibid.*, 1613, written to urge and assist in the reformation of the Calendar; 'Enodatio duorum questionum circa annum nativitatis et tempus ministerii Christi,' Erfurt, 4to, 1610.

CAMBINI, GIOVANNI GIUSEPPE, musical composer, was born at Leghorn, February 13th, 1740. He early acquired great proficiency in violin playing, especially in quartettes and other kinds of chamber music. In 1763 he went to Bologna, where he studied counterpoint under Martini. In 1766, while on a voyage to Naples, he was captured by corsairs, and underwent much insult and misery before he could be liberated by ransom. Settling at Paris in 1770, he gave lessons in music, and wrote symphonies, motetts, oratorios, and other musical works, far too rapidly for the attainment of excellence; but being intemperate and improvident, he wrote literally for his bread, without bestowing time and thought enough upon his compositions. He sank into an old age of penury, and is supposed to have died a pauper in the Bicêtre about 1825; but this is uncertain. Between the years 1776 and 1793, Cambini produced 'Les Romans,' a ballet; 'Rose d'Amour,' a second ballet; various operas and ballets, under the names of 'La Croisée,' 'Cora, prêtresse du Soleil,' 'Les Deux Frères,' 'Adèle et Edina,' 'Nantilde et Dagobert,' 'Trois Gascons,' 'Alcmæon,' 'Alcide,' 'Anide,' 'Fêtes Venitiennes,' &c., besides two oratorios, 'Joab,' and the 'Sacrifice of Abraham.' His best compositions were his violin quartettes.

CAMERARIUS, JOACHIM, botanist, was born at Nürnberg, November 5, 1534. After receiving instructions from the best professors of the time in Germany and Italy, he acquired a doctorate in 1562, and soon formed a more or less intimate acquaintance with Fallopius, Aldrovandus, and many other eminent cultivators of science. In the practice of medicine he was so successful, that several royal personages offered him great inducements to join their court, but he declined all offers of the kind. He was the principal promoter of the Academy of Medicine, which was founded at Nürnberg in 1592, and he established an excellent botanical garden, in maintaining which he was assisted by Prosper Alpin, Clusius, and others. His principal works are 'Hortus Medicus,' 1588, which is a catalogue of the plants

in his garden, with descriptions of the more interesting species ; 'Symbolorum et Emblematum ex Herbis et Animalibus centuriæ iii. &c.,' 1590-1597, which is a collection of anecdotes relating to all branches of natural history ; 'Plantarum tum indigenarum quam exoticarum icones,' 1591. He has also written many other works, and in some of them he made considerable use of the engravings which Gesner had prepared for a 'History of Plants,' and which he had intended should form a sequel to his 'History of Animals.' These drawings, about 1500 in number, together with Gesner's botanical library, were purchased by Camerarius after Gesner's death. He died at Nürnberg, October 11, 1598.

CAMERARIUS, RODOLF JACOB, botanist, was born at Tübingen, February 17, 1655. His education was carried out in his native town, and was completed by a tour through Europe, in the course of which he visited all the most celebrated professors of the time. In 1687 he graduated as doctor of medicine, and in the following year was appointed an assistant professor and inspector at the botanical garden at Tübingen. Shortly afterwards he became professor of medicine. He died, September 11, 1721, of pulmonary phthisis. His principal works are, 'De Sexu Plantarum Epistola,' 4to, 1694 ; a work in which some writers find the germ of the Linnean system of classification ; and 'De Convénientia Plantarum in fructificatione et vicibus,' 8vo, Tübingen, 1699.

CAMPBELL, LORD. [E. C. vol. ii. col. 54.] On the formation of the ministry of Lord Palmerston, June, 1859, Lord Campbell was made Lord Chancellor, with a seat in the Cabinet, thus attaining the crowning dignity for which he had all his life been struggling. He held the office till his death, which occurred on the 23rd of June, 1861 ; but it had not been expected that he would confer any new lustre on the title, either in the Court or the Parliament, and the anticipations were not exceeded. More than seven years after his death, appeared a work on which he was known to have been occupied during the dull years preceding his elevation to the Chancellorship, and the publication of which had been looked for with some curiosity, 'Lives of Lord Lyndhurst and Lord Brougham, Lord Chancellors and Keepers of the Great Seal of England,' 8vo, London, 1869. As a biography, the work is no more trustworthy than the 'Lives of the Lord Chancellors,' of which it is a continuation, though as a contribution to contemporary history it may have its use. In it is recorded whatever enmity had invented and gossip collected or whispered, to the detriment of the two distinguished men whose lives it professes to narrate. But the aspersion is not confined to Lords Lyndhurst and Brougham. The object of the author seemed to be to show that all, or almost all, his immediate predecessors in the office, however superior in learning, eloquence, and fame, were as intrinsically mean, unscrupulous, and malignant as himself. Happily the misstatements in the book met with speedy exposure, and its tenor with general condemnation.

CAMPBELL, SIR COLIN. [CLYDE, LORD, E. C. S.]

CAMPBELL, JOHN, D.D., a journalist and Nonconformist divine, the son of Alexander Campbell, a surgeon, of Kirriemuir, in Forfarshire, was born on the 5th of October, 1795. From October, 1817, he was a student in the faculty of arts successively at the universities of St. Andrews and Glasgow ; and prosecuted his theological studies in the latter city at the Divinity Hall of the Independent denomination, then under the presidency of Dr. Wardlaw and the Rev. Greville Ewing. He became minister of an Independent church in Kilmarnock, in 1827 ; and in the following year, accepted an invitation to undertake the pastorate of the congregation assembling in the Tabernacle, Moorfields, which had been erected by Whitefield. Here, with constant popularity, he laboured for twenty years, until the failure of his health warned him to a change of employment ; and he accordingly undertook the editorial management of a popular religious newspaper, called the 'British Banner,' which met with a surprising success. When he had conducted this journal for a period of nine years, he relinquished it, and established, on his own account, the 'British Standard,' to which, two years afterwards, he added the 'British Ensign.' In 1844, in compliance with a vote of the Assembly of the Congregational Union of England and Wales, he undertook the editorship of a popular religious magazine, called the 'Christian Witness,' which circulated so successfully—30,000 a month—that, after two years, he added the 'Christian's Penny Magazine,' which attained a monthly circulation of 100,000. Dr. Campbell entered largely into the ecclesiastical and theological controversies of the day—not always without acrimony. His death took place at his residence, Manor House, St. John's Wood Park, on the 26th of March, 1867 ; and he was interred at Abney Park Cemetery, on the 2nd of April following.

Dr. Campbell was a voluminous author, and among his more important productions may be mentioned his 'Maritime Discovery and Christian Missions, considered in their Mutual Relations,' 8vo, London, 1840 ; 'Jethro,' an essay which obtained a prize of 100 guineas, on the employment of lay agency in the propagation of religion ; 'The Martyr of Erromango : or the Philosophy of Missions, illustrated from the Labours, Death, and Character of the late Rev. John Williams,' 8vo, London, 1842 ; 'Memoirs of David Nasmyth [the Founder of City Missions] ; his Labours and Travels in Great Britain, France, the United States, and Canada,' 8vo, London, 1844 ; 'Popery and Puseyism illustrated : a Series of Essays,' 12mo, London, 1851 ; 'John Angell James, a Review of his History, Character, Eloquence, and Literary Labours ; with Dissertations on the Pulpit and the Press, Academic Preaching, College Reform,' &c., 8vo, London, 1860 ; 'Popery, Ancient and Modern : its Spirit, Principles, Character, &c., with Warnings and Counsels to the People of England,' 8vo, London, 1865. In his later years, we are informed by his somewhat diffuse biographers, Drs. Ferguson and Morton Brown, he meditated a Life of Whitefield, his great predecessor at the Moorfields Tabernacle.

CAMPION, EDMUND, was born in London on the 25th of January, 1540, the year in which the Society of Jesus, of which he afterwards became a member, was established. He was educated, first at Christ's Hospital ; whence he was received on the foundation of St. John's College, Oxford, then recently founded by Sir Thomas White, over whose remains, when they were brought, in February, 1566, to the College Chapel for interment, Campian was selected to pronounce a Latin funeral oration before the members of the University. His appearance on two or three occasions before Queen Elizabeth, was so scholarly and successful, that Sir William Cecil, afterwards Lord Burleigh, is said to have pronounced him one of the "diamonds" of England. Unsatisfied with his ecclesiastical position as a member of the Anglican Church, Campian yet complied with the prayers of his friends so far as to be ordained deacon by Dr. Richard Cheyney, Bishop of Gloucester. This step seems to have immediately added remorse to his former mental disquiet ; he proceeded to throw up his fellowship, and on the 1st of August, 1569, to quit the University, and to betake himself to Dublin. Abjuring Protestantism, he repaired to the English seminary at Douay, which he quitted for Rome, where he was admitted a Jesuit in 1573. After his novitiate, he passed some time at Vienna and Prague ; and on his return to Rome, was sent by Pope Gregory XIII., with other Jesuits, as "missioners" to England, where they arrived in 1580. Campian's zeal and activity attracted the notice of the government of Queen Elizabeth ; he was arrested at Lyford, in Berkshire, and committed, with some others, to the Tower of London, on the charge of conspiracy and exciting the people to rebellion. They were put to the rack, but though they asserted their loyalty to the queen, they refused to renounce the pope's deposing powers ; they were, consequently, condemned to death ; and, in accordance with their sentence, were executed at Tyburn, on the 28th of November, 1581. The literary works of Campian are chiefly polemical, the most celebrated being his 'Decem Rationes,' addressed to the Privy Council, in 1581. One of his works is a 'Chronologia Universalis ;' another is a history in Latin of 'The Divorce of Henry VIII. and Queen Catherine.' His 'History of Ireland,' was published by Sir James Ware, in 1633, from a MS. in the Cotton Library.

CAMPION, THOMAS, a poet and musician, lived and wrote in the 17th century ; but nothing is recorded of his personal history. He wrote 'A New Way of Making Fowre Parts in Counterpoint, by a most familiar and infallible rule,' of which the first edition is without date, but the second edition, with the title, 'The Art of Setting or Composing Music in Parts,' appeared in 1660. Another work is 'The Art of Discant, with annotations, by Christopher Sympson,' London, 8vo, 1672 ; this is incorporated in Playford's 'Introduction to the Knowledge of Music,' London, 8vo, 1679. These works are ascribed to a Thomas Campion who lived much earlier in the century, and was the author of 'Observations in the Art of English Poesie,' 12mo, 1602 ; Words adapted to Airs, by Ferabosco, London, 1609 ; verses on the Death of Prince Henry, set to music by Cooper, or Coperario, 1619 ; descriptions of three or four Masques, published between 1607 and 1614 ; and 'Epigrammatum Libri ii. Umbra,' 12mo, 1619. There is, however, reason to believe that there were two persons named Thomas Campion, connected with Oxford University, at different periods in the 17th century.

CAMUS, ARMAND GASTON, one of the active partici-

pators in the great French Revolution, was born at Paris, April 2nd, 1740. Having directed his studies towards ecclesiastical law, he became advocate for the clergy of France; the Elector of Treves and the Prince of Salm-Salm also employed him as their counsellor. The publication of Buffon's 'Histoire Naturelle,' led Camus to translate Aristotle's 'History of Animals.' This, however, did not turn the general current of his studies; he continued to be an ecclesiastical lawyer. When the revolutionary times arrived, Camus was chosen one of the deputies for Paris to the States-General. He denounced the 'Red Book,' in which the pensions made out of the National Treasury were inscribed; maintained the civil constitution of the clergy; and rendered much service while filling the post of archivist, in preventing the destruction of the books and papers that had belonged to the various suppressed corporations. When the National Convention was formed in 1792, Camus entered it as deputy for Haute-Loire. He was sent on a political mission to Flanders, and on his return was chosen a member of the Committee of Public Safety. He was then thrown out of the current of French politics, during the worst period of the Reign of Terror, by an unexpected occurrence. Having been appointed in 1793 commissioner to accompany the army of Dumouriez, the latter, who did not relish the espionage, arrested him, and delivered him over to the enemy, by whom he was imprisoned successively at Maastricht, Coblenz, Königgrätz, and Olmütz. Camus occupied a portion of his enforced leisure in translating from Epictetus, and in writing a Journal; the latter has not been published, but Toulougeon made citations from it in his 'Éloge Historique' on Camus, Paris, 1806. On regaining his liberty, Camus entered the Council of Five Hundred, of which body he was afterwards elected president. In 1797, he abandoned senatorial and political functions, and employed the remaining seven years of his life in collecting MSS. relating to the history of France, for which purpose he made numerous exploratory journeys. He was one of the first members of the Institute, to whose Memoirs he contributed many papers. Camus died of apoplexy on the 2nd November, 1804, leaving behind him the reputation of a pious and honest man, but vain and obstinate. His chief literary works were:—(1) 'Code Matrimoniel,' Paris, 4to, 1770; 'Lettre sur la profession d'Avocat, et Bibliothèque choisie des livres de droit,' Paris, 12mo, 1772; of which the third and best edition is dated 1805; (3) 'Histoire des Animaux,' Paris, 2 vols. 4to, 1783; this is the translation from Aristotle; (4) 'Manuel d'Épictète et Tableau de Cébès,' 18mo, Paris, 1796; (5) 'Mémoires sur la collection des grands et petits Voyages,' 4to, Paris, 1802; (6) 'Histoire et Procédés de Polytypage, et de Stéréotypage,' 8vo, Paris, 1802; a useful contribution to the history of printing; (7) 'Voyage dans les Départements,' 8vo, Paris, 1803; interesting for its bibliographical and literary history.

CANINA, CAV. LUIGI, an eminent Italian archæologist, was born at Casale in Piedmont, October 23rd, 1795, and after completing his literary course, studied architecture. He resided many years in Rome, directed various excavations of ancient edifices, &c., and there produced the works which established his fame. Some of these were brought out at the cost of his patroness, the Queen of Sardinia, and are sumptuous in paper, printing, and embellishments. His works secured him admission into the Institute of France and many other learned societies, as well foreign as Italian, and the post of professor of architecture in Turin Academy. He died whilst on a visit to Florence, October 17, 1856. The following are his more important publications: 'L'Architettura Romana,' 2 vols. fol. Rome, 1830; 'L'Architettura Græca,' fol., Rome, 1833; 'Descrizione storica del Foro Romano e sua adiacente,' 8vo, Rome, 1834; 'L'Architettura antica descritta e dimostrata coi Monumenti, &c. Opera divisa in tre sezioni riguardanti la Storia, la Teorica, e le Pratiche dell'Architettura Egiziana, Greca, Romana,' 6 vols. fol. Rome, 1830-44; 2nd edition, text, 9 vols. 8vo, plates, 3 vols. fol. Rome, 1839-46; 'Descrizione dell'Antico Tuscolo,' 43 plates, fol. (privately printed), Rome, 1841; 'Esposizione Topografica di Roma antica,' fol. Rome, 1842, 8vo, 1855; 'Indicazione Topografica di Roma antica in corrispondenza dell'Epoca Imperiale,' 4th edition, 8vo, Rome, 1850; 'Pianta Topografica di Roma antica, con i principali Monumenti, ideati nel loro primitivo stato, secondo le ultime scoperte, e con i Frammenti della Marmorea pianta Capitolina disposti nel suo d'intorno,' 8vo, 1850; 'Gli Edifizj di Roma Antica, cogniti per alcune reliquie,' 6 vols. 312 plates, fol. 1848-56; 'La Prima Parte della Via Appia dalla Porta Capena a Boville,' 2 vols. 52 plates, 4to, 1853; 'L'Antica Città di Veii,' 44 plates, fol. (privately printed), Rome, 1847; 'Ricerche sull'Architettura più propria dei tempi Cristiani,'

plates, fol. 1843; second edition, plates, fol. 1846; 'Antica Etruria Marittima, compresa nella dizione Ponteficia,' 2 vols. plates, fol. 1846-51; 'Particolare genere di Architettura domestica,' 40 plates, fol. Rome, 1852; 'Illustrations Architectural and Pictorial of the genius of M. A. Buonarroti. With descriptions of the plates by the Commendatore Canina, C. R. Cockerell, R.A., and J. S. Harford,' with 15 plates, fol. London, 1857. Cav. Canina also wrote a great number of short monographs.

CANNING, CHARLES JOHN, VISCOUNT. [E. C. vol. vi. col. 985.] Lord Canning commenced his course as Governor-General of India, with the resolution to maintain a policy of peace with the native princes, and to devote his attention and influence mainly to the amelioration of the social condition of the people, the extension of roads, railways, and canals, and the general improvement of the country. His plans were rudely thrust aside by the outbreak of the Sepoy insurrection, May, 1857. But Lord Canning proved himself equal to the altered requirements of his position. His measures were prompt, decided, and made with a clear appreciation of the gravity of the crisis, and of his own means of meeting it. The European population, especially in Calcutta, in their passionate excitement against the native population, regarded his calmness and moderation as signs of feebleness and apathy, and he was for a time extremely unpopular. Something of the same feeling influenced partisans in this country. Whilst Oude was in open rebellion, Lord Canning placed in the hands of the Chief Commissioner in Oude, a proclamation, not necessarily for issue, but to be used in his discretion, and only so far as might seem advisable, addressed to the inhabitants of Lucknow, in which, whilst rewards were promised to those who remained faithful, it declared that the proprietary right in the soil of the province had been forfeited by the revolt and contumacy of the bulk of the landowners. At home the consideration of the proclamation, undoubtedly unusual in its terms, fell to the lot of a ministry selected from a different party to that which made Viscount Canning Governor-General of India. The Earl of Derby was premier, the Earl of Ellenborough had the control of Indian affairs. Lord Ellenborough addressed a "secret despatch" to Viscount Canning, but at the moment of sending it, published the tenor of its contents in England, in which, asserting that the hostilities in Oude had rather the character of legitimate war than rebellion, he condemned in the most unqualified and arrogant terms, Lord Canning's conduct and policy. When the text of the despatch was published, the feeling of its impolicy, as well as discourtesy, was so strong and general, that Lord Ellenborough was constrained to an immediate resignation. The reply of Viscount Canning did not reach England till some months later, but then produced a deep impression by its calm and statesmanlike explanation and vindication of his policy, and the dignified reference to the ungenerous treatment he had received. After the complete suppression of the rebellion, Lord Canning was as distinguished by the moderation and consideration with which he dealt with the native population as he had previously been by his energy. Peace restored, he addressed himself to the task of reviving the trade, and developing the agricultural and industrial resources of the country. But climate, anxiety, and toil had broken his strength. It was hoped that rest in England might restore it, but the experiment was made too late. He reached London in April, 1862, and died there on the 17th of the following June.

*CANNING, SIR SAMUEL, civil and electrical engineer, was born at Ogbourne St. Andrew, Wilts, on the 21st of July, 1823. His attention had been particularly directed to telegraphic engineering, and in 1852 he was engaged in superintending the laying down of submarine electric cables. This requires such a delicate handling of the mechanism on ship-board for uncoiling, gripping, paying out, and registering the movements of the cable, and especially for finding and raising a sunken cable when snapped, that it is becoming a distinctly recognised branch of engineering. Mr. Canning mainly conducted the extensive series of experiments, instituted by the Atlantic Telegraph Company, to determine the form and arrangement for the cables of 1857 and 1858; and the experience thus acquired has led to his being employed in the construction and laying of a larger number of important submarine cables than any other engineer. The embarrassing and apparently hopeless work of groping for the end of a cable at a depth of 12,000 feet in the ocean, was rendered possible by him and Mr. Clifford through the invention of new paying out and grappling machinery. Mr. Canning has been long associated in these matters with Messrs. Glass and Elliott, the manufacturers of the wire-work of electric cables, and with the Gutta Percha Company in regard to the gutta percha insulators,

both before and since the coalescence of the two establishments in the Telegraph Construction and Maintenance Company. The success which attended the submersion of the Atlantic cable of 1866, and the recovery of that which had been broken and sunk in 1865, led to the conferring of two baronetcies and four knighthoods on those who had been concerned in the enterprise; Mr. Canning was one of the four who were knighted. In 1867 he was awarded the gold medal of the American Chamber of Commerce at Liverpool. In 1869 Sir Samuel Canning conducted the laying of the French Atlantic Cable, from a point on the French coast near Brest, to the French Isle of St. Pierre, near Newfoundland; the whole cable, except a short shore-end, being carried by the 'Great Eastern.' In 1870 he superintended the laying of the Suez, Aden, and Bombay, and the Falmouth, Gibraltar, and Malta submarine cables, thus affording better telegraphic communication with India than had before existed.

CAPELLA, MARTIANUS MINEUS FELIX, was a learned writer in the second half of the 5th century, concerning whose personal history nothing is known, except that he was probably born at Medaura, in Africa, went to Carthage in the service of a Roman pro-consul, and afterwards went to Rome. About 470, A.D., he wrote, in rather debased Latin, in mingled prose and verse, a work called 'Satiricon,' a sort of encyclopædia of the learning of the time, which was much read and studied in the middle ages. It consists of nine books. The first two are devoted to 'De Nuptiis Philologiæ et Mercurii,' a sort of mystical allegory. The other seven books relate to the seven liberal arts—grammar, dialectics, rhetoric, geometry, arithmetic, astronomy, and music, treated mythologically. Copernicus is believed to have derived from Capella's Astronomy, the first idea of the sun, instead of the earth, being the centre of our system. The first edition of the *Satiricon* was published at Vicenza, folio, 1499; there have been many since, of which the best is by Kopp, Frankfurt, 1836. A translation by Notker into old high German, was published at Berlin in 1837. There have also been many commentaries on the *Satiricon*.

CAPELLI, ANGELO, Italian astronomer, lived in the first half of the 18th century. Little more is known of his personal history, than that he was a canon and a professor of astronomy at Parma. Weidler ('*Bibliographia Astronomica*,' and '*Historia Astronomiæ*,') speaks favourably of two works by Capelli; (1) '*Astrosophia Numerica, sive Astronomica Supputandi Ratio*,' 2 vols. 4to, Venice, 1733-46: this work is in four parts, treating severally of the longitudes and latitudes of the celestial bodies; the calculation of eclipses, astronomical problems, and the construction of ephemerides; (2) '*Novissimæ Novissimarum Saturni, Jovis, Martis, Veneris, et Mercurii Tabulæ*,' 4to, Venice, 1733.

CAPGRAVE, JOHN, an old English historian, was born at Bishop's Lynn (now King's Lynn), Norfolk, April 21, 1393; entered early the Augustinian convent in his native town; was distinguished by his devotion to study; sent to Cambridge to complete his education, and afterwards to Oxford, where he took the degree of doctor of divinity, and in 1427, entered the priesthood. He speaks of himself as having been in London, "studying there in the fourth and fifth year after being raised to the priesthood;" he then spent some time, engaged in literary composition, in the Austin Friary, Lynn; was in 1445 elected provincial of his order in England; appears to have assisted at the formal foundation of the College, Eton, and King's College, Cambridge; and died at Lynn on the 12th of August, 1464. Capgrave had the reputation of being one of the most learned men of his order then living in England. He was a very voluminous writer. The titles are known of thirty-seven distinct works written by him, but of these only eight are extant. His lost writings include commentaries on nearly all the books of Scripture, a Manual of Christian Doctrine, Sermons, and other strictly theological works, Lives of St. Augustine, of certain of the illustrious men of the Order of St. Augustine, of St. Gilbert, and of Humphrey Duke of Gloucester. The MSS. are extant of a 'Commentary on the Book of Genesis;' 'On the Acts of the Apostles;' 'On the Creeds;' 'The Life of St. Katherine;' 'The Nova Legenda Angliæ;' 'A Chronicle of England;' and 'Liber de Illustribus Henricis.' The two last were published under the direction of the Master of the Rolls, in 1858. 'The Chronicle of England,' extends from the Creation to the year 1417. It is not a work of much historical importance, but it has considerable value as an example of the Norfolk dialect of the middle of the 15th century. A translation of the 'Liber de Illustribus Henricis,' by the Rev. F. C. Hingeston, the editor of the Rolls editions of that book, and the Chronicle, was published simultaneously with the original text.

BIOG. DIV.—SUP.

The book was dedicated to Henry VI., greatest of all the Henries. The first part contains Lives of the Henries, Emperors of Germany; the second part, of the Henries, Kings of England; the third, of sovereigns of that name in various parts of Europe. The author has read much, but is sadly deficient in judgment. He approves the derivation of the name of England "from *En*, which is 'in,' and *cleos*, which is 'glory,' as though she were all glorious within."

CAPOCCI DE BELMONTE, ERNESTO, Italian astronomer, was born at Picinisco, in the kingdom of Naples, 28th of March, 1798. He was placed early as a pupil at the Observatory of Capo di Monte, under his uncle, Zuccari, who was the director. While yet in his 18th year, he wrote on astronomical subjects in the '*Giornale Enciclopedico di Napoli*.' He became assistant astronomer at Capo di Monte, under various directors, and eventually himself director. During a long series of years he made valuable observations on the orbits of newly-discovered comets, the spots on the sun, the periodicity of meteors, the variations in the sea-level, &c.; the results of which appeared in '*Zach's Correspondenz*,' and other scientific journals. In 1839, the Berlin Academy, engaged in the preparation of the elaborate star-map which has since so greatly aided in the discovery of new planets, &c., invited Capocci to undertake the section known as *hora 18*; it was a work of great labour, on account of the large portion of the Milky Way comprised within the area, and occupied him three years. Capocci, after suffering by the revolutionary changes in Italy, was, on the erection of the kingdom of Italy, placed at the head of the Observatory of Naples. He died in 1864.

CAPPELLER, MAURIZIO ANTONIO, was born at Lucerne in 1685. He studied medicine at Milan and elsewhere, and in 1707, was attached as surgeon to the Imperial Army in the invasion of the kingdom of Naples. He afterwards became captain of engineers in the province of Abruzzo. He again served in 1712, after which he followed his profession at Lucerne, whence, in 1730, he removed to Freiburg, and afterwards, in 1744, to Soleure. In 1747, he returned to Lucerne, where, in addition to the practice of medicine, he gave lessons in geometry and mathematics as applied to military engineering. In 1754, he went to reside with his son, who was a pastor near Lucerne, and continued to practise medicine until his death, 16th September, 1769.

Capeller was elected a Fellow of the Royal Society in 1725, and the services rendered by him to science, which procured him this honour, related to crystallography. His '*Prodromus Crystallographiæ*,' appeared at Lucerne in 1723, the design of which was to carry out the idea started by Dominic Gulielmi, in 1707, that in crystals "nature does not employ all figures, but only certain ones of those which are possible; and of these the determination is not to be fetched from the brain, or proved *à priori*, but obtained by experiments and observations. Nevertheless, since there is here a principle of crystallisation, the inclination of the planes and of the angles is always constant."

Capeller left behind him a complete MSS. treatise on crystallography in the German language, the figures for which were engraved in 1788; but the publication of the letterpress was interrupted. A Natural History of Lucerne, sometimes said to have been first published after his death by his friend, Felix Balthazar, really appeared in 1757, 4to, Basel, under the title, '*Pilati Montis Historia*.'

CARAFÀ DE COLOBRANO, MICHELE ENRICO FRANCESCO VINCENZO PAOLO, musical composer, was born at Naples, 17th of November, 1787, or (according to Fétis) 28th of November, 1785. He commenced the study of music at an early age, learning harmony, accompaniment, counterpoint, and fugue successively under Fazzi, Ruggi, Fenaroli, and Cherubini. He was for some years, however, before being known as a composer, in the army of Murat, where he served as a cavalry officer, terminating his military career in the Russian campaign of 1812. In 1814, his opera, '*Il Vascello l'Occidente*,' was produced at Naples; and for more than twenty years similar productions flowed from his pen, brought out at Naples, Milan, Venice, Rome, and Paris, in which last-named city he settled permanently in 1827. In 1837 he succeeded Lesueur as member of the Académie des Beaux Arts, and was director of the Gymnase Musical Militaire. At the Conservatoire, he was member of the Committee of Musical Studies, and professor of composition, counterpoint, and fugue. Carafà's best opera, out of about thirty, is '*Abufar*,' which came out with the support of Donzelli and Lablache; but the most successful is '*Le Solitaire*,' which has been several times revived.

CARAMUEL LOBKOWITZ, JUAN, a Spanish divine and

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man of science, was born at Madrid on the 23rd of May, 1606. It has been said of him that he was endowed with genius to the eighth degree, with eloquence to the fifth, and with judgment to the second. He became a member of the Cistercian order, and was for some time professor of divinity in the University of Alcalá. He afterwards made a great reputation as a preacher in the Low Countries, and graduated at Louvain, as doctor in theology, on the 22nd of September, 1638. His winning address, his great learning, and his eloquence, both in the pulpit and in conversation, everywhere commanded preferment. He was made Abbot of Melrose, and Vicar-general of his order in Great Britain, without being called upon to visit these islands. When political events forced him from his residence as Abbot of Disenburgh, the Emperor Ferdinand III., to whose court he was accredited as agent of the King of Spain, conferred two abbeys upon him, one at Vienna and the other at Prague. He bravely assisted, at the head of a body of churchmen, in the defence of the latter city, when it was besieged by the Swedes in 1648. In 1655 he was invited to Rome by Pope Alexander VII., who gave him the united bishoprics of Campagna and Satriano, in the kingdom of Naples, which he resigned in 1673, on his nomination by the King of Spain to the See of Vigevano. Here he died on the 8th of September, 1682, and was buried in his cathedral church.

Caramuel was a very voluminous author, and a complete list of his works, canonical, theological, political, and scientific, is to be found in 'Nicéron's Mémoires des Hommes Illustres.' The following may be mentioned as illustrating the various directions of his literary and learned activity:—*Thanatosophia*, 4to, Brussels, 1637; *Theologia Regularis Sanctorum Benedicti*, Augustini, Francisci Regulas Commentariis dilucidans, folio, Bruges, 1638, and Lyon, 1665; 4to, Frankfurt, 1644, and Venice, 1651; *Theologia Moralis ad prima eaque clarissima Principia reducta*, folio, Louvain, 1643; *Philippus Prudens, Lusitanus, Algarvius, Indus, Brasilius, &c., legitimus Rex demonstratus*, folio, Antwerp, 1638; *Declaracion Mystica de las Armas de España*, folio, Brussels, 1639; *Cælestes Metamorphoses, sive circulares Planetarum Theoricæ in alias formas transfiguratas*, 8vo, Brussels, 1639; *Mathesis Audax: rationalem, naturalem, supernaturalem, divinamque sapientiam Arithmeticiis, Geometricis, Catoptriciis, Staticis, Dioptriciis, Astronomicis, Musicis, Chronicis, et Architectonicis fundamentis substruens exponensque*, 4to, Louvain, 1642 and 1644; *De Novem Sideribus circa Jovem visis*, 12mo, Louvain, 1643; and *Severa Argumentandi Methodus*, folio, Louvain, 1644.

CAREY, WILLIAM, D.D. [E. C. vol. vi. col. 985.]

CARISSIMI, GIOVANNI GIACOMO, Italian composer, is known more by his works than by his life. Venice and Padua have been named by different authorities as the place of his birth, and 1582 as the year; but Pitoni, in his 'Historical Sketch of the Roman Masters of Music,' has more recently stated that Carissimi was born at Marino, near Rome, in 1604. After filling the post of maestro di capella at Assisi, when only twenty years of age, he went to Rome in 1628, and for the remainder of his life occupied a similar position in the Church of St. Apollinaris, belonging to the Germanic college. As a composer, he greatly improved recitative, introduced the style of cantata combination of voices and instruments, substituted grace and variety for monotony in bass accompaniments, and introduced orchestral instruments in church music. His masses, oratorios, cantatas, motetts, &c., are very numerous, but only a few of them have been published. A large quantity of his MS. music was sold as waste paper, when the Jesuit Colleges were suppressed. He founded a newschool of music, which was further developed by his pupils, Bassani, Cesti, Bononcini, and Scarlatti. His short treatise on singing, the '*Arte Cantandi*,' has appeared in several editions in Germany. A comic piece by him is preserved, harmonising the declination of the Latin pronoun, '*Hic, hæc, hoc*,' for four voices. Carissimi died in 1674.

CARLETON, WILLIAM, a popular novelist and delineator of Irish life and character, was born at Prillisk, Antrim, in 1798. His father was poor, but well versed in the traditions of Ireland, and William Carleton, while suffering many of the privations of a peasant's lot, grew up with a strong sympathy with the feelings and superstitions of his native country. He learned under a hedge-schoolmaster; served as tutor to a school at Glasslough, and then started for Dublin to seek his fortune. He wrote in the '*Christian Examiner*,' next, in 1830, appeared his '*Traits and Stories of the Irish Peasantry*,' a work which attracted much attention by its freshness of style and graphic touches. In 1832 he published a second series of the same work; in 1839, 'Far-

dorougha the Miser;' in 1841, a series of tales, including '*Misfortunes of Barney Branagan*;' in 1845, '*Valentine M'Clutchy*;' in 1846, '*Rody the Rover*;' in 1847, the '*Black Prophet*;' in 1849, '*The Tithe Proctor*;' in 1855, '*Willy Reilly*;' in 1860, '*The Evil Eye*,' all remarkable as pictures of Irish character and sentiment. Many of these works appeared in the '*Dublin University Magazine*.' Mr. Carleton, who for some years had a pension of £200 from the Crown, died January 30, 1869.

CARLINI, FRANCESCO, Italian astronomer, born 1785, produced, during more than half a century, a series of valuable papers on the science to which his attention was mainly directed, mostly relating to observations and researches conducted by himself. These papers, upwards of seventy in number, appeared at various dates between 1807 and 1863, in the Milan '*Effemeridi Astronomiche*,' *Zach's Monat. Corresp.*, *Brugnatelli's Giornale*, *Lindenau's Zeitschriften*, the '*Memoirs of the Italian Society of Modena*,' the '*Biblio. Ital.*,' the '*Nuovo Cincento*,' &c. They take a wide range in astronomical phenomena; including refraction, the asteroids, solar tables, zenith observations, lunar inequalities, lunar parallax, Kepler's problem, the pole star, solar eclipses, comets, astronomical clocks, hourly variations of the barometer, solstitial observations, lunar perturbations, the zodiacal light, the distribution of heat, the constants of the barometer, &c. Carlini made many valuable contributions in 1823-4-5, towards the measurement of an arc of the meridian in Italy, by determining the longitudes of several Italian towns, and by ascertaining the length of the seconds' pendulum at various elevations in the Alps. He also wrote on the barometrical determination of the relative levels of the Black and Caspian Seas. One of his earlier papers was published separately, '*Esposizione di un Nuovo Metodo di Costruire le Tavole Astronomiche applicato alle Tavole del Sole*,' Milan, 8vo, 1810. He died August 29, 1862, aged 77.

CARLISLE, GEORGE WILLIAM FREDERICK HOWARD, EARL OF, a statesman and man of letters, the eldest son of George, sixth Earl of Carlisle, by Lady Georgiana Dorothy Cavendish, eldest daughter of William, fifth Duke of Devonshire, was born in Hill-street, Berkeley-square, on the 18th of April, 1802. He was educated at Eton and at Christ Church, Oxford, where, and until the death of his father in 1848, he was known as Lord Morpeth. At Oxford he distinguished himself especially as a writer of verse, both English and Latin. In 1821 he won the Chancellor's prize for a Latin poem, '*Eleusis*,' and the Newdegate prize for English verse, '*Pæstum*;' a Prize Poem, &c., 8vo, Oxford, 1821. He graduated first class in classics in 1823; and two years after, accompanied his uncle, the Duke of Devonshire, to assist at the coronation of the Emperor Nicolas of Russia, whom, in his place in the House of Commons, as member for Morpeth, he defended, in one of his earliest speeches, against the attacks which were made upon the imperial policy on the suppression of the Polish insurrection of 1830. After a short Parliamentary connection with the borough of Morpeth, the passing of the Reform Act found him member for Yorkshire, the West Riding of which he subsequently represented from 1833 to 1841, when he lost his election. He retook his seat for this constituency, however, in 1846, and held it until his call to the House of Peers in 1848.

He turned to account the leisure he enjoyed as the rejected of the West Riding, by paying a lengthened visit to the United States of America; and he made this tour the subject of a Lecture, which he delivered before the members of the Leeds Mechanics' Institution, in December, 1850. He also lectured before the same body on the '*Life and Writings of Pope*,' and the Lectures he here delivered, and repeated at various places about the same time, were severally published in 8vo, London, 1851. His lordship was Chief Secretary of State for Ireland from 1835 to 1841; was appointed Lord-lieutenant of the East Riding of Yorkshire in 1847; Chancellor of the Duchy of Lancaster from 1849 to 1851; Lord Rector of Marischal College and University, Aberdeen, in 1853; and in 1863 was admitted to the freedom of the City of Derry. The great public event of Lord Carlisle's life, however, was his appointment, in 1855, to be Lord-lieutenant of Ireland, an office which, with the exception of a short interval upon the second accession of Lord Derby to power in 1858, he continued to fill, with great popularity, until his failing health compelled his resignation in August, 1864. He died at Castle Howard on the 5th of the following December.

The Earl of Carlisle was a man of great kindness, amiability, and beneficence of disposition, of high moral character, and of large and graceful literary culture. His works comprise a tragedy in five acts, and in verse, entitled '*The Last of the Greeks*;' or

the Fall of Constantinople,' 8vo, London, 1828; 'Lines on Yorkshire,' privately printed, which, written in 1832, were edited by Lady Caroline Georgiana Lascelles, 4to, London, 1866; a Speech on 'Sanitary Reform,' 8vo, London, 1847, delivered in the House of Commons on the 30th of March, in that year; a 'Diary in Turkish and Greek Waters,' 8vo, London, 1854; 8vo, Boston, U.S., 1855, the careful and impartial result of travels in the East, commenced in June, 1853. Two other volumes have been published posthumously, 'The Viceregal Speeches of the late Earl of Carlisle, K.G.,' 8vo, Dublin, 1866, collected and edited by J. J. Gaskin; and 'Poems,' by George Howard, Earl of Carlisle, selected by his Sisters, 8vo, London, 1869.

CARNE, JOSEPH, the son of a banker, and a representative of a family which has been established in Cornwall for three centuries, and in Glamorganshire for a still longer period, was born in 1776. From an early period in his life he devoted his attention to the mineral resources of Cornwall. He succeeded to his father's business as banker, and in that capacity took a considerable share in promoting the principal fiscal operations connected with Cornish mines. As a scientific man, he wrote several excellent papers on the rocks and minerals of his native county, nearly all of which were contributed to the Geological Society of Cornwall, in whose 'Transactions' they may be found. The more important are: 'On the relative age of the Veins of Cornwall,' vol. ii. pp. 119—128; 'On the Mineral Productions and the Geology of the parish of St. Just,' vol. ii. pp. 290—358; vi. pp. 47—50; 'On the Granite of the Western part of Cornwall,' vol. iii. pp. 208—246; and 'An account of the discovery of some varieties of Tin Ore in a vein, which have been considered peculiar to streams, with remarks on Diluvial Tin in general,' vol. iv. pp. 95—112. He was for several years justice of the peace for Cornwall, and was a Fellow of the Royal Society and other learned institutions. He died Oct. 12, 1858.

CARNOVALE, FRA, known also as BARTOLOMEO CORRADINI, an Italian painter, in his day the chief of the Umbrian school, and the reputed master of Bramante, was about 1460-1488 a Dominican friar, and curate of San Cassiano, near Urbino. Nothing further is known about him. A picture attributed to him is in the National Gallery, No. 769, 'St. Michael and the Dragon,' the figures nearly life-size and, for the period, well painted. In the Brera, Milan, is a 'Virgin and Child, with Saints,' by him. Pungileoni supposes that Giovanni Santi, the father of Raffaella, learnt painting of Fra Carnovale.

CARO, ANNIBALE, an Italian poet of the 16th century, was born at Città Nuova in 1507. He commenced life as tutor in the family of a rich Florentine, named Ludovico Gaddi, to whose brother, Giovanni, he afterwards became secretary. With this patron he visited Rome, where, in conjunction with the brothers Molza, he established the "Accademia della Virtù." After Gaddi's death, in 1543, Caro entered the service of Pietro Ludovico Farnese, a natural son of Pope Paul III., and first Duke of Parma and Piacenza, who employed him in various important negotiations. After the assassination of the duke, the favour he had shown to Caro was continued by his three sons; and through the ease and competency which the kindness of such powerful friends secured him, he was enabled to amass a valuable collection of antiquities, and especially of medals, as well as to devote himself to the study of the Tuscan language, of which his various works offer so pure and forcible an example. In his old age he fixed his residence at Rome, occupying, in the summer months, a country house at Frascati. He died at Rome in the year 1566. Caro's principal work, which he had scarcely finished at the time of his death, is his excellent translation of the 'Æneid' of Virgil, which was posthumously published, in 4to, Venice, 1581, 2 vols., Paris, 1760. Besides translations of the 'Rhetoric' of Aristotle, and of two 'Orations' of Gregory Nazianzen, and various humorous writings, Caro is the author of 'Le Reine,' 4to, Venice, 1569, a volume of elegant poems which have been frequently reprinted; and 'Le Lettere,' 2 vols., Venice, 1573-1574, &c. New editions of his works were published in 6 vols., Venice, 1757, and in 8 vols., Milan, 1806.

CAROLAN, TURLOUGH O', the most genuine modern representative of the ancient Irish bards, was born in the county of Westmeath in 1670. Being poor, and having lost his sight by small-pox in early youth, he was thrown upon his own resources for a livelihood. His musical genius was the leading feature of his character. Not only could he repeat an elaborate composition after once hearing it, but his facility for composing new tunes was very great. On one occasion he composed a lengthened piece for the harp *impromptu*, since known as 'Carolan's Concerto.' He combined something of the German and Italian styles of

music with that of the native Irish. He travelled about Ireland, composing as he went, and was always welcome as a bard at the hospitable houses of the gentry. Writing the words of his songs, as well as composing the tunes, he indulged in rather exaggerated flattery of the beauty and virtues of those who befriended him. Carolan died in 1738, leaving six daughters and one son. The son, a harpist, published a collection of his father's music in 1747, with a very laudatory preface.

CARPOCCI, VITTORE, called SCARPUCCIA by Vasari, an eminent Venetian painter, was born about 1450. He is believed to have been a scholar of Luigi Vivarini; was one of the first of the Venetians who painted in oil; was one of the three artists called in to report on the works of Giorgione in the Fondaco dei Tedeschi, Venice, in 1508, and was still living in 1522. Carpocci was among the best painters of his day. His drawing was bold, firm, and correct; his colouring rich, harmonious, and true; he designed well, and worked with great freedom and facility. His most celebrated extant work is the series of eight pictures in the Gallery of the Academy, Venice, illustrating the legend of St. Ursula. In the National Gallery is a fine painting by him, No. 750, 'The Madonna and Child enthroned: the Doge Giovanni Mocenigo in adoration,' it was purchased at Venice in 1865, from Count Mocenigo, the Doge's descendant, for 3,400*l*.

CARRADORI, GIACOMO, was born at Prato, 7th June, 1758, and died November, 1818. He practised medicine, and studied physics and chemistry, in connection with which he has published a number of works which were of interest at the time. His fame rests on his papers on the superficial attraction of liquids ('Sull' Attrazione di Superficie'), embodied in two memoirs in the *Memor. di Matem. e di Fisica della Soc. Ital. delle Scienze* (vols. xi. and xii.), and the discussions consequent thereon, inserted in the French 'Annales de Chimie,' for 1800, 1803, and in the 'Giornale di Fisica di Brugnatelli' from 1807 to 1816, and which have supplied a large amount of material in support of the theory of the surface tension of liquids, which is now occupying the attention of the scientific world.

CARTIER, JACQUES, the discoverer of the river St. Lawrence, was born at St. Malo, December 31, 1494. Brought up as a sailor, and excited by the discoveries of Columbus and Vasco de Gama, he made an offer to Philippe de Chabot, Admiral of France, to explore the coast of America, and extend the discoveries recently made in that region. His offer being accepted, he was placed in command of an expedition by Francis I., and started from St. Malo, 20th April, 1534. Until then, Newfoundland was believed to be part of the mainland or continent, but Cartier found it to be an island, and discovered the Gulf of St. Lawrence behind it. Returning to France in September, his report excited interest, and he was placed in command of another expedition, larger and better equipped, which set sail from St. Malo, 19th May, 1535. On this occasion he not only discovered the great river St. Lawrence, by following the coasts of the Gulf westward, but penetrated as far as what is now called Montreal. His crew suffered, however, severely from scurvy, and returned in a very shattered condition to St. Malo, which he reached 16th July, 1536. He made a third voyage in 1540-42, extending his discoveries in that region, the narrative of which is included in Hakluyt's Collection. Charges of malversation were brought against him, and an inquiry was instituted, when he was not merely acquitted, but declared to have appropriated a portion of his own property to defray the expenses of the expedition. Francis conferred on him letters of nobility, and he retired to an estate he owned at Limoilin. The year of his death is not known. He was living in 1552.

* CARUS, JULIUS VICTOR, the son of Ernst August Carus, professor of surgery at Dorpat, was born August 25, 1823, at Leipzig. After having passed through the University of his native town, he became an assistant medical attendant at the George Hospital. In 1849 he commenced a sort of educational tour, making stays of varying duration at Wurzburg, Freiburg, and at Oxford, where he was the custodian of the Museum of Comparative Anatomy, and finally settled down at Leipzig, in 1851, as professor of comparative anatomy and director of the anatomical museum in the University. His principal works are: 'Zur naheren Kenntniss des Generations-wechsels,' 1849; 'System der thierischen Morphologie,' 1853; and 'Ueber die Leptocephaliden,' 1861. He was the editor of 'Icones Zootomicæ,' 1857, &c.; and in conjunction with Engelmann he produced the 'Bibliotheca Zoologica,' 1862, an admirable work, the execution of which demanded immense labour and research. This last work added considerably to his reputation, and we believe he is now engaged in drawing up the classified index to scientific papers published

from about 1800 to 1863, which the Royal Society propose issuing. In connection with Gerstaecker, he is bringing out a 'Handbuch der Zoologie,' of which the vertebrates has been undertaken by Carus. The first half of the first volume appeared in 1868. The second volume is devoted to the invertebrates, and appeared in 1869; about a third of this volume, or that part which relates to the annelids, echinoderms, coelenterates, and protozoans, was done by Carus. When completed, the work will form perhaps the most complete guide to systematic zoology yet published.

CARUS, KARL GUSTAV, an eminent biologist, was born January 3, 1789, at Leipzig, in which town his father carried on the business of a dyer. His education was received at Leipzig. In 1804 he commenced his studies at the University, and at first devoted himself more especially to chemistry, in order to be able to assist in his father's works, but he soon abandoned this idea, and determined upon giving his attention mainly to anatomy, and upon qualifying himself for the medical profession. In 1812 he graduated as M.D., and soon after commenced his career as teacher, by delivering the first special course of lectures given at Leipzig on comparative anatomy. He then became an enthusiastic student of midwifery and of painting. In the war of 1813, he was entrusted with the direction of the French hospital at Pfaffendorf, and in 1814 he removed to Dresden, where he had accepted the posts of professor of midwifery and director of the lying-in hospital in connection with the newly established Medico-chirurgical Academy. In 1827 he added to his reputation by a course of lectures on anthropology, which was succeeded by a course on psychology in 1829. In 1827 he was appointed physician to Prince Frederick August, afterwards King of Saxony, and in 1828 he accompanied him on a tour through Germany, Switzerland, and Italy. In 1862 he was elected president of the Imperial Leopold Caroli Academy of Natural Marvels. His writings are exceedingly numerous, and are remarkable for the immense extent of their range, their methodical arrangement, and lucidity of exposition. Many of them have taken their place as standard works of reference or as text books. They relate to anatomy, physiology, psychology, geography, and painting. As an artist he is best known for his landscapes. The following are a few of his more important works, but in addition, he has written numerous papers, a list of which is given in the Royal Society's 'Catalogue of Scientific Papers.' 'Versuch einer Darstellung des Nervensystems und insbesondere der Gehirns,' 1814; 'Lehrbuch der Zootomie,' 1818, 2nd edition, 1834; 'Lehrbuch der Gynakologie,' 3rd edition, 1838; 'Erläuterungstafeln zur vergleichenden Anatomie,' 1826-1855; 'Entdeckung einer einfachen vom Herzen aus beschleunigten Blutkreislaufes in den Larvennetzflügeligen Insekten,' 1827; 'Grundzüge der vergleichenden Anatomie und Physiologie,' 1828. 'Briefe über Landschaftsmalerei,' 2nd edition, 1835; 'England und Schottland im Jahr. 1844, 1845,' of which an English version appeared in 1846; 'Grundzüge einer neuen und wissenschaftlich begründeten Cranioscopie (Schädel-lehre),' 1841; 'Die Proportions-lehre der menschlichen Gestalt,' 1854; 'Symbolik der menschlichen Gestalt,' 1853; 'Ueber die typisch gewordener Abbildungen menschlichen Kopfformen, etc.,' 1863; 'Lebenserinnerungen und Denkwürdigkeiten,' 1865; and 'Vergleichende Psychologie,' 1866. He died in June, 1870.

* CASELLI, GIOVANNI, one of the improvers of the electric telegraph, was born at Sienna, 25th of May, 1815. He studied the physical sciences under Nobili, of whom he published a Memoir in 1837. He took holy orders in 1836, and attended to ecclesiastical duties for several years; but having been driven into exile from Tuscany, during the troubles of 1849, he was induced to adopt science as an occupation after his return. In 1854 he started a scientific journal, 'La Recreazione, Giornale de Scienze Fisiche e di Arte.' About 1856 he introduced his system of *pantelegraphy*, or *auto-telegraphy*, by which a telegram preserves its original character or alphabetic form when re-produced for the receiver. The message is written on a slip of metallized paper, or foil, coiled on a barrel rotated by clockwork; and it is received on a strip of chemically prepared paper, also coiled on a rotating barrel; the one writing is a counterpart of the other, in size, shape, and character. After years of experiments and improvements, Caselli succeeded in having his plan taken up by the French and Russian Governments in 1865, for use on certain railways. He has also invented an electro-motive machine.

CASENTINO, JACOPO DI, an eminent Italian painter, whose real name was JACOPO LANDINI, was born about 1310, at Prato Vecchio, in the Casentino. He was a scholar of Taddeo Gaddi, whose manner is very evident in his earlier works. He settled in Florence, assisted in the foundation of the Florentine

Academy, 1350, and was admitted to the Guild of Painters in 1351. He is said to have been an architect as well as a painter. He died at Prato Vecchio about 1390. Casentino was especially distinguished as a painter in fresco. His works are now very rare. Portions of his frescoes remain in the Church of Or San Michele, Florence, and in the Cathedral of Arezzo. The National Gallery possesses a large altar-piece by him, No. 580, brought from the church of San Giovanni, Prato Vecchio. It is painted in tempera on wood, and consists of a central picture representing 'St. John the Evangelist lifted up into Heaven,' among patriarchs, evangelists, and fathers of the Church; and on the other principal panels, 'The Ascension of Christ;' the 'Casting down of the Gates of Hell;' the 'Donor with his family and patron saints.' Over these are the 'Archangels Michael and Tobias.' The three upper panels represent the Trinity, the Virgin, and the Angel of the Annunciation; while in the predella below, are St. John baptizing catechumens, distributing alms, in the Isle of Patmos, and liberated from the boiling cauldron.

CASLON, WILLIAM, eminent for his skill in type-founding, was born at Halesowen, Worcestershire, in 1692. After serving an apprenticeship to an engraver of gun-locks and barrels, he established himself in business on his own account. The delicacy of his workmanship led him also to be employed in engraving or cutting stamps and punches for ornamental bookbinding. In the early part of the 18th century, the types for book-printing being coarse and ill-shaped, Mr. Bowyer, and other printers, invited Caslon to turn his attention to that subject; and, by the aid of capital supplied by them, he entirely changed the art of type-founding in England. Arabic types for the Christian Knowledge Society's use, Coptic types for a new edition of the Pentateuch, beautiful new types for standard English works, and especially, a new fount of the type called Roman pica, raised his name to great eminence. Caslon, after acquiring a handsome fortune, died 23rd of January, 1766. The typefoundry of Messrs. Caslon is still kept up.

CASS, GENERAL LEWIS. [E. C. vol. ii. col. 104.] Under President Buchanan, General Cass was made Secretary of State in 1857, and he held this position until the breaking out of the Civil War, when he retired into private life. He died at Detroit, Michigan, on the 17th of June, 1866.

* CASSIN, JOHN, American ornithologist, was born near Chester, in Pennsylvania, September 6, 1813. Since 1834 he has resided at Philadelphia, engaged in studying birds, and in publishing memoirs relating to them, chiefly of a diagnostic character. Up to 1863 these numbered fifty-six, to which about a dozen have since been added; most of them have appeared in the 'Proceedings' and 'Journal' of the Academy of Natural Sciences of Philadelphia. He has also written 'Birds of California and Texas;' 'Synopsis of the Birds of North America;' 'Ornithology of the United States Exploring Expedition;' the ornithological portion of Gillies's 'Astronomical Expedition to Chili,' and some of the chapters on birds in the 'Pacific Railroad Explorations and Surveys.'

CATALANI, ANGELICA, a celebrated singer, was born at Sinigaglia, Papal States, in October, 1779. Having, when in a convent in early life, attracted much attention by the range and beauty of her voice she began to study for public singing in 1794, and made her first appearance at Naples, in opera, in 1795. After going the round of the chief Italian cities between that year and 1803, she went in 1804 to Lisbon, where she married M. Valabrégue, an officer attached to the French embassy. After a brief engagement at Paris, she came in 1806 to London, where her success eclipsed everything until then known. In four months she received 10,000*l.* for singing in operas and concerts in London, and afterwards reaped an enormous harvest in the provinces. Her public performances were mostly in England until 1814. An opera management speculation in Paris in 1816-17 failed; after which she sang in most of the chief cities of Europe for some years. Her last public appearance was in 1827, but she survived until June 13th, 1849. Catalani's voice had a wonderful range and power, reaching up to the note called in French *contre sol*; but she had never been really well trained as a vocalist, and her dramatic powers as an actress in opera were but small.

CATTERMOLE, GEORGE. [E. C. vol. ii. col. 123.] This very clever painter died at his residence, Cedars-road, Clapham Common, on the 24th of July, 1868, in his 68th year.

CAUCHY, AUGUSTIN LOUIS. [E. C. vol. ii. col. 125.] Baron Cauchy died on the 23rd of May, 1857, at his country-seat, Sceaux, after a short illness.

* CAUMONT, ARCISSE DE, an eminent French archaeologist, was born at Bayeux, in Calvados, August 28, 1802. Having completed the ordinary educational course, and possessing a sufficient fortune, he studied geology with M. Lamouroux; founded with him the Société Linnéenne de Normandie, and published memoirs, accompanied with geological maps, on the geology of the Arrondissement de Bayeux, 1824; the Département de la Manche, 1825; and the Département du Calvados, 1828. But his attention had been strongly directed to the archaeology of his native district, and gradually this became his absorbing pursuit. He had delivered in 1825-30, courses of lectures at Caen, on archaeology, which formed the basis of his first important publication in this line, 'Cours d'Antiquités Monumentales,' 10 vols. 8vo, with 100 plates, 1830-39. The volume on mediæval architecture exciting much attention, he afterwards remodelled and published it separately, under the title 'Histoire sommaire de l'Architecture religieuse, militaire, et civile,' 8vo, with atlas of plates, 4to, Caen, 1837. This work, in which the author gave a careful chronological arrangement of French Gothic architecture, met with great success, and has done more than any in the language to popularise the study of the mediæval architecture of France. Under the title of 'Abécédaire ou Rudiment d'Archéologie (Architecture religieuse, civile, militaire),' 3 vols. 8vo, Paris and Caen, 1853, &c., the work, in a more compact and convenient form, and illustrated with an abundance of vigorous and characteristic woodcuts, has passed through several editions, has been adopted as a text-book in the colleges and upper schools of France, and forms by far the clearest and most instructive hand-book of mediæval architecture yet published. The fifth edition of the 'Architecture religieuse,' 1867, was enlarged to 2 vols. 8vo. His 'Histoire de l'Art dans l'ouest de la France, depuis les temps les plus reculés jusqu'au xvii^e siècle,' 6 vols. 8vo, 1831-40, secured his nomination as corresponding member of the Académie des Inscriptions. His investigation of the antiquities of Normandy brought him into connection with a great number of persons of similar tastes, and in the hope of inducing them to co-operate in studying and preserving the remaining monuments, he founded the Société des Antiquaires de Normandie, and later, the Congrès Scientifiques de la France, and the Société Française pour la Conservation et la Description des Monuments historiques. This last society, of which M. De Caumont is director, has, under his management, well fulfilled both parts of its title. Its 'Bulletin Monumental,' 30 vols. 8vo, Caen, 1834, &c., edited from the first by M. De Caumont, contains a large number of monographs by him, some on subjects of historical interest, like the Bayeux tapestry (vol. viii.), of considerable length, and largely illustrated. M. De Caumont has also contributed many papers to the 'Annales de Normandie,' and to the 'Journal de l'Institut des Provinces,' of which institute he is director. He has likewise edited the 'Statistique Monumentale du Calvados,' 3 vols. 8vo, Caen, 1847-58, for the most part republished from the 'Bulletin Monumental.'

CAUS, SOLOMON DE. The idea of employing steam as a mechanical agent for the purpose of raising water, heavy weights, &c., is given to the Marquis of Worcester, and the subsequent improvements are assigned exclusively to Englishmen. It was therefore with some surprise that in 1829, and again with more force in 1857, a statement was received from the powerful pen of M. Arago to the effect that the steam engine is not an English, but a French invention. Arago's paper appeared in the *Annuaire* of the Bureau des Longitudes for 1837, from which it appears that in the *Annuaire* for 1829, at the request of the students of the École Polytechnique, he had endeavoured to trace in a chronological series the improvements which the steam engine had been subjected to, from its origin to the time of the inquiry. And he expressed his belief that he should have to refer to English mechanicians only; but on a closer examination he was led to the conclusion that Solomon De Caus (Caus or Caux) preceded the Marquis of Worcester by forty-eight years. In order to transfer the glory from Britain to France it was necessary to prove De Caus to be a Frenchman. Montucla, in his 'History of Mathematics,' refers to him only as the author of a treatise on Perspective. Later works on biography state that he began and ended his life in Normandy. What little is known of him is derived from the prefaces to his works, and the confusion respecting his country seems to have arisen from the fact, that being of the reformed religion, he entered the service of several Protestant princes as engineer. In 1612 he was in the service of the Prince of Wales, afterwards Charles I. In his work entitled 'Les Raisons des Forces mouvantes,' published at Frankfurt in 1615, he styles himself

"Ingenieur et Architecte de S. Altesse Palatine Electorale." From this it has been supposed that Caus was a German, but as Arago remarks, it is not probable that a German would write in French in his own country. Moreover, in the dedication to the Most Christian King (Louis XIII.), these words precede the signature:—"de Votre Majesté le très obéissant Subject;" and lastly, in the licence, the word *subject* is again used. "Nostre bien aimé Solomon de Caus, maistre ingénieur, estant de présent au service de nostre cher et bien aimé cousin le prince Electeur Palatin, nous a fait dir, &c., désirant gratifier le dict de Caus, comme estant Nostre *subject*," &c.

In this work Caus gives a theorem that water will ascend, by the assistance of fire, higher than its level. The apparatus by which this is proved consists of a copper ball, with a vent pipe attached to the side, by which water is introduced, and the tube is then closed. There is also another pipe, passing nearly to the bottom of the ball and rising to some height above it. When the ball is placed on the fire, the elasticity of the steam acting on the surface of the water forces it up the tube and out in the form of a jet.

Arago was somewhat feebly replied to by Mr. Ainger in two lectures delivered at the Royal Institution, and published in its *Journal*. M. Arago's reply to this criticism will be found in the *Annuaire* for 1837, p. 310.

The discussion as to whether Caus or the Marquis of Worcester invented a machine of little or no practical value, even though worked by steam, is of small consequence, and does not affect the fact that the steam engine and the locomotive have emerged at the hands of Englishmen from rudimentary forms to their present power and usefulness.

De Caus had correct notions as to the important principle of the lever, known as the principle of virtual velocities; the effects of toothed wheels and of the screw being determined by its aid.

Among his other works may be mentioned 'Institution harmonique,' Frankfurt, 1615. 'Hortus Palatinus,' 1620, folio, giving an account of the Garden at Heidelberg, which was laid out under the direction of Caus, and finished in six months. 'La Pratique et Demonstration des Horloges solaires,' Paris, 1624, folio, dedicated to the Cardinal de Richelieu. In this year also appeared a second edition of the 'Raisons des Forces mouvantes,' Paris, in which the author styles himself engineer and architect to the King. After this he is lost sight of, but he is supposed to have died in 1635.

CAVAIGNAC, GENERAL LOUIS EUGÈNE. [E. C. vol. ii. col. 126.] General Cavaignac remained quietly in retirement at his villa, near Mans, till 1857, when he was elected member of the Corps Législatif for the fourth arrondissement of Paris. A few weeks later he was seized with a sudden illness, and died on the 28th October, 1857.

CAVOUR, CAMILLO BENSO, CONTE DI, a statesman celebrated as the first Premier of the new kingdom of Italy, was born at Turin on the 10th of August, 1810. He was the younger son of the Marchese Michele di Cavour, the representative of a noble Piedmontese family, which had been long settled in the neighbouring town of Chieri, and which is said to have accompanied the Emperor Barbarossa from Germany. His godmother was the Princess Borghese, sister of the Emperor Napoleon I. When ten years old he became a pupil in the Accademia Militare of Turin, where he distinguished himself so much in mathematics as to be made at the age of 16 an officer of engineers, in which capacity he assisted in the construction of various fortifications. In 1831, partly from an impatience of garrison life, and partly from the disfavour with which certain liberal expressions were received by the King, he resigned his commission, and for the next four or five years devoted himself to the improvement of his father's estates by the application to their culture of modern scientific methods. He took, however, the greatest interest in the political events of the time, and advocated a peaceable reform in society and government, to the exclusion of violence and revolution. He paid repeated visits to Switzerland; and in 1835 and during the following years made himself personally acquainted with the agricultural, industrial, social, and political institutions of France, and especially of England. Returning to his native country in 1842, he endeavoured to establish useful and benevolent corporations there, but was to a great extent baffled through the influence of the priests with the Government. Yet he joined with other able men in founding the Agricultural Society, an association which soon became powerful for good upon the prosperity of the country. For the next five years there is little trace of the direction of his activity, except in a few literary productions.

Soon after his return from Great Britain he published his 'Considerations on the Present State and Future Prospects of Ireland' in the 'Bibliothèque Universelle' of Geneva, which were subsequently translated into English; and it is known that he wrote an article on Piedmontese railways in a French periodical. In the year 1847 he established a first-class political daily newspaper, 'Il Risorgimento,' in partnership with his friend, Count Cesare Balbo, and with Count Santa Rosa, the Chevalier Carlo Buoncompagni, and one of the d'Azeglios as associates. This journal became one of the most influential organs of the middle classes; and there are to be found in it the germs of the "Cavourian Ideas," the theories of political and administrative reform, the sober aspirations after Italian unity, or "unification," as it was then called, the belief, at that time strong, in the possibility of combining Naples, Rome, and Piedmont in a Liberal crusade, and the bold views respecting the temporalities of the Church which have since become identified with the name of Cavour.

During the stormy period which followed the cession of the constitution by Carlo Alberto, Count Cavour redoubled his exertions. But the turning-point of his life was the fatal campaign that ended with Novara, after which he appeared as the expounder of a policy of compromise, as the occupant of a place between the "moderates" and the party of action, reconciling the practical aims of the one with the comprehensive patriotism of the other. His success in forming a party which stood between reaction and revolution was what first gave him real position as a statesman. In 1849 he entered the Chamber of Deputies as member for the first electoral college of Turin; and in the following year succeeded Santa Rosa as Minister of Commerce and Agriculture, and was also, in 1851, entrusted with the Ministry of Finance. The principal measures which characterised his home policy were the inauguration of free-trade, the promotion of education, the appropriation of monastic property to State purposes, the development of the material resources of the country by means of railways, the improvement of postal communication, the reform of finances, and the entire reorganisation of the army and national fortifications. During the parliamentary recess of 1852 he took the opportunity of once more visiting England, where he remained until recalled by the King in November, on the occurrence of a ministerial crisis, which left Cavour, as the successor of M. d'Azeglio, in the position of President of the Council. From this period the "unification" of Italy and the consolidation of her liberty were the professed objects of all Cavour's exertions; and everything that followed, including the futile attempt to obtain a liberal Concordat from Rome, and even the part taken by Piedmont in the Crimean war, seemed but the legitimate development of these preconceived ideas. The alliance formed with England and France against Russia, and the despatch to the Crimea of a contingent, which reflected credit on itself and on the military abilities of its leader, General della Marmora, was a great step towards the admission of Sardinia, as if by anticipation of an Italian monarchy, into the councils of Europe as a sixth great Power. At the peace, Cavour accompanied King Victor Emmanuel to London and Paris, and took an active part in the congress of the latter city, where he officially called the attention of the representatives of the Great Powers of Europe to the cause of Italy. In 1858 he was the guest of the Emperor of the French at the baths of Plombières, and the result of this visit, co-operating with the assumed and understood community of interests and antipathies, was recognised in the Franco-Sardinian alliance, which had for its object the deliverance of the Peninsula from the domination of Austria. On the 29th of January, 1859, the 'Moniteur' of Paris announced that "the mutual interests of France and Sardinia had influenced the two sovereigns to draw more closely the bonds between them by a family alliance;" and on the 30th of the same month the marriage of Prince Napoleon with the Princess Clotilde of Savoy was solemnized at Turin. On the 25th of March, Count Cavour, at the invitation of the French Emperor, paid a visit to Paris, where he omitted nothing that might be necessary to secure the interests of his country, whether the decision of Napoleon III. should be for peace or war with Austria. The voting of large sums in the Sardinian Chamber on the 12th of April for the fortifications of Alessandria was regarded by Austria as a menace, and eleven days afterwards Count Buol's ultimatum was presented at Turin. Fortunately for Count Cavour, this ultimatum was insulting enough to rally round him the whole country, and in rejecting it, which he did on the 26th of April, he seemed to throw upon Austria all the responsibility of the war. The

passage of the Ticino by the Austrians on the 29th initiated a campaign of 70 days, during which were fought the sanguinary battles of Magenta and Solferino. At the end of July, in consequence of the disappointment of his hopes by the strange and sudden peace of Villafranca, Cavour retired from office; to which, however, on the breaking down of the Rattazzi ministry, he was recalled, nominally by the King, but really by the people, on the 21st of January, 1860. He now contrived, by the treaty of Zurich, to put a new reading on Villafranca. Lombardy, surrendered by Austria to France, was transferred to Sardinia; the duchies and the legations were "annexed;" and Savoy and Nice were "re-annexed to France" as the avowed price of the Emperor Napoleon's support in the formation of the Italian kingdom, or at least his armed neutrality. At the same time the success of General Garibaldi seemed to prepare the way for the application of Count Cavour's principles to the whole of Italy: Garibaldi landed in Sicily, and soon drove out the Bourbons. His expedition was fitted out in the Sardinian ports, but all knowledge of it was officially denied. When, however, it succeeded almost beyond expectation, and King Francis was obliged to leave Naples, Cavour accepted the situation, and came forward to appropriate the spoil; and Victor Emmanuel made his entry into Naples on the 7th of November, 1860. The reduction of Gaeta by the Sardinian forces, and the defeat of the Papal troops under De la Moricière, caused Victor Emmanuel to be received as King, *de facto*, at least, of all Italy, except Venice and a remnant of the Papal States. These exceptions were enough to mar the absolute completeness of the design, so far as Count Cavour himself was concerned, and he died at Turin on the 6th of June, 1861, leaving the full accomplishment of his purpose to the efforts of his successors.

He was of a full habit of body, and so neglectful of health that he made one inordinate and luxurious meal serve for the whole day, quietly assuring his physician that he "could not spare time for more." When he at last fell ill, he was treated according to the Sangrado method, still prevalent in Italy, though abandoned in most other civilised countries, and was, it is said, literally bled to death. Within the short period of five days his physicians attempted to cure him of four or more different complaints—congestion of the brain, typhus fever, intermittent pernicious fever, brain fever, dropsy, and, lastly, gout; and for all these diseases they could exhibit but one sovereign remedy, the lancet. Count Cavour suffered and died, to the intense grief and despair of Turin and of Italy; personally, he had the power of attracting love, but it is not known that any one could boast of having enjoyed his friendship. "He stood," said the 'Times' of June 10th, 1861, "alone in his greatness."

For him politics was no more than agriculture, trade, or industry. It was a sphere of activity he looked for—work for his restless spirit, for his colossal faculties, for his undaunted energies. In early youth he was an ardent student; in his prime of manhood a deep speculator; in mature age an earnest, eager statesman. By turns he stored his mind, he enriched his family, he made his country. Foresight and steadiness chained fortune to his chariot; he met with no failure. He loved politics for exertion's sake. Power had become a necessity for him; he pined and fretted at Chieri in 1859, during those few months of comparative inaction; he would have died of weariness if, upon the Roman and Venetian question being solved, prudence had suggested a retirement under the shade of his laurels.

CENNINI, CENNINO, a Florentine painter and writer on art, was born probably about 1360 at Colle di Valdelsa. He was a pupil of Agnolo Gaddi, and practised chiefly in fresco, but never attained much distinction as a painter. A series of frescoes by him, representing the history of the Cross, are still extant in the Croce di Giorno Chapel in the church of the Franciscan convent, Volterra. His title to remembrance is, however, his 'Treatise on Painting,' which is of exceeding value, as giving a clear and tolerably minute account of the processes of the best artists of the 14th century in fresco, distemper, and oil painting, the painting of miniatures in MSS., and mosaic. In this treatise Cennini mentions that he was for twelve years the pupil of Agnolo Gaddi (who died about 1387); now Agnolo was the son and pupil of Taddeo Gaddi, the godson, and for twenty-four years the pupil and assistant of Giotto: we have thus through few hands the traditions of the fathers of modern painting, and from Cennini's evident care and conscientiousness, we may be certain that we have in his work an accurate account of the materials and practice of the chief painters of the 14th century; whilst Vasari, the scholar of Michelangelo and the companion of most of the painters

of the grandest period of the art in Italy, in his life of Agnolo Gaddi has noticed Cennini's treatise, and pointed out what additional pigments were in use in his day. The treatise was published for the first time from a MS. in the Vatican, under the title, 'Trattato della Pittura, messo in luce con annotazione del Cav. G. Tambroni,' 8vo, Rome, 1821. From the statement at the end of this MS. that it was written in 1437, "*ex Stincharum*," i.e., in the prison for debtors at Florence called "Le Stinche," it was rather hastily concluded that Cennini was confined there in his old age, and beguiled the tediousness of his imprisonment by writing his treatise. But no reference is made by Vasari or any other early authority to such an event; the records of the prison have been searched, and show no entry of his name, whilst it is known that the prisoners in Le Stinche were in those days permitted to earn money by copying MSS.; and, finally, other and better MSS. in the Laurenzian and Riccardian Libraries (which contain the description of mosaic, and much besides, omitted in the Vatican MS.) have no such date or statement. It seems, indeed, probable that the work was composed not later than the end of the 14th century, and the usual statement that "Cennini was living in 1437," must be regarded as unauthorised. Another edition of the treatise, enlarged and corrected from the Florentine MSS., was published under the care of G. de C. Milanesi, 8vo, Florence, 1859. The portion referring to oil-painting was given, with a translation, in Sir C. L. Eastlake's 'Memorial for a History of Oil-Painting,' vol. i. pp 65-73; and a translation of the entire work, by Mrs. M. P. Merrifield, appeared in 1844, with the title, 'A Treatise on Painting, by Cennino Cennini in the year 1437, and first published in Italian in 1821, with an Introduction and Notes by Signor Tambroni,' &c. A French translation, by M. V. Mottez, was published in 1858.

CHABERT, JOSEPH BERNARD, MARQUIS DE, a distinguished hydrographer, was born at Toulon, 28th of February, 1724. He entered the naval service of France in 1741, and gradually rose through the various ranks to that of admiral, and was also ennobled as a peer. His services were especially in surveying coasts and ports, to assist in the production of more correct charts than those previously in existence. His first paper on this subject was read before the Academy of Sciences in 1748, and his first volume published in 1753, 'Voyage fait par ordre du Roi en 1750 et 1751, dans l'Amérique Septentrionale, pour rectifier les Cartes de l'Acadie, de l'île Royale, et de l'île de Terre Neuve, et pour en fixer les principaux points par des Observations Astronomiques.' After making similar researches in the Mediterranean, he was appointed to the Chart Department at Versailles to arrange the materials he had collected. During several voyages to the Levant between 1762 and 1776, he added greatly to his accumulated facts, and was appointed, in 1773, inspector of marine charts and plans. During the American revolution he served in the war against England; and during the French revolution he was an exile in England, sheltered and succoured by Maskelyne, the Astronomer Royal. Returning to France in 1802, he was well received by the First Consul. Although he had lost his sight in 1800 by too close application, he continued to labour steadily at hydrography till his death, which took place on the 1st of December, 1805. The Marquis de Chabert was greatly influential in completing and perfecting the naval museums at the Louvre and at Brest.

* CHAILLU, PAUL BELLONI DU, an explorer of Western Africa, was born in New York about 1820. His father carried on trading operations with the natives in the neighbourhood of the Gaboon river, and during his early years he himself had numerous opportunities of becoming acquainted with the natives and natural productions in the vicinity. In 1855 he was sent out by the Academy of Natural Sciences at Philadelphia to explore Western Africa and to obtain information as to its natural history. His journeys extended from 1856 to 1859, and resulted in numerous discoveries, of which a brief account will be found under AFRICA, GEOG. DIV., E. C. S., and a full account in his 'Explorations and Adventures in Equatorial Africa,' 1861. In 1863 he resumed his researches in the same district, mainly with the view of confirming those of his observations which had been impugned or doubted. His account of this journey is given in 'A Journey to Ashango Land, &c.,' 1867, and the numerous astronomical observations which he made so added to our accurate knowledge of the geography of districts hitherto scarcely known that a testimonial was awarded to him in 1866 by the Royal Geographical Society of London.

CHALON, ALFRED EDWARD, R.A., was born at Geneva in 1781. He was brought early to England by his father (who

obtained the post of French professor in the Military College, Sandhurst); entered the Royal Academy as a student in 1797; was elected A.R.A. in 1812; R.A. in 1816, and died October the 3rd, 1860. Mr. A. Chalon painted a few subject pieces in oil, but his specialty was the painting of female portraits in water-colours, the heads highly finished, the dresses in a light sketchy style, but with extreme attention to mode and ornament. In this style he was without a rival, at least in popularity. For a long series of years he was the painter of ladies of rank and fashion; indeed, it was almost a mark of distinction to be painted by him. He was portrait painter to the Queen, and shortly after her accession he made the full-length portrait of her so well known by the large engraving.

CHALON, JOHN JAMES, R.A., elder brother of Alfred E. Chalon, R.A., was born in 1780; and became a student of the Royal Academy in 1816. He was professedly a landscape painter, but he also painted marine subjects, figures, and animals. His representations of Swiss scenery were most admired, but he was never popular, and though he was elected A.R.A. in 1827 and R.A. in 1841, even this slow measure of academical success was probably due rather to his brother's position and his own social qualities than to his standing as a painter. He had, however, some warm admirers. Like his brother, he was one of the original members of the Sketching Club; and on his death, which occurred November 14, 1854, the friends of the brothers organised an exhibition of their works at the Society of Arts in the spring of 1855. Mr. J. J. Chalon published in 1820 a series of humorous sketches of Parisian life.

* CHAM, a celebrated French caricaturist, the pseudonym of AMÉDÉE DE NOË, son of Comte de Noë ("Cham était le second fils de Noë."—'Fr. Dict.'). He was born at Paris, January 29, 1819; passed through the usual courses at the École Polytechnique; studied painting in the atelier of Paul Delaroche, and afterwards in that of Charlet. But his passion for caricature developed rapidly; his early published efforts had an unexpected success; he became identified with the 'Charivari,' and he and the journal have together enjoyed a long course of prosperity. Many of his designs have been collected and republished in the form of albums, and had a wide circulation. Among these are the 'Impressions de Voyage de M. Boniface'; 'P. J. Proudhon en Voyage'; 'Melanges Comiques'; 'Croquis en Noir'; 'Croquis de Printemps'; 'Croquis d'Automne,' and many more. Cham's caricatures are the purest Parisian. He has something light and airy in his manner, even when at his coarsest. His satire has sufficient malice to impart sharpness and pungency, and you feel that it is done, as well as enjoyed, with a relish. The style and treatment are always artistic.

CHAMBERLAYNE, EDWARD, a political and general writer, descended from the Counts of Tanquerville, in Normandy, was born on the 13th of December, 1616, at Oddington, near Stow-on-the-Wold, in Gloucestershire. He received his early education at Gloucester, and was admitted a commoner of St. Edmund Hall, Oxford, in Michaelmas term, 1634. He took his B.A. and M.A. degrees respectively in 1638 and 1641; and for a portion of the latter year and the year following was rhetoric reader of the university. During the civil war he travelled in France, Spain, Italy, Hungary, Bohemia, Germany, the Low Countries, Denmark, and Sweden. In 1668 he became Fellow of the Royal Society, and in 1669 was appointed secretary to Charles, Earl of Carlisle, whom he accompanied on his mission to Stockholm as bearer of the Order of the Garter to the King of Sweden. In 1670, by the King's mandate, dated February 6th, he received from the University of Cambridge the degree of doctor of laws, and was, on the 22nd of June, 1672, incorporated of the same standing at his own university. About 1679 he became tutor to Henry, Duke of Grafton, one of the natural sons of King Charles II., and was afterwards chosen instructor in English to Prince George of Denmark. He spent the latter part of his life at Chelsea; and, dying there in May, 1703, was buried in a vault in the church-yard of that parish, where a monument was erected to his memory, with a Latin inscription which declares that he "was so very desirous of doing good to all, and even to posterity, that he ordered some of the books of which he was the author to be covered over with wax and buried with him, in the hope that they might be of service to future ages." His works comprise a small treatise, entitled, 'The Late Warre Parallel'd, or a Brief Relation of the five years' Civil Warres of Henry the Third, King of England, with the Event and Issue and unnatural Warre, and by what Course the Kingdom was then Settled again,' 4to, London, 1680; a reprint, with a modified title, of a work which had first ap-

peared in 1647; 'England's Wants, or Several Proposals probably beneficial for England, offered to the consideration of both Houses of Parliament,' 4to, London, 1667; with considerable additions, 4to, London, 1668; and with further additions, 4to, London, 1685 and 1689; 'The Converted Presbyterian, or the Church of England justified in some Practices,' &c., London, 1668; 'Angliæ Notitia, or the Present State of England, together with Divers Reflections upon the Ancient State thereof,' 12mo, London, 1668, 1669, &c., of which the Second Part was published in 1671. This work, which gradually received many additions and amendments, went through numerous editions, the 18th of which, 8vo, London, 1694, incorporated a Third Part, and of which all up to and including the 20th, 8vo, London, 1702, were published by Dr. Edward Chamberlayne. The 21st edition, 8vo, London, 1704, was announced as being continued by his son, John Chamberlayne, F.R.S., who in the 22nd edition, with which the statistics of Scotland were for the first time incorporated, enlarged the title to 'Magnæ Britanniæ Notitia,' &c., under which it reached its 38th edition in the year 1755. The work, of which a Latin epitome was published by Thomas Wood, with the title of 'Angliæ Notitia; sive Præsens Status Angliæ succincte Enucleatus,' 12mo, Oxford, 1686, was also circulated in the languages of France, Germany, and Spain. Dr. Chamberlayne was in addition the author of some translations, and of several productions in political and polemical literature.

CHAMBERLAYNE, JOHN, the son of Dr. Edward Chamberlayne, received his education at Trinity College, Oxford, and was of considerable reputation as a linguist, being, as was said, a master of ten languages. He translated various treatises into English from the Dutch, French, Spanish, and Italian; but is chiefly remarkable at present for his continuation of his father's 'Angliæ Notitia,' the particulars of which are given in the preceding article. He was elected a fellow of the Royal Society in 1702, and contributed to its 'Philosophical Transactions.' He died in November, 1723.

CHAMFORT, or CHAMPFORT, SEBASTIAN ROCH NICOLAS, was born near Clermont, Auvergne, in 1741. He studied for awhile at the Collège des Grassins, but was expelled for irregularities. After serving some time as a private tutor, he went to Paris, and became connected with the 'Révue Encyclopédique.' In 1764 appeared his first comedy, 'Le Jeune Indienne,' at the Comédie Française. He attracted the notice of the French Academy by his 'Épître d'un père à son fils sur la naissance de son petit fils,' 1764; 'Homme de Lettres,' 1766; 'Combien le génie des grands hommes influe sur l'esprit de leur siècle,' 1768; 'Eloge de Molière,' 1769; and 'Eloge de La Fontaine,' 1774. Two dramas by him, the 'Marchand de Smyrne,' 1770, and 'Mustapha et Zéangir,' 1776, brought him into favour at Court; and he served for some time as secretary, first to the Prince de Condé, and then to Madame Elizabeth. He entered warmly at first into the French Revolution, and was appointed jointly with Carra, keeper of the Bibliothèque Nationale. To Chamfort is attributed the cry of 'Guerre aux châteaux, paix aux Chaumières;' but he became alarmed at the violence which ensued, and greatly exasperated the Jacobins by his sarcastic and biting epigrams. He died 13th April, 1794, after having attempted to commit suicide as a means of avoiding imprisonment. His collected works were published in a more or less complete form by Guinguenê, 4 vols. 8vo, Paris, 1795; by Colnet, 5 vols. 8vo, 1808, and several times reprinted; by Collin de Plancy, 2 vols. 32mo, 1825; by Auguis, 5 vols. 8vo, 1824-5; and by A. Houssaye, large 18mo, 1867.

CHAMPLAIN, SAMUEL DE, was born at Brouage, in the second half of the 16th century. After having served Henry IV. in the wars of the League, he travelled for two or three years in the East Indies, and then joined an expedition under M. Pont Gravé, fitted out to extend the exploration of Canada, which had been commenced by Cartier. They reached the St. Lawrence in the early summer of 1603, pushed far up into the interior, and collected such information as enabled Champlain to prepare a rough map of portions of the country. During the next thirty years he made frequent voyages to Canada, at first under other commanders, but afterwards holding the chief command. He founded the city of Quebec, travelled so far west as to discover Lakes Huron and Ontario, and ascended the river Ottawa under a mistaken idea that it might possibly solve the problem of a north-west passage to China. In 1629 he was forced to surrender Quebec to the English; but it was restored two or three years afterwards. At his death, in December, 1635, he was Governor of Canada. His valuable

explorations in that country were described in 'Des Sauvages, ou Voyage de S. Champlain,' 1603; and in two later works, the volumes of which were published at various dates between 1619 and 1631.

CHAMPOLLION-FIGEAC, JEAN-JACQUES. [E. C. vol. ii. col. 159.] In 1861 appeared the first part of a splendidly illustrated work in folio, intended to embrace a description of the older imperial palaces of France, the text written by, or under the direction of, M. Champollion-Figeac, as Imperial Librarian, entitled 'Châteaux de la Renaissance. Monographie du Palais de Fontainebleau, dessinée et gravée par R. Pfnor, accompagnée d'une texte historique et descriptif par M. C.-F.,' but the full plan appears to have been abandoned or deferred, and the account of Fontainebleau was issued as a complete work, with the title 'Le Palais de Fontainebleau, ses origines, son histoire artistique et politique, son état actuel. Publié d'après les ordres de l'Empereur,' 2 vols. folio, with atlas of plates, Paris, 1866. M. Champollion-Figeac died at Fontainebleau, May 9, 1867. His son, AIMÉ CHAMPOLLION, principal of the secretariat of the departmental archives of the minister of the interior, has published some good editions of historical works, including the 'Mémoires du Cardinal de Retz,' 8vo, 1837; 'Poésies du Duc d'Orléans,' 8vo, 1842; 'Poésies du Roi François I^{er}, de Louis de Savoie et Marguerite reines de Navarre, suivies de la Correspondance intime du Roi avec Diane de Poitiers,' 4to, 1847. He has also written 'Louis et Charles d'Orléans, leur influence sur les Arts, la Littérature et l'Esprit de leur Siècle,' 2 vols. 8vo, 1844; and 'Droits et Usages concernant les travaux de construction, publics ou privés, sous la troisième race des Rois de France, palais, châteaux, cathédrales, églises, fortresses, hospices, prisons, halles, &c. . . . de l'an 987 à l'an 1830. D'après les chartes et autres documents originaux,' 8vo, Paris, 1860.

* CHANDLESS, WILLIAM, one of the explorers of the Amazon basin, was born in November, 1829. His first extensive journey was a trip across the United States to the Mormons at Utah, amongst whom he resided for a time. The results of his experience are given in a 'Visit to the Salt Lake,' published in 1857. In 1860 he made a hasty canoe voyage from the diamond district of Matto Grosso to the Amazon down the river Tapajoz; but he managed to fix the positions of several places by means of astronomical observations. In 1864 and 1865 he ascended the Purús, one of the tributaries of the Amazon, but of which very little was known in this country. Several expeditions, organised by the Brazilian Government, had attempted the ascent, but not one succeeded in travelling more than 800 miles up, and no arrangements were made for ascertaining the course either by compass or by observations for latitude and longitude. Mr. Chandless, relying solely on his own resources, traced the whole course of the river up to within a few miles of its source (or about 1640 miles), and projected a map of it executed with great minuteness of detail. For this survey the Royal Geographical Society awarded him the patron's medal in 1866. In 1865 he followed up the Aquiry, the principal tributary of the Purús, and surveyed it as carefully as he had done the main stream. These explorations added much to our knowledge of a vast tract of country hitherto unexplored by Europeans, and necessitated great alterations in the maps of this part of South America. One of the points which he settled was that the Madre de Dios, which rises in the Caravayan Andes, is not the upper portion of the Purús, as was generally supposed. The question had, however, been previously solved by Don Faustino Maldonado, who embarked on the Madre de Dios in 1861 with a crew which reached Manao on the Amazon, he himself having been drowned in passing a rapid. This journey showed that the Madre de Dios is one of the head waters of the Madera. Further details are given under AMERICA, GEOG. DIV. E. C. S. In 1867 Mr. Chandless explored and mapped the Jurua for nearly 1000 miles, and found that its course is given wrongly on most maps, the general direction of the upper portion of the stream being west, not south.

CHAPONE, HESTER, daughter of Thomas Mulso, Esq., was born at Twywell, in Northamptonshire, on the 27th of October, 1727. Her literary taste exhibited itself at an early age; and she cultivated the study of French, Italian, and, to a less degree, of Latin, with a strong tendency to ethics and philosophy. She passed much of her time in London, and about 1748 made the acquaintance of Miss Elizabeth Carter, who was a few years her senior, with whom she contracted a friendship which continued for fifty years. At the house of her friend Richardson, the novelist, she met Mr. Chapone, a solicitor, of Clement's Inn, to whom she was united in 1760, but was left a

widow in less than ten months after her marriage. Mrs. Chapone, at that time Miss Mulso, contributed four billets to the 10th number of the 'Rambler' (1750—52); and in 1753 her story of 'Fidelia,' written with the intention of exposing the sophistry of scepticism, appeared in three successive numbers (77, 78, and 79) of the 'Adventurer.' Amongst her earlier productions were an 'Ode to Peace,' and an 'Ode' prefixed to Miss Carter's translation of Epictetus. In 1766, Mrs. Chapone staid for some months at the parsonage of her second brother, at Thornhill, near Wakefield, where she contracted that affectionate partiality for his eldest daughter which resulted in the writing, and finally, in the publication of the well-known 'Letters on the Improvement of the Mind, addressed to a Young Lady,' 2 vols. 12mo, London, 1773, and many times reprinted. These were followed by 'Miscellanies, in Prose and Verse,' 12mo, London, 1775; and a 'Letter to a newly-married Lady,' 12mo, London, 1777. Mrs. Chapone varied her habitual residence in London by frequent visits to friends in the country; but after severe family bereavements, which she experienced about 1790, her mind became affected, and she was removed to Hadley, by Barnet, where she expired on Christmas Day, 1801, being then in her 75th year. Her works were posthumously published, with a memoir, &c., by her nephew, Mr. Mulso, under the title of 'The Works of Mrs. Chapone: now first collected. Containing (I.) Letters on the Improvement of the Mind; (II.) Miscellanies; (III.) Correspondence with Mr. Richardson; (IV.) Letters to Miss Carter; (V.) Fugitive Pieces. To which is prefixed an Account of her Life and Character, drawn up by her own Family,' 4 vols. 8vo, London, 1807, &c.

CHARRON, PIERRE, French ethical writer, was born at Paris in 1541. After having practised as an advocate for six years, he took a dislike to the law, entered the church, and became eminent as a missionary preacher. During his temporary sojourn in various parts of France he made the acquaintance of Montaigne at Bordeaux, and formed with him a lasting friendship. For some time he was preacher in ordinary to Queen Marguerite. In 1588 he wished to take monastic vows, and to devote his leisure to philosophical speculation; but he was refused admission by the Chartreux and the Celestins of Paris on account of age. He resumed his occupation as a preacher, and continued it till his death, which took place November 16th, 1603. Charron's essay, 'De trois Vérités,' 1594, is a confutation of Atheists, Idolaters (including Jews and Mohammedans), and Schismatics or Protestants, as three classes of offenders against the truth. Soon after his appointment as secretary to the Assembly of the Clergy, in 1595, he produced his 'Traité de la Sagesse,' 1595, a broader and deeper work, sound in morality, though dry and inelegant in style. It was too free in tone, however, for his orthodox contemporaries, and brought him into some discredit, which was not (as he had hoped) wholly removed by the publication of a third work, 'Refutation des Hérétiques,' 1600. The 'Traité de la Sagesse' has been many times reprinted; perhaps the most prized is the little Elzevir ed. 12mo, Leyden, n. d., but after 1656. There are two English versions, one by Sampson Lennard, 4to, 1658; the other by George Stanhope, D.D., 3 vols. 8vo, 1697, 2nd ed. 1707. Charron's works were published in a collected form, 'Œuvres Diverses,' 4to, Paris, 1635.

CHARTIER, ALAIN, a celebrated French poet, was born at Bayeux between the years 1380 and 1390. After studying at the University of Paris, he obtained various ecclesiastical appointments, and rose into favour at court. He was at different times secretary to Charles VI. and Charles VII. (1420), and was sent on embassies to Scotland and to Bohemia; but few dates are recorded in reference to him. The date of his death is variously stated at 1449, 1457, and 1458. Chartier wrote many essays and short poems, intensely national in spirit, and which being circulated at court and from hand to hand, rendered the author extremely popular. Few of them were, however, given to the public till after his death. The names of some of them are 'Sur la Sortie de Paris par le Dauphin;' 'Harangue aux Hussites;' 'Sur les Maux de la Guerre;' 'Le Livre des Quatre Dames;' 'Le Quadrilogue Invectif;' 'L'Espérance, ou Consolation des trois Vertues;' 'Le Curial;' 'Le Paix de Pays;' 'La Ballade de Fongières.' He was an elegant writer for the period in which he lived, and he contributed, by his 'Quadrilogue Invectif' and other occasional pieces, to maintain a patriotic spirit among his countrymen at a time when the English successes in France had produced some despondency. 'Joan of Arc' was the heroine of one of his minor pieces. The first edition of his "dictes et ballades" appears to be that of Paris, 1 vol. folio, BIOG. DIV.—SUP.

1489, but some think an edition in two thin folio volumes is the earlier: both have for title 'Les Faiz Maistre Alain Chartier.' Many subsequent editions were published; that most esteemed by collectors is by Galliot du Pre, 'Les Œuvres feu Maistre A. C.,' &c., 8vo, Paris, 1529.

CHATELAIN, GEORGES, French chronicler and essayist, was born at Alost, in Flanders, 1403. When a young man he followed the profession of arms, and afterwards travelled in various parts of France and England. In 1443 he entered the service of Charles the Good, Duke of Burgundy, to whom he acted as chronicler and secretary, and to some extent as director of Court pageants. Under the patronage of the next duke, Charles the Bold, he settled permanently at Valenciennes, and devoted most of his time to writing till his death, which took place 20th March, 1475. Chastelain's chief work is 'La Grande Chronique, ou livre de tous les hauts et grands faits de la Chrétienté, souverainement de ce noble royaume de France, et de ces dépendances, depuis l'an vingt (1420) jusques à maintenant,' (1474). It was a valuable and much prized history at the time of its production. Only the first and third portions, from 1419 to 1422, and from 1461 to 1474 appear to be now extant. They were edited by M. Buchon in the collection of 'Chroniques Nationales,' 8vo, 1827; and in the 'Pantheon Littéraire,' 1837. He wrote other but less important histories, and several essays, among which were 'Les Epitaphs de Hector et d'Achille;' 'Louanges de la très glorieuse Vierge;' 'Les douze dames de Rhétoric.'

CHATELAIN, JOHN, a clever designer and engraver, was born in England of French parents about 1710. He designed and etched landscapes with rare ability, but his habits were irregular, and his application fitful. He died about 1770. The engravings by him most prized by collectors, are three grand landscapes after N. Poussin, F. Bolognese, and P. Da Cortona, and those executed for Boydell's collection of Landscapes after the great masters, including nine after Gaspar Poussin, whose manner he rendered very happily. He also engraved eight Views in the Lake District, after Bellers; several after M. Ricci; and 'Fifty Views of Churches, Buildings, Villages, and Rural Scenes adjacent to London,' 8vo, 1750, as well as other landscapes from his own designs.

CHÂTELET, GABRIELLE ÉMILIE LE TONNELIER DE BRETEUIL, MARQUISE DU, was born at Paris, December 17, 1706. The daughter of the Baron de Breteuil, her education was carefully attended to; her early studies embraced a wide range, including Latin and the modern languages, classics, poetry, and science; and after her marriage with the Marquis du Châtelet, she combined in a singular way a taste for abstruse scientific research, with an indulgence in the frivolity and moral laxity of the French court. In 1733 she formed an acquaintance with Voltaire, arising out of her admiration for his poetry; and the relations which she maintained with him at Paris, Cirey, and Lunéville, were such as to furnish ample scope for the chroniclers of scandal. Madame Du Deffand and Madame Delaunay spoke of her in disparaging terms; but men greatly marvelled at the mingled depth and frivolity of her character. Voltaire himself said of her:—

"Son esprit est très philosophe,
Mais son cœur aime les pouspous."

She died on the 10th of August, 1749, a few days after giving birth to a daughter, under circumstances which afforded as much occasion for scandal and epigram as any previous event in her career. Her published writings are chiefly the following: (1) 'Institutions de Physique,' 8vo, Paris, 1740; (2) 'Réponse à la lettre de Mairan . . . sur la question des forces vives,' 8vo, Brussels, 1741; (3) 'Dissertation sur la Nature de feu,' 8vo, Paris, 1744; this was an essay which she had sent to the Academy of Sciences in 1738, in competition for a prize; it did not gain the prize, but was afterwards published separately. Other works from her pen were published posthumously; (4) 'Principes Mathématiques de la Philosophie Naturelle, traduit de Newton,' 8vo, Paris, 1792; (5) 'Doutes sur les religions révélées adressés à Voltaire,' 8vo, Paris, 1792; (6) 'Lettres inédites de la Marquise du Châtelet à M. le Comte d'Argental,' 8vo, Paris, 1806.

* CHATIN, ADOLPHE, a French botanist and physician, was born at Tullins, in the Isère department. His special studies were pursued at Paris, in which city he became a hospital boarding student in 1835, and shortly after carried off prizes for efficiency in several branches of natural history science. In 1837 he wrote a paper, in which he showed that the law of symmetry and equilibrium discovered by Serres and Geoffroy St. Hilaire in animals was also applicable to plants. In 1842, and several subsequent

years, he acted as substitute for Professors Guiart and Clarion, who were conducting botanical classes in the École de Pharmacie, and when their chairs were amalgamated in 1848, he was appointed their successor as professor of botany. Prior to this appointment he had delivered several courses of lectures in other branches of natural history. Thus from 1845 to 1847 he lectured on comparative anatomy, anthropology, and general zoology; and in 1848 he gave a course on physical geography, geology, and metallurgy. His contributions to literature have been numerous, his papers in scientific journals exceeding one hundred in number; but we can here allude to a few only of his lines of research. One group of his papers relates to the presence of arsenic, copper, and iodine in water, air, and organisms. His attention has been mainly given to iodine, which, he says, exists in all plants, and is to be found in greater or less quantity in the soil, rivers, and air of most localities. The proportion present varies according to circumstances, being greater when the temperature is highest, and vice versa; and more abundant in rain water than in river water, according to the amount which has been intercepted by the soil. It varies from one locality to another; and from his researches it would seem that there is some connection between the distribution of cretinism and goitre, and of iodine. The diseases prevail where the water, soil, and food are least impregnated with iodine, while they are rare or absent where this element is most abundant. His researches on plants have led to important conclusions, relating mainly to their physiology and anatomical structure, the development of their organs, and their classification. An account of his investigations was first published in papers contributed to the 'Comptes Rendus,' the 'Bulletin' of the Botanical Society of Paris, and one or two other publications; but most of the results are brought together in his most important work, entitled 'Anatomie comparée des Végétaux,' etc., which commenced issuing in parts in 1856, and is still being published. It is embellished with hundreds of well executed plates.

CHAUDON, DOM LOUIS MAYEUL, French biographer, was born at Valensoles in the Basses-Alpes, May 20, 1737. On the completion of his educational course in the colleges of Marseille and Avignon, he resolved to become an ecclesiastic, and was admitted to the order of St. Benedict at Cluny. Here his literary tastes received ample encouragement, and he had the use of a noble library. His earliest essays were poetical, but after the publication of an 'Ode sur la Calomnie,' (1756), and another addressed to the 'Échevins de Marseille' (1757), he perceived that his forte lay in history and biography. He published in 1766 a biographical dictionary in 4 vols. 8vo, with the imprint of Amsterdam, and professing to be the production of a "société de gens de lettres," but which, in fact, proceeded exclusively from the pen of Chaudon, and was published at Paris. The reason for the adoption of this pseudonymous character is said to have been the doubt felt by the author how far the impartiality with which all classes of men, even those under ban of the church, were spoken of, would be acceptable to his superiors. However that may be, the value of the book was recognised by the public, and as edition after edition was called for, the author addressed himself to the duty of rendering it more worthy of the favour with which it was received. The 'Nouveau Dictionnaire Historique,' in the form it ultimately assumed, was by far the best biographical dictionary produced in France down to the close of the last century, and it has formed the basis of most of those produced there since. The lives are brief, but the essential facts and distinctive opinions are usually noted. The remarks are judicious, spirited, occasionally witty, and almost always impartial. It has its faults of course; is necessarily imperfect; contains many errors in dates and facts, and has been in a great measure superseded by later compilations, but is still a handy book of reference. The best edition is the 8th, in 13 vols. 8vo, Lyon, An xii. (1804), in which Chaudon, who had been for some time blind, was assisted by F. A. Delandine, who wrote the lives of the revolutionists, the two names being associated on the title page. In this edition, the 13th volume consists of a series of carefully compiled chronological tables of ancient and modern history. The 9th and last edition, by Prudhomme, 20 vols. 8vo, Paris, 1810-12, is full of errors, and comparatively worthless. Dom Chaudon is also the author of a pseudonymous 'Dictionnaire Historique des Auteurs Ecclésiastiques, avec le catalogue de leurs ouvrages,' 4 vols. 12mo, Lyon, 1767; a work directed against the Encyclopédistes; 'Dictionnaire anti-philosophique,' 2 vols. 8vo, 1767-69, of which a second edition appeared in 1783, under the title of 'Anti-Dictionnaire Philosophique'; 'Chronologiste Manuel,' 12mo, 1766, &c.; 'Leçons d'Histoire et de

Chronologie,' 2 vols. 12mo, Caen, 1785; 'Nouveau Manuel Epistolaire,' Caen, 1785, 2 vols. 12mo, Paris, 1786; 'Mémoires pour servir à la Histoire de Voltaire,' 2 vols. 12mo, Amsterdam (Paris), 1785. These were his latest literary labours. Already there were symptoms of the coming revolution. The congregation of Cluny was suppressed in 1787. Chaudon took refuge in the little village of Mezin. Old age was drawing on; his sight was failing, his health was feeble, but he secured the esteem of his new neighbours, who begged permission to place his portrait in the hall of the mairie. He lived at Mezin through all the revolutionary changes, for the last ten or twelve years blind and in much suffering, till the 28th of May, 1817.

* CHAUVÉAU, ALEXANDRE PIERRE, French anatomist and physiologist, who holds the position of principal anatomical demonstrator at the Imperial Veterinary School at Lyon. In 1834 he published his thesis, entitled 'Considerations générales sur la folie partielle, ou Monomania'; in 1857 appeared his 'Traité d'Anatomie comparée des Animaux domestiques,' an octavo volume of 828 pages, comprising a concise and methodical resumé of the subject it relates to; and in 1860 a small pamphlet entitled 'Théorie des Effets physiologique de l'Electricité,' in which he condenses his views on this matter, which had been previously scattered through a series of papers published in Brown Séquard's 'Journal de la Physiologie, etc.,' and in the 'Comptes Rendus.' He has made original investigations into the formation of sugar in the animal economy, the various sounds produced by the heart, on the rate of flow of the blood in the arteries, and on the properties of the spinal chord.

* CHELMSFORD, FREDERICK THESIGER, LORD. [E. C. vol. v. col. 1018.] On the formation of the second administration of the Earl of Derby in 1858, Sir Frederick Thesiger was appointed Lord Chancellor, with, of course, a seat in the Cabinet, and raised to the peerage with the title of Baron Chelmsford. He retained the chancellorship on this occasion but a very short time, resigning with the rest of the ministry in 1859. On Lord Derby's return to office in July 1866, Lord Chelmsford was reappointed Lord Chancellor, and he continued to hold the seals till 1868, when, under the premiership of Mr. Disraeli, they were transferred to Lord Cairns.

* CHENU, JEAN CHARLES, naturalist and surgeon, was born at Metz, August 30, 1808. After passing through a course of medical study at Paris, he joined the army as military surgeon, and was stationed for some years at Carcassonne. On one occasion he was called upon to give his professional assistance to Gabriel Delessert, the préfet of the department of Aude. This led to his becoming acquainted with the Delessert family, and to his being entrusted with the care of the fine collection of plants and shells formed by Benjamin Delessert. His works may be classified in four groups, according as they relate to medical matters, general natural history, shells, and mineral springs. His experience as a medical man in the south of France, and in the Crimea, where he served as one of the principal physicians, led to his writing a 'Rapport sur le Cholera Morbus,' in 1835; a 'Rapport' to the Army Council for Health, on some of the medical aspects of the Crimean war in 1854-1856; a paper on a similar subject, entitled 'Recrutement de l'Armée et population de la France,' 1867; 'Statistique medico-chirurgicale de la campagne d'Italie en 1859, 1869, for which the Academy of Sciences awarded him the Monthyon statistical prize in 1870; and a general summary of the last mentioned works, entitled 'De la Mortalité dans l'Armée et des moyens d'économiser la vie humaine,' 1870. In these he discusses several important points, and amongst others, the immense waste of life and wealth incurred by France by the enlistment of young men, before they have acquired sufficient stamina to bear up against the wear and tear of military service. He attempts to show by statistics that the expenditure in life and money, especially during war, is chiefly due to the invaliding of young soldiers, while the loss from the ordinary contingencies of war, such as wounds, &c., forms a small proportion only of the total expense. In general natural history, he has written 'Leçons élémentaires d'Histoire Naturelle,' 1846; 'La Fauconnerie Ancienne et Moderne,' 1862, in conjunction with Des Murs; and has edited 'Les Trois Règnes de la Nature,' 1864; and an 'Encyclopédie d'Histoire Naturelle,' 1850-1860. His contributions to the literature of shells include 'Illustrations Conchyliologiques,' 1842-1850, an unfinished work, which was to have given a figure of every species; a 'Manuel de Conchyliologie et de Paléontologie Conchyliologique,' 1860-1862, which is his most popular work; and a 'Notice sur le Musée Conchyliologique de M. le Baron B. Delessert,' 1844. He has also written an 'Essai sur les eaux Minérales,'

1840; and one or two other works on mineral springs. He retired from the service in 1868, but rejoined in 1870.

CHETWOOD, WILLIAM RUFUS, a dramatic author and historian, born towards the end of the 17th century, was for some time a bookseller and publisher in Covent Garden, and for twenty years, probably from 1720 to 1740, acted as prompter at Drury Lane Theatre. At the time of his benefit at Covent Garden, January 12, 1741, he was a prisoner in the King's Bench; and about twelve months after went to Ireland, which he had first visited in 1715, having been engaged by Duval as prompter to the theatre in Orange-street (*vulgariter*, Smock Alley), Dublin. To the advice and experience of Chetwood the Irish stage owed many improvements, especially of a mechanical kind; and although no actor himself, his knowledge of the stage and of the various manners of different eminent performers, made him a valuable theatrical instructor. Barry and Mrs. Gregory are said to have received the first rudiments of acting from him; and in a note to the prologue spoken on the occasion of a benefit which he took in 1760, it was asserted that his old pupil, Barry, had, in his greatest distress—at the time of this benefit, as of the one already mentioned, Chetwood was a prisoner for debt—refused him any assistance. He died on the 3rd of March, 1766.

Chetwood wrote, *inter alia*, two farces, designed not so much for the stage as in ridicule of the South Sea Scheme, entitled respectively, 'The Stock-Jobbers; or the Humours of Exchange Alley,' and 'South Sea; or the Bitters Bit, a tragi-comi-pastoral Farce,' 8vo, London, 1720; 'The Lover's Opera,' 8vo, London, 1729, third edition, with alterations, 8vo, London, 1730, and 8vo, London, 1781; 'The Voyages, dangerous Adventures, and imminent Escapes of Captain Richard Falconer,' 12mo, London, 1724, a fictitious narrative purporting to be written by Falconer himself; 'The Generous Freemason; or the Constant Lady. With the Humours of Squire Noodle and his man Doodle, a tragi-comi-farcical ballad Opera, in three acts,' 8vo, London, 1731; 'Memoirs of the Life and Writings of B. Jonson, Poet Laureat to James the First and Charles the First, &c.,' 12mo, Dublin, 1756. Chetwood's most important work, however, and one which enjoys a certain reputation as containing "some good anecdotes and some useful information," and which he dedicated to the several managers under whom he had served, Garrick, Lacey, Rich, and Sheridan, is that entitled 'A General History of the Stage, from its origin in Greece down to the present Time. With the Memoirs of most of the principal Performers that have appeared on the English and Irish Stage for the last fifty years,' 8vo, London, 1749, and with a modification of title to adapt or to recommend it to Irish readers, 8vo, Dublin, 1749. This work was supplemented by 'The British Theatre; containing the Lives of the English Dramatic Poets, with an Account of all their Plays,' &c., 8vo, Dublin, 1750, a production not famous for its accuracy, in the preface of which Chetwood is spoken of as being at that time in prison for debt, with "the melancholy prospect of ending the residue of life within the walls of a prison."

* CHEVALIER, MICHEL, a French political economist, was born at Limoges, on the 13th of January, 1806. His father, who was a shopkeeper, procured his admission at 18 years of age to the École Polytechnique, which he left, after two years, for the École des Mines. The revolution of 1830 found him attached as engineer to the Département du Nord. He had adopted the principles of Saint-Simon, and became their advocate in the 'Globe,' a journal of which he not long after assumed the management. As the director of a paper in which articles had appeared that were condemned as outrages on public morals, M. Chevalier was sentenced, in July, 1832, to a year's imprisonment. Having upon his enlargement, which took place when a moiety of his term of confinement had expired, repudiated the doctrines of which he had formerly been the apostle, M. Chevalier was sent by M. Thiers on an extraordinary mission to the United States of America, in order to study the river, lake, and general water communications, together with the railway system of the country. His letters, recording the results of his observations, not only in these, but in industrial affairs generally, were published from time to time in the 'Journal des Débats,' in a series of letters which were afterwards collected under the title of 'Lettres sur l'Amérique du Nord,' 2 vols. 8vo, Paris, 1836; fourth edition, 1842. This work, which attracted lively attention, was translated by T. G. Bradford, from the third edition, and published under the title of 'Society, Manners, and Politics in the United States; being a Series of Letters on North America,' 8vo, Boston, U.S., 1839. In 1836 he was commissioned to England to watch the progress and effects of the commercial crisis from which this country was then suffer-

ing; but shortly after his arrival received such injuries from a carriage accident, that he was obliged to repair to the Pyrenees before his health was completely re-established. In 1838 he published a work entitled 'Des Intérêts Matériels en France; Travaux publics, Routes, Canaux, Chemins de Fer, &c.,' 8vo, Paris; seventh edition, 1843; a programme of industrial progress to be followed by his country, which was translated into German by Lindner, 8vo, Stuttgart, 1838. The reputation acquired by these works caused M. Chevalier to be named a member extraordinary of the Council of State in 1838, and of the Upper Council of Agriculture and Commerce. In 1840 he succeeded M. Rossi in the chair of political economy in the Collège de France, and next year he was appointed Ingénieur en chef des Mines. In 1836 he had been named Chevalier de la Légion d'Honneur, in which he finally attained the rank of grand officier on the 4th of January, 1861. In 1845 he was elected to the Chamber of Deputies for the department of Aveyron; and, while generally confining his speeches to his special subjects, advocated his various commercial and industrial projects in the 'Journal des Débats,' in the conduct of which he had taken part since the close of the year 1835. This advocacy was, however, displeasing to his constituents, and in the election of 1846 he found himself superseded. Before this he had analysed very completely and methodically the various industries, means of communication, and capabilities of America, in his 'Histoire et Description des Voies de Communication des États-Unis, et des Travaux d'Art qui en dépendent,' 2 vols. 4to, Paris, 1840-1, to which was afterwards added an atlas in folio, and a 'Table Analytique et Alphabétique des Matières.' The lectures delivered by M. Chevalier as a professor, which were enthusiastically received by numerous students, were issued under the title of 'Cours d'Économie Politique fait au Collège de France,' 3 vols. 8vo, Paris—the first volume being published in 1842, the second in 1844, and the third, which bears 'La Monnaie' as a sub-title, in 1850. The first volume of a second edition, improved and enlarged, was commenced in 8vo, Paris, 1855. Freed from his duties as a deputy, M. Chevalier threw himself enthusiastically into the advocacy of free trade, and endeavoured, although in vain, in co-operation with M. Frédéric Bastiat, to organise in France a league similar to the then triumphant Anti-Corn Law League of England. After the revolution of February, 1848, he boldly combated the socialistic theories of M. Louis Blanc, in articles first published severally in the 'Revue des Deux Mondes' and the 'Journal des Débats,' and afterwards issued with the titles of 'Question des Travailleurs,' &c., 16mo, Paris, 1848, and 'Lettres sur l'Organisation du Travail,' &c., 12mo, Paris, 1848. On the 7th of April the Provisional Government deprived him of his chair in the Collège de France; but he was subsequently re-appointed. In 1851 he became a member of the Institute (Académie des Sciences Morales et Politiques), and in 1852 was named "Conseiller d'État en service extraordinaire." He was one of the commissioners for organising the Exposition Universelle of 1855, and one of the foremost promoters of the Treaty of Commerce between England and France in 1860. On the 14th of March of this year he became a senator; and in 1862 was elected president of the international jury for awarding the prizes at the second great Exhibition of London. The works of M. Chevalier, besides those which have been already mentioned, comprise 'L'Isthme de Panama, &c., suivi d'un aperçu sur l'Isthme de Suez,' 8vo, Paris, 1844; 'La Liberté aux États-Unis,' 8vo, Paris, 1849; 'Examen du Système Commercial connu sous le nom de Système Protecteur,' 8vo, Paris, 1852; 'De la Baisse probable de l'Or,' &c., 8vo, Paris, 1859, of which an English translation, with notes, was published by the author's friend, Richard Cobden, 'On the probable Fall of the Value of Gold,' 8vo, Manchester, 1859; 'L'Expédition du Mexique,' 8vo, Paris, 1862, a pamphlet; 'Le Mexique ancien et moderne,' 12mo, Paris, 1863; 'L'Industrie et l'Octroi de Paris,' 8vo, 1867, a series of letters collected from the 'Journal des Débats.' Many of M. Chevalier's works have been translated into English or German, or into both languages; and he has contributed extensively to various serials and periodicals—the 'Revue des Deux Mondes' and the 'Journal des Débats,' as already mentioned; the 'Dictionnaire de l'Économie Politique,' 2 vols. 8vo, Paris, 1852-53, and the 'Journal de la Société de Statistique de Paris,' 8vo, Paris, 1860, &c.

CHEVALIER, SULPICE PAUL. (GAVARNI, E. C. vol. iii. col. 42, and E. C. S.)

CHÉZY, ANTOINE LÉONARD DE, a distinguished French Orientalist, was born at Neuilly, on the 15th of January, 1753. His father, Antoine de Chézy, an engineer of repute, who was

born at Châlons-sur-Marne in 1718, and died in 1798, and who is remembered as the joint constructor of the bridge at Neuilly, and the sole architect of those at Meaux and Tréport, designed his son for his own profession. The genius of the younger Chézy, however, determined him to literature, and especially to the study of oriental languages. He acquired with great rapidity a knowledge of Arabic and Persian, to which he added a more than ordinary acquaintance with the classical and modern European languages. He cultivated also botany and natural philosophy. The year 1798 found him in the employment of the Ministry for Foreign Affairs, and he was one of the band of scholars selected to accompany the expedition of Napoleon to Egypt. But his progress was arrested by malignant fever at Toulon, and he did not proceed farther. In 1799 he was keeper of the oriental manuscripts in the Bibliothèque Nationale, and was incited to undertake the study of Sanskrit, at that time so much a novelty in France that he had to pursue his investigations without the aid of grammar or dictionary. His enthusiasm was rewarded by the King, Louis XVIII., who in 1815 created two chairs, of Chinese and Sanskrit respectively, in the Collège de France, of which the former was filled by M. Abel Rémusat, and the latter by M. de Chézy. The two scholars were also named knights of the Legion of Honour, and elected members of the Institute. M. Chézy's domestic life was not one of contentment; but he continued to solace himself for family afflictions, as well as for disappointments of a more public nature, by continuous devotion to his studies. He died of cholera, at Paris, on the 31st of August, 1832. He is known, amongst other works, by his 'Extrait du Livre des Merveilles de la Nature, par Mohammed,' 8vo, Paris, 1805; 'Medjoun et Leila,' translated from the Persian of Djani, 2 vols. 8vo, Paris, 1807; 'Yadnadatta badha,' &c., an episode from the 'Ramayana,' a Sanskrit epic by Valmiki, 8vo, Paris, 1814, of which a new edition appeared with additions and a modified title as 'Yadnadattabada; ou, la Mort d'Yadnadatta, Épisode Extrait du Ramayana, poème épique sanscrit, donné avec le texte gravé, une analyse grammaticale très-détaillée, une traduction française, et des Notes par A. L. Chézy, et suivi par forme d'appendice d'une traduction latine littérale par J. L. Burnouf,' with fifteen engravings, 4to, Paris, 1827; 'Théorie du Sloka, ou mètre héroïque sanscrit,' 8vo, Paris, 1827; 'La Reconnaissance de Sacountala, Drame sanscrit et pracrit de Calidasa, publié pour la première fois, en original, sur un manuscrit unique de la Bibliothèque du Roi, accompagné d'une traduction française, de notes philosophiques, critiques, et littéraires, et suivi d'une appendice,' 4to, Paris, 1830. Besides the foregoing, M. de Chézy published, under the pseudonym of A. L. Apudy, a translation of the 'Anthologie érotique d'Amarou,' &c., 8vo, Paris, 1831; and at his death left several philological works in manuscript. He was likewise known as a contributor to the 'Journal Asiatique,' 8vo, Paris, 1832, &c.; the 'Annales de la Littérature et des Arts,' 8vo, Paris, 1820, &c., and others.

CHÉZY, HELMINA, or WILHELMINE CHRISTIANE VON, wife of M. A. L. de Chézy, was born at Berlin on the 26th of January, 1783, and was the grand-daughter of Anna Luise Karsch, known in German poetic literature by the name of Karschin. At the age of 16 she became the wife of Herr von Hastfer, from whom she separated in the following year. In 1802 she availed herself of the proffered protection of Madame de Genlis, at Paris, and in 1806 became the wife of M. de Chézy, whose acquaintance she had made at the house of Friedrich von Schlegel, and from whom she finally separated in 1810. She now repaired with her two sons to Germany, where she devoted herself to literary pursuits, enjoying the patronage of Prince von Dalberg, and residing in turn at Heidelberg, Berlin, Dresden, Vienna, and Munich. She died in the last-named city on the 28th of January, 1866. The poems of Madame de Chézy are regarded as favourable specimens of the romantic school; and amongst others she published a collection, entitled 'Gedichte,' 2 vols. 8vo, Aschaffenburg, 1812; Heart-Tones of a Pilgrim, 'Hertzenstone auf Pilgerwegen,' 12mo, Sulzbach, 1833, containing a revised edition of the Three White Roses, 'Die drei Weissen Rosen,' which had first appeared in the 'Urania' for 1821. Amongst her novels may be mentioned the Newly Selected Writings of the grand-daughter of Karschin, 'Neue auserlesene Schriften der Enkelin der Karschin,' 2 parts, 8vo, Heidelberg, 1817: Stories and Novels, 'Erzählungen und Novellen,' 2 parts, 8vo, Leipzig, 1822; Hour-Flowers, 'Stundenblumen,' 4 vols. 12mo, Vienna, 1824-27; and Emma's Trials, 'Emma's Prüfungen,' Heidelberg, 1827. Besides the production of some books of social and topographical interest, Madame de Chézy

is known as the writer of the libretto to Weber's opera of 'Euryanthe,' Vienna, 1824, German and English, and third edition, 1843. Two years after her death an autobiographical memoir of the remarkable circumstances of her life was edited by Bertha Bornträger, with the title of 'Unvergessene. Denkwürdigkeiten aus dem Leben von Helmina von Chézy. Von ihr selbst erzählt,' 2 parts, 8vo, Leipzig, 1858.

* CHÉZY, WILHELM VON, elder son of the above, was born on the 21st of March, 1806; and, following the movements of his mother, was educated at various cities in Germany. In 1829 he studied law at Munich, but, yielding to the greater attraction of literature, soon gave evidence of considerable power and versatility. He acted as a journalist, novelist, and dramatist, fixing himself in 1850 for the discharge of his duties in the first capacity at Vienna. The works by which he has achieved reputation as a delineator of the manners of chivalric and of modern times comprise the Wandering Scholar, 'Der fahrende Schüler,' 3 vols. Zurich, 1835; The Pious Jew, 'Der fromme Jude,' &c., 4 parts, 8vo, Stuttgart, 1844-45; the Last of the Janizaries, 'Der Letzte Janitschar,' &c., 8vo, Vienna, 1855; and Recollections of his Life, 'Erinnerungen aus meinem Leben,' 2 vols. 8vo, Schaffhausen, 1863, &c.

MAX VON CHÉZY, the younger brother of Wilhelm, was a painter, who died at Heidelberg, in the year 1846.

CHIARAMONTI, SCIPIONE (Lat. SCIPIO CLARAMONTIUS), Italian astronomer, was born at Cassena, in Romagna, June 22nd, 1565. After studying philosophy and mathematics at Perugia and Ferrara, he removed to Pisa, where during the greater part of his life he was a teacher of science. Upon the death of his wife he took ecclesiastical vows, and entered the Congregation of the Oratory. He died the 6th of October, 1652. Chiaramonti, who wrote in Latin, controverted one of the theorems laid down by Tycho, concerning comets; 'Anti-Tycho, in quo contra Tychonem Brahe, et nonnullos alios rationibus eorum ex optica et geometricis principiis solutis, demonstratur cometæ esse sublunares, non cœlestes,' 4to, Venice, 1621; Kepler and Galileo supported Tycho's views against those of Chiaramonti. Another astronomical controversy was raised by him in 'Anti-Philolæus, in quo Philolæus redivivus de terræ motu et solis ac fixarum quiete impugnatur, necnon positio eadem de re Copernici confutatur, et Galilæi defensiones rejiciuntur,' 4to, Cassena, 1643; this attempt to overturn the Copernican hypothesis was, of course, a failure. In another work he criticised Aristotle's views on certain astronomical phenomena: 'Commentaria in Aristotelem de iride, de corona, de parheliis, et virgis,' 4to, Cassena, 1654. Two other works from his pen were, 'De conjectandis cujusque moribus et latitantibus animi affectibus,' 4to, Venice, 1625; and 'Cassena historia, libri xvi., ab initio civitatis ad hæc tempora, in quâ totius interdum Italiæ status describitur,' 4to, Cassena, 1641. His 'Opuscula varia Mathematica,' appeared in a now exceedingly scarce quarto volume, Bologna, 1653.

CHLADNI, ERNEST FLORENCE FREDERICK, was born at Wittenberg, 30th of November, 1756, of a family of Hungarian origin. His father wished him to follow his own profession, that of the law, for which purpose he was trained first at home, and then at the provincial school of Grimma. Referring to this period he says:—"My education left me so little leisure, that while others regard their youth as the happiest period of their life, I cannot say as much for mine. This continual restraint, which was not at all necessary, since I was not of a disposition to abuse my liberty, produced an effect quite contrary to that intended, for it gave me an almost irresistible longing to choose my own occupations, to travel, and to contend against opposing circumstances." At length he obtained his degree of Doctor in Philosophy and Law, and returned to Wittenberg to practise his profession. But after the death of his father he gave up law in disgust, and devoted himself to the study of nature, to which he had previously applied some of his scanty leisure. He had already remarked while taking lessons in music, at the age of 19, that the theory of Sound had been more neglected than that of other branches of physics. He felt a strong desire to supply this defect, and to make discoveries of his own. He says, "In 1785 I made some imperfect experiments, and observed that a plate of glass or of metal gave different tones when it was pressed and struck in different places. The journals about this time noticed a musical instrument constructed in Italy by the Abbé Mazzocchi, consisting of bells made to vibrate by means of fiddle bows; this suggested to me the idea of making use of a fiddle bow to examine the vibrations of sonorous bodies. When I applied the bow to a disc of copper fixed in the centre, it gave different notes

which, compared among themselves, were equal to the squares of 2, 3, 4, 5, &c. But the nature of the motions to which these sounds corresponded, and the means of producing any one of them at will, were as yet unknown to me. Calling to mind Lichtenberg's electrical figures, I fancied that the different vibratory motions of a sonorous disk would present different figures if a little sand or similar matter were dusted over the surface. In adopting this device the first figure that struck my eyes on the round disk, resembled a star of ten or twelve radii, and the sharp sound produced corresponded to the square of the number of diametrical lines. One may judge my astonishment in regarding this phenomenon which no one had ever before seen. After having reflected on the nature of these motions, it was not difficult for me to vary and multiply the experiments, the results of which succeeded each other with tolerable rapidity. My first memoir, which contained researches on the vibrations of a circular plate, a square plate, a ring, a bell, &c., appeared at Leipsig in 1787."

Chladni also invented two musical instruments, the Euphonia and the Clavicylinder, which cost him more time, labour, and expense than his experiments on vibration. He says:—"After having worked in vain for a long time, one must sometimes destroy all one's work, and begin again, but the least success makes one forget all these trials of patience." The Euphonia, invented in 1789 and finished in 1790, consisted of small cylinders of glass which were rubbed longitudinally with the moistened fingers. The Clavicylinder, finished in 1800, consisted of a cylinder of glass made to revolve and produce notes by its friction on some interior mechanism, while by means of a key-board notes could be produced at will with the various shades of *crescendo* and *diminuendo*, the instrument never getting out of tune. It was favourably reported on by the Institute of France, and by the Conservatoire de Musique.

In order to make these instruments known, Chladni set out in 1802 on a journey throughout Germany, Holland, France, Italy, Russia, and Denmark. His instrument and his lectures on Acoustics were favourably received. In the same year he published a Treatise on Acoustics, a French translation of which appeared, under his own superintendence, at Paris in 1809. The following is the dedication. "Napoleon le Grand a daigné agréer la dédicace de cet ouvrage, après en avoir vu les expériences fondamentales."

The Emperor was so struck with these experiments that he proposed a prize of 3000 francs for the best essay on the question, "To give the mathematical theory of the vibrations of elastic surfaces, and to compare it with experiment." In the programme issued by the Institut de France we get some idea of the language of adulation which scientific men condescended to use at this period. "Cette nouvelle conception du génie bienfaisant qui anime et dirige les vues grandes et profondes de Sa Majesté pour le progrès, et la propagation des lumières, sera reçue avec reconnaissance par tous les peuples qui honorent et cultivent les sciences." Only one memoir was sent in as a candidate for the prize, and this was not crowned, though honourable mention was made of it.

Chladni is best known by his acoustical figures, which are made out by the symmetrical arrangement of nodal lines. In his published works he attempts to reduce the vast number of figures produced to something like method. Thus he traces the vibrations of square plates to those forms of vibration in which the nodal lines are parallel to one side of the square, and to those in which they are parallel to another side. His notation indicates the modes of vibration. Thus 5—2 is a form in which there are 5 nodal lines parallel to one side and 2 to another, or a form can be traced to a disfigurement of such a type as this. The subject has been largely enriched by contemporary and later physicists.

Chladni published his 'Neue Beiträge zur Akustik' in 1807, a 'Treatise on the Art of Constructing Musical Instruments' in 1822, while the second German edition of his 'Treatise on Sound' appeared in 1830.

Chladni also took great interest in the subject of Meteors. "It was Lichtenberg," he says, "who for the second time gave an impulse to the course of my ideas." Being at Göttingen in 1792 he asked his opinion as to the nature of igneous meteors, or *bolides*, and was so much struck with the opinion that they came from beyond our atmosphere, that he set to work to compile a list of recorded cases of the fall of meteoric iron, &c. This appeared at Leipzig in 1794. He also published in the 'Bulletin de la Société Philomatique' for April, 1809, a Catalogue

of Meteors. Another paper on Fiery Meteors was published at Vienna in 1819.

Chladni died at Breslau, April 4th, 1827. Professor Tyndall, in his published lectures on Sound, gives a portrait of Chladni, with his autograph, as a frontispiece, and quotes a letter which he received from Professor Weber, in which he says:—"I knew Chladni personally. From my youth up, he was my leader and model as a man of science, and I cannot too thankfully acknowledge the influence which his stimulating encouragement during the last years of his life, had upon my own scientific labours."

The short autobiographical sketch from which we have quoted, is prefixed by Chladni to the Paris edition of his 'Treatise on Acoustics' (1809). He says:—"People have often asked by what chance I succeeded in making discoveries. Chance has never favoured me; hard work has. Following the examples of many distinguished persons, I proceed to give some account of the history of my discoveries. These being the result of individual circumstances, I may thus be able to interest some of my readers."

CHOISY, FRANÇOIS TIMOLÉON DE, Prior of Saint Lô, Grand Doyen of the Cathedral of Bayeux, and a member of the Académie Française, was born at Paris on the 16th of August, 1644. His youth and early manhood were a series of irregularities, and for some years he dressed and lived as a woman. He was appointed "coadjuteur d'ambassade" to the Chevalier de Chaumont, who was sent by the French monarch to the King of Siam, who, it is said, wished to become a Christian. The envoys embarked at Brest on the 3rd of March, 1685; and during the voyage M. de Choisy was admitted to priest's orders by the Vicar Apostolic of the Indies, so that he performed his first mass on the open sea. The mission arrived at Brest on their return, on the 18th of June, 1686, having effected little further than to lay the basis of a superficial and untrustworthy volume which the Abbé de Choisy published the following year, with the title of 'Journal du Voyage de Siam fait en 1685 et 1686,' 4to, Paris, 1687; 12mo, Amsterdam, 1688, &c. In 1687 the Abbé was elected a member of the Académie; and some years after published his French version of the 'Imitation de Jésus-Christ,' which was reprinted in 12mo, 1735, and of which the first edition was dedicated to Madame de Maintenon, with the advice curiously applied from the 44th Psalm, "Audi, filia, et vide, et inclina aurem tuam, et concupiscet rex decorem tuum." Such was the man who, at the request of Bossuet, undertook to write an 'Histoire de l'Eglise,' 11 vols. 4to, Paris, 1706-23, in which the author discusses rather too gaily the gallantries of kings and the pleasant sins of the world. The versatile abbé died at an advanced age on the 2nd of October, 1724. He was a voluminous author, and left, *inter alia*, 'Quatre Dialogues: (1) Sur l'Immortalité de l'Âme, (2) Sur l'Existence de Dieu, (3) Sur la Providence, (4) Sur la Religion,' 12mo, 1684; reprinted in 12mo, Paris, 1768, the joint production of M. de Choisy and the Abbé de Dangeau; 'Histoire de la Vie de David,' 4to, about 1687, and 12mo, Amsterdam, 1692; 'La Vie de Salomon,' 12mo, 1687; 'Mémoires pour servir à l'Histoire de Louis XIV.,' 2 vols. 8vo, and another edition in 3 vols. 8vo, Utrecht, 1727; and Histories of several of the Kings of France, which having been already published by instalments at different times, were collected and issued with the title of 'Histoire de France sous les Règnes de Saint Louis, de Philippe de Valois, du Roi Jean, de Charles V., et de Charles VI.,' 4 vols. 12mo, Paris, 1750. Particulars of a life and character which have caused some debate have been supplied by M. P. J. T. d'Olivet, in a work entitled 'Vie de M. l'Abbé de Choisy,' 8vo, Lausanne and Geneva, 1742.

CHOPIN, FREDERIC FRANÇOIS, musical composer and pianist, was born of French parents settled near Warsaw, 8th February, 1810. He acquired his musical education chiefly through the liberality of Prince Radzivil, at Warsaw, and then studied composition under Elsner. After travelling in France, Germany, and Italy, he made his first public appearance as a pianist at Vienna in 1829. During the remaining twenty years of his life he attracted much public attention, as a brilliant pianist, a composer of numerous pieces for that instrument, and a teacher. He resided at Paris from 1831 to 1837, then went to Majorca for the benefit of his health, visited London in 1848, and died at Paris, 17th October, 1849. As a pianist, Chopin held a high rank for delicacy of touch and originality of style; though many other artists (with whom, generally, he was not a favourite) took exception to his method. As a composer he was chiefly successful in polaccas, polonaises, mazurkas, nocturnos, preludes, tarantellas, and other light pieces. As a teacher, he was in high

favour with ladies of rank at Paris, especially the Polish nobility living in exile; his refined manners and fastidious taste conducing to his welcome in such circles.

CHRESTIEN, or CHRESTIENS, DE TROYES, one of the most illustrious of the early French poets who devoted their talents to the glory of King Arthur and the history of the Holy Graal, was born at Troyes, in Champagne, during the reign of Louis VII., and probably between the years 1140 and 1150. He was thus a contemporary of Robiers and Helie Borron. He was emphatically the poet of the nobles, pure in style, delicate, for his age, in thought, fertile in imagination, and an accomplished student of men and manners. He enjoyed the patronage of Philippe d'Alsace, Comte de Flandre, to whom he dedicated most of his works, and to whose court it has been supposed he was attached. There is some reason, also, for thinking that he was in holy orders. He died near the close of the 12th century, or in one of the earliest years of the 13th.

The romances of Chrestien began to appear about the year 1170, and according to the order in which he enumerates them in his opening of the romance of 'Cligés,' or 'Cligét,' that of 'Erec et Enide,' which extends to about 6600 verses, and the characteristic circumstances of which have been lately retold in Mr. Tennyson's 'Idylls of the King,' was the first produced. Fragments of 'Erec et Enide' have appeared in various modern works; and the whole poem was published from the Cangé MS., by Immanuel Bekker, in Haupt's 'Zeitschrift für Deutsches Alterthum,' vol. x. 8vo, Leipzig, 1855. Chrestien's next romance, sometimes called 'Tristram,' but which he himself mentions as 'Le Roi Mare et Ysent la blonde,' and which is believed to have been written previous to 1173, is lost as a whole, and even such fragments as profess to belong to it cannot be identified. A third romance, that of 'Cligés,' has not been edited; but quotations from it appear in the works of Ginguéné and Dr. W. L. Holland, and various MSS. of it are preserved at Paris and elsewhere. The hero, who goes through at least an average round of knightly adventures, is the grandson of Alexander, Emperor of Constantinople, and son of Alexander, who, having been admitted by King Arthur as a Knight of the Round Table, wins the love and the hand of Sore (Sœur) d'Amors, who becomes the mother of Sir Cligés. The author professes to have adapted the story from a MS. which he discovered at Beauvais.

The adventures of a knight who by an opportune act of kindness subdued a lion to devotion and obedience, which form the subject of a fourth romance, have been more than once edited of late years. They are told by Chrestien in nearly 7000 verses, which are given complete in the third volume of Lady Charlotte Guest's 'Mabynogion,' 8vo, London, 1838, and in Dr. Holland's 'Li Romans dou Chevalier au Lyon,' 8vo, Hanover, 1862. Of a fifth romance, Launcelot du Lac is the true hero, 'Li Romans del Chevalier de la Charrette,' a poem of nearly 7000 verses, which, written for the most part by Chrestien, was continued by Godefroid de Laigny (Godefroid de Leigni), and which was published by M. Tarbé as 'Le Roman du Chevalier à la Charrette,' par Chrestien de Troyes et Godefroid de Laigny, 8vo, Reims, 1849. The History of William the Conqueror, which, differing somewhat from the foregoing works, is still not entirely without the realm of the imagination, occupies a poem of 3300 lines, 'Il Contes del Roi Guillaume d'Engleterre,' which has recently been translated into German by H. A. von Keller, and into French by Léon Paulel, and which occurs in the original in a work edited by Dr. Giles for the Caxton Society, 'Scriptores Rerum Gestarum Willelmi Conquestoris,' 8vo, London, 1845, where the version is followed of M. Francisque Michel's 'Chroniques Anglo-Normandes,' 3 vols. 8vo, Rouen, 1840. One other of the larger works of Chrestien remains to be mentioned, and it has been reserved for this place because it offers one of the earliest—perhaps the earliest—examples of the interweaving of the legends of the Holy Graal with those of the Round Table. It is called 'Le Roman de Perceval le Gallois; ou, le Conte du Grail (li Contes del Graal),' of which, in spite of the existence of many MSS., and the interest of many students of Troubadour literature, no complete modern version has been printed, although a large portion appeared in a volume by M. Ch. Potvin, entitled 'Bibliographie de Chrestien de Troyes. Comparaison des Manuscrits de Perceval le Gallois,' 8vo, Bruxelles, Leipzig, &c., 1863. Fragments and passages of it have been given in various works for purposes of illustration; and translations or imitations of the whole poem have appeared in German, French, Flemish, Spanish, and Icelandic. An old English version, 'The Romance of Sir Perceval of Gales,' scarcely one-tenth of the length of the original, is given in 'The Thornton Romances,' 8vo, London, 1844,

a volume edited by Mr. Halliwell for the Camden Society. The original poem, which is over 20,000 lines in length, was written by Chrestien de Troyes, and continued by Gautier de Denet and Manesier.

Of minor productions, the authorship of six Songs can be accurately referred to Chrestien; and he claims several imitations of Ovid, 'Les Comendemens (Remedia Amorum),' 'L'Art d'aimer,' and others, which remain to this day in manuscript. Amongst the many scholarly books of recent issue which are conversant about Chrestien de Troyes, the work of Dr. Wilhelm Ludwig Holland, for its truth and completeness, deserves especial mention, 'Chrestien de Troyes. Eine Literaturgeschichtliche Untersuchung,' 8vo, Tübingen, 1854.

CHRISTIE, SAMUEL HUNTER, was born in London 22nd March, 1784. He displayed at an early age a taste for mathematics. In 1801 he was entered at Trinity College, Cambridge, and in his third year obtained a scholarship. In 1805 he took his degree of Bachelor of Arts as second wrangler, after a severe struggle with Turton (afterwards Bishop of Ely) for the "blue riband" of the University, and being bracketed with him as Smith's prizeman. In 1806 Christie became third mathematical master at the Royal Academy, Woolwich, and devoted himself to the improvement of the mathematical studies of the College. In 1812 he established a system of competitive examinations, but was not able fully to develop his views until 1838, when he became professor of mathematics. It was not until 1854, after forty-eight years' service in the same institution, that he vacated his chair, and went to reside at Lausanne. After some time he returned to England, and took up his abode at Twickenham, where he died, 24th January, 1865, having nearly completed his 81st year.

Christie was elected a Fellow of the Royal Society in January, 1826. He has contributed a number of papers to the 'Transactions,' on magnetism and subjects related thereto. He delivered the Bakerian lecture for 1833, on the magneto-electric conduction of various metals. He served on the "Compass Committee" of the Admiralty, and drew up that part of the British Association Report for 1833 which refers to the magnetism of the earth. He also, in conjunction with Mr. Airey, reported on Humboldt's suggestion for the establishment of permanent magnetic observations. In 1837 he succeeded Mr. Children as one of the secretaries of the Royal Society, and retained that office until 1854. He also published an 'Elementary Course of Mathematics' for the use of the Royal Military Academy.

* CHRISTISON, ROBERT, a Scotch physician and toxicologist, was born in 1798, and was educated partly in London and partly in some of the continental universities, more especially that of Paris. In 1819 he took his doctor's degree at Edinburgh; in 1822 he succeeded to Dr. Alison, as professor of medical jurisprudence in the University of Edinburgh, and in 1832 he succeeded to Dr. Duncan as professor of materia medica in the same institution, which last post he still retains. He has been twice elected president of the College of Physicians in Edinburgh; is one of the vice-presidents of the Royal Society of that town, and also one of the physicians in ordinary in the Queen's household. His best known work is a 'Treatise on Poisons,' of which the first edition appeared in 1829, and the fourth in 1844. He has written a 'Dispensary or Commentary on the Pharmacopœias,' and has edited the 'Edinburgh Pharmacopœia.' He has also written numerous papers, mostly relating to poisons, amongst which may be cited, 'On the Detection of minute quantities of Arsenic in mixed fluids,' in the 'Edinburgh Medical and Surgical Journal,' xxii. p. 60 (1824); 'On the Poisonous Properties of Hemlock and its alkaloid, Conia,' in the 'Transactions of the Royal Society of Edinburgh,' xiii. p. 383 (1836); 'On the Properties of the Ordeal Bean of Old Calabar, Western Africa,' in the 'Edinburgh Monthly Journal of Medical Science,' xx. p. 193 (1855); and 'An Experimental Inquiry on Poisoning by Oxalic Acid,' written in conjunction with M. Coindet, and published in the 'Edinburgh Medical and Surgical Journal,' xix. pp. 163, 323 (1823).

CHRISTY, HENRY, was born July 26, 1810. His early life was spent in business as a member of the firm of Christy & Co., in Gracechurch-street, and as a director of the London Joint Stock Bank. He soon acquired a taste for antiquarian research, and in 1850 he gratified it by travelling in the East, and collecting objects illustrative of the manners and customs of the people he visited. In 1852 he travelled through Denmark, Sweden, and Norway, and it was during these travels that he formed the idea of investigating the similarity in the mode of thought and living and in the state of the arts amongst the modern barbaric tribes, and the earliest races of which evidence has been obtained.

With this view he collected an immense number of implements, fashioned out of flint, obsidian, and other stones, bone, horn, &c., as well as relics from the caves at Dordogne, the lake dwellings of Switzerland, and other storehouses of antiquarian objects. In 1853 he traversed Germany. In 1856 he made a long tour through North America, and accompanied Mr. Tylor to Mexico. In 1863 he visited Algeria and North Africa. Besides this, he explored many other countries, with a view to collecting evidence as to the condition and resources of primitive peoples. Soon after the caves of Dordogne began to occupy the thoughts of French geologists and palæontologists, Mr. Christy entered upon this field of research with his accustomed enthusiasm. In conjunction with M. Lartët, he systematically examined the caves along the banks of the Vézère, from which he collected an immense mass of valuable material. In 1865 his attention was attracted by the caves on the Meuse, near Dinant, in Belgium. While exploring a cave there he caught a cold, but he persisted in his travels, and journeyed on to La Pelisse, Allier, where he was attacked by inflammation of the lungs, and died on May 4. Before his death he had made considerable preparation for a large work on Aquitanian antiquities; and since his death several parts have been issued under the title of '*Reliquiæ Aquitanicæ*,' by Edouard Lartët and Henry Christy, edited by Professor T. Rupert Jones. He bequeathed his museum to the nation, and it now forms the Christy Ethnological Collection attached to the British Museum.

* CIALDINI, ENRICO, an Italian general, was born on the 10th of August, 1813, at his father's villa of Lombardina, near Castelvetro, in Modena. Some time afterwards his father, Giuseppe Cialdini, removed to Reggio, where he fulfilled the duties of *Ingegnere nell' Ufficio di acque e strade*. Here the education of the young Enrico was committed to the Jesuits, who for a time were led to hope that he might become a member of their order. The failure of their expectations is said to have changed their favour into hatred and opposition, and to have led to his expulsion from their seminary. He now repaired to the University of Parma, where he studied philosophy and medicine, and also cultivated painting with some assiduity. On the breaking out of the insurrection in February, 1831, he enrolled himself at Reggio as a volunteer in a regiment of the *Milizie Nazionali*, which marched to Bologna to place itself under the orders of General Zucchi. Upon the termination of this insurrection, and the surrender of Ancona, where he had taken refuge, Cialdini embarked for Marseille, and proceeding from that town to Paris, devoted himself in the latter place to the pursuit of scientific, and especially of medical and chemical studies. But he gave up his prospects of civil distinction for the sake of taking part in the Spanish war of Succession. He landed at Oporto, in March, 1833, and made the campaign of Portugal so successfully, that at its close he had arrived, by rapid but regular promotions, at the rank of sub-lieutenant, having whilst a sergeant so distinguished himself for his valour as to have been created a knight of the order of the Tower and Sword. On the 22nd of October, 1835, he was appointed to a lieutenancy in the *Cacciatori di Oporto*, a force composed chiefly of Portuguese soldiers and officered by Italians. Proceeding to Spain, Cialdini became aide-de-camp to Borso, who had the command in Catalonia; and at the battle of Cherta, 29th of June, 1836, won by his conduct and courage the Cross of St. Ferdinand, a distinction which was soon followed by his promotion to a company. At the conclusion of the war, which, after continuing for seven years, ended in the establishment of the throne of Queen Isabella II., Cialdini applied for admission into the regular Spanish army, in which he was appointed sub-lieutenant in 1839, and captain in the following year. The suspicion into which he fell in October, 1841, of complicity with Diego Leon, Concha, and Borso di Carminati, in their attempts to replace the regency in the hands of the Queen Mother instead of those of Espartero, entailed upon him an inactivity of two years, during which he retired to Valencia, where he married. In 1843 he accepted somewhat reluctantly the post of aide-de-camp to Narvaez; and was appointed in 1844 to a command in the then recently instituted Civil Guard, in which he became lieutenant-colonel in 1847. The movements of 1848 attracted Cialdini to Italy, where he served as a colonel in the army of General Durando. He was severely wounded at the battle of Vicenza, being at first reported dead; and it required many months to effect his restoration to health. He was then employed in the organisation of a regiment of volunteers in the Piedmontese service, consisting of about 3000 men, for the most part belonging to the Italian duchies, at whose head he fought gallantly, but unsuccessfully, against the superior

forces of the Austrians, under Radetzky, at the disastrous battle of Novara, March 23rd, 1849. When Piedmont resolved to take part in the war against Russia, a select force of 15,000 men was despatched to the Crimea under the command of General Alfonso La Marmora. This force was divided into five brigades; and the third was placed under the command of Cialdini, who played a distinguished part at the battle of the Tchernaya on the 6th of September, 1855. Returning to Italy, Cialdini was confirmed in his rank of major-general, and was appointed aide-de-camp to the King, an event of the greater interest because such an office had hitherto been the monopoly of the nobles. He was also made *Ispettore dei Bersaglieri*, a force which had owed its formation to General Alessandro La Marmora.

Placed at the head of the 4th division from the commencement of the war of 1859, Cialdini fought at Palestro, and distinguished himself generally in the campaign which was brought to an end by the treaty of Villafranca, 11th of July, 1859. In the movements of the following year, which had for their aim the "unification" of Italy, General Cialdini occupied an important position. He led his division into the Marches in September, 1860; took Pessaro, Fano, and Urbino; defeated General Lamoricière at Castelfidardo; and on the 29th of September, 14 days after crossing the Papal frontier, entered Ancona as a conqueror, from which, 19 years before, he had embarked as an exile. In 1861 he took Gaeta, after a siege of 17 days, and shortly after captured the citadel of Messina. He was now promoted to the rank of *Generale d'Armata*, equivalent to that of field marshal. In April of the same year he sat in the Italian parliament as deputy of the Electoral College of Reggio; and being offended by some imprudent words of Garibaldi, wrote to the latter such a letter as involved a rupture. But through the good offices of the Marchese Pallavicino, their common friend, the two generals were reconciled. From the 9th of July to the 1st of November, General Cialdini presided in Naples as Lieutenant-General in the southern provinces, from which office, at his own request, he was relieved by La Marmora. In the following year, when Garibaldi endeavoured to provoke in Sicily a movement for the immediate achievement of Italian independence, Cialdini was sent thither with full powers both civil and military; and after this mission was terminated by the victory of Colonel Pallavicini at Aspromonte, he returned to Turin. One of the great military commands was shortly afterwards assigned to him, with Bologna for a residence. In March, 1864, he was named a senator; and in 1866 took a prominent part in the campaign against the Austrians. General Cialdini has received the decorations of various orders, both of his own and other countries. Throughout his career he has shown himself a soldier of courage and resources, of originality of plan, of resolution, and of firm and decisive will.

CIGNA, GIOVANNI FRANCESCO, was born at Mondovì, 2nd July, 1734. He was nephew to the celebrated electrician, Beccaria, whose lectures he attended, and from whom he derived a strong taste for electrical science. He is mentioned a number of times in Priestley's *History of Electricity*: his greatest merit as an electrician consists in supplying the main defect of Dufay's theory, by showing that the two opposite electricities are produced simultaneously. In 1770 he was called to the chair of anatomy in the University of Turin. He early became secretary to a society of savans, which gave birth to the Royal Academy of Sciences at Turin. Cigna edited four volumes of its memoirs, and wrote the Latin preface. He also contributed a number of papers thereto. He died at Turin in 1790.

CIMA DA CONEGLIANO. [CONEGLIANO, G. B. DA, E. C. S.] CIVITALI, MATTEO, an eminent Italian sculptor, was born, about 1435, at Lucca, of which city he has been called the glory. Vasari says he was a scholar of Jacopo della Quercia, but this is inconsistent, not only with the date usually given of his birth, but with the known date of some of his works. The story that he followed the calling of a barber till he was over thirty years old, and then discovered his talent for sculpture almost by accident, appears to be equally mythical. Matteo was probably regarded as a disciple of Jacopo della Quercia from the evident influence of that artist on his style. Matteo's chief productions are in Lucca Cathedral. His statue of San Sebastian, one of the first nude figures of a man executed after the revival of art, is one of the most admired. Another great work is the monument of Pietro de Noceto, secretary to Nicholas V. The grand figure of Abraham, one of six large marble statues executed by him for the Cathedral of Genoa, ranks among the noblest works of the age. Matteo Civitali died in 1501. He appears to have occa-

sionally acted as architect. His chief work in this line was the Bernardini palace at Lucca.

* CLAPARÈDE, JEAN LOUIS RENÉ ANTOINE EDOUARD, the son of Jean Louis Claparède, an evangelical pastor, was born April 24, 1832. He was educated first at the classical school, and afterwards at the university of Geneva, from which latter institution he received his M.A. degree in 1852. He then went to the university at Berlin where he attended lectures by Professors Müller, Alexander Braun, Ehrenberg, Dove, H. Rose, and other eminent cultivators of natural history science. In 1857 he maintained a thesis, 'Cyclostomatis elegantis anatome,' which was published in that year, and others on various subjects in natural history. In that year also he became a member of the Physical Society of Geneva. In 1859 he visited Scotland; in 1863 he stayed some months in the Bay of Biscay; and now he is professor of comparative anatomy at the university of Geneva. His papers relate mainly to invertebrate animals; and he has given especial attention to the development and fecundation of ova. He has also written on binocular vision; and during his visits to Scotland, the Bay of Biscay, and other places he investigated the annelidan fauna, the results of which investigation have been some highly valuable contributions to our knowledge of the *Annelida*. He is, perhaps, best known for his researches on the *Infusoria*, on which he has published an excellent monograph in conjunction with C. F. J. Lachmann, entitled, 'Mémoire sur les Infusoires et les Rhizopodes,' 4to, 1861. It had previously appeared in vols. v. vi. and vii. of the 'Mémoires de l'Institut National Genevois.' Amongst his other more important papers we cite the following:—'Sur la théorie de la fécondation de l'œuf,' in the 'Supplément, à la Bibliothèque Universelle,' vol. xxix. p. 284-330 (1855); 'De la formation et de la fécondation des œufs chez les vers nematodes,' in the 'Mémoires' of the Physical and Natural History Society of Geneva, vol. xv. pp. 1—97 (1860); 'Anatomie und Entwicklungsgeschichte der *Neritina fuvialis*,' in 'Müller's Archiv für Anatomie,' for 1857, pp. 109—248; 'Études Anatomiques sur les Annelides, Turbellaires, Opalines, et Grégaires, observées dans les Hébrides,' in the 'Mémoires' of the Physical Society of Geneva, vol. xvi. pp. 15—165 (1862); 'Recherches Anatomiques sur les Oligochètes,' in the volume last mentioned, pp. 217—291; 'Glansures Zootomiques parmi les Annelides de Port Vendres,' in 'Mem. Soc. Phys. Genève,' vol. xvii. pp. 463—600 (1864); and 'Les Annelides Chétopodes du Golfe de Naples,' in 'Mem. Soc. Phys. Genève,' vols. xix. and xx., which is also reprinted as a distinct quarto volume of 500 pages.

CLARAC, CHARLES OTHON FRÉDÉRIC JEAN-BAPTISTE, COMTE DE, French archæologist, was born at Paris, of a noble Gascon family, June 16, 1777. His father having been driven from France by the revolution, young Clarac completed his education in Germany; travelled through Europe, and acquired a familiarity with modern languages, which was of great service in his future pursuits. By the wish of his father he entered the army of Prince Condé, and afterwards the service of the Emperor of Russia; but when, by the amnesty offered by the First Consul, he was enabled to return to France, he abandoned the military profession and resumed his studies. Having accepted an offer to proceed to Naples as governor of the children of Murat, Clarac found time to conduct various excavations at Pompeii, of which he published an account under the title of 'Fouilles faites à Pompei,' with 16 plates designed by the author, 8vo, Naples, 1813. The restoration opened a career to M. Clarac. He went in the suite of the Duc de Luxembourg, ambassador to Brazil, and made some journeys in South America, and sketched some of its more remarkable scenery, prior to his return by way of the Antilles to France. On his return Louis XVIII. appointed him to succeed Visconti as conservator of the Museum of Antiquities at the Louvre. From this time M. de Clarac made the study of art, and especially ancient art, his chief pursuit. His knowledge was to the last but superficial, but as the head of a great national museum he had access to sources of information beyond the reach of an ordinary student, and was brought into communication with the leading professors and collectors of the day. He was able to assist artists and writers on art, and he added something to its literature, though the text of his contributions is of less value than the accompanying engravings. The Comte de Clarac was of course a member of many learned societies. He was elected into the Institute in 1838, and in the following years nearly all the academies of Europe enrolled his name among their associates. He died suddenly on the 20th of January, 1847. M. de Clarac's chief work is the 'Musée de Sculpture antique et moderne, ou description de ce que le Louvre,

le Musée Royal des Antiques et les Tuileries renferment en statues, bustes, bas-reliefs, inscriptions; accompagnée d'une Iconographie Grecque et Romaine, et de plus de 1200 statues antiques, tirées des principaux musées et de diverses collections de l'Europe,' 6 vols. text, 8vo, and 6 vols. of plates, oblong 4to, Paris, 1826-53. The work contains 1336 plates, not always correct in drawing nor in the purest style of engraving, and is invaluable as affording a compendious view of the principal extant works in sculpture: it was completed after the death of M. de Clarac by M. Alfred Maury. The first part of the text was published separately, under the title 'Mélange d'Antiquités Grecques et Romaines,' 8vo, Paris, 1830; and again, as 'Manuel de l'Histoire d'Art, chez les Anciens,' 3 vols. 8vo, 1847-49. His other works include a monograph on the Venus of Milo, 1821, and an Alphabetical Table of the Artists of Antiquity, 1829.

CLARE, JOHN [E. C. vol. ii. col. 257]. The last days of the Northamptonshire peasant poet were rendered as comfortable as his condition allowed. He was kept as far as possible free from personal restraint, and was for a time permitted to wander about the lanes and fields in the neighbourhood of the asylum, but subsequently his walks were limited to the grounds. Occasionally during the last years of his life he resumed the use of the pen, and composed a few short poems much in his old manner, but devoid of consecutive thought, and imperfect in the versification. These intervals of comparative lucidity were, however, infrequent; there was no permanent improvement in his mental condition, and he died an inmate of the Northampton General Lunatic Asylum on the 19th of May, 1864. By the kindness of a few friends he was buried, as he had desired, in the church-yard of his native village, Helpstone. A 'Life of John Clare,' by Frederic Martin, appeared in 1865.

CLARENDON, GEORGE WILLIAM FREDERICK VILLIERS, EARL OF [E. C. vol. ii. col. 258]. Lord Clarendon resigned with the other members of Lord Palmerston's Cabinet in 1858. On the formation of Lord Palmerston's third ministry, Lord Clarendon remained out of office, but rejoined his colleagues in 1864, having accepted the post of Chancellor of the Duchy of Lancaster. On Lord Palmerston's death, October, 1865, Lord Clarendon became again Secretary of State for Foreign Affairs under Lord Russell; but the ministry lasted only till the following June. The Conservatives remained in power till December, 1868, when Mr. Gladstone was called to form an administration, in which Lord Clarendon resumed his old position of Foreign Secretary, and retained the office till his death, which occurred at his house in Grosvenor-crescent, after an illness of only four days, on the 27th of June, 1870. He was interred in a family vault of recent construction in Watford Cemetery. His title and estates devolve on his eldest surviving son, Edward, Lord Hyde, late M.P. for Brecknock, born 1846.

The services and character of Lord Clarendon are sufficiently indicated in the memoir above cited. Nearly the whole of his life from early manhood had been spent in the public service, and never probably had the public a more laborious or devoted servant. His industry was indeed untiring, and it was as active in the last months of his life, though over 70 years of age, as in the prime of his days. One of the latest matters of a prominent kind in which he was engaged as Minister of Foreign Affairs was that of the murder of English travellers by Greek brigands, and his promptness of action, energy, and keenness, won general admiration. Even on his death-bed he read despatches, and dictated answers. As Minister of Foreign Affairs, Lord Clarendon had long enjoyed the full confidence of the country, men of all parties feeling satisfied that whilst the national honour was safe in his hands he would leave nothing undone which sound judgment, tact, courtesy, forbearance, and clearness of vision could supply to preserve peace, soften dissension, and maintain good feeling. And these characteristics and this assured position were more or less generally recognised in other countries alike by rulers and people, and hence the general confidence with which he was regarded, and the regret everywhere expressed for his loss. In private life he was a universal favourite—accomplished, genial, witty, courteous after the best models of the past school, and free from even the shadow of arrogance.

* CLARK, EDWIN, civil and telegraphic engineer, was born at Great Marlow, January 7th, 1814. After completing his training as a civil engineer, he superintended, under Robert Stephenson, the preliminary experiments relating to the Britannia Tubular Bridge over the Menai Strait, and was closely associated with the construction of the bridge itself between 1846 and 1850. The history of this important undertaking is given in 'The Britannia and Conway Tubular Bridges,

with general inquiries on Beams, and on the properties of materials used in construction,' by Edwin Clark, published under the superintendence of R. Stephenson, 2 vols. 8vo. with a folio Atlas of Plates, London, 1850. Mr. Clark has designed a great number of iron bridges, including the large caisson swing bridge at Arnheim, and the trellis bridges on the Victor Emmanuel Railway in Italy. He perfected, and was part patentee of, the system of construction known as the Warren Iron Girder. He has been engineer of the Smyrna and Aidin Railway, and of many other lines at home and abroad. When the Electric Telegraph Company began to lay down their lines of wire on railways, Mr. Clark introduced the system known as "block signalling," which, when steadily adopted, tends to lessen considerably the liability to accident. In the construction of the Crystal Palace at Sydenham, Mr. Clark acted as engineer. He patented the Hydraulic Lift Graving Dock, the most efficient apparatus yet devised for raising ships out of the water for repairs, and a very striking application of hydraulic power. In 1856 he laid out a general plan of railways for Russia. Mr. Clark has written papers on the 'Hydraulic Lift,' on 'Engineering Philosophy,' on the 'Durability of Materials,' &c., read before the Institution of Civil Engineers, of which he is a member. He has been awarded a medal by the Institution for his Hydraulic Lift, and also the Telford medal; a gold medal from the jurors of the Paris International Exhibition of 1855, for his work on the Britannia Tubular Bridge; a medal from the International Exhibition of 1862, for his Hydraulic Graving Dock; a medal from the Paris Exhibition of 1867, for improvements in Hydraulic Engineering; and a gold medal from the Emperor of Russia, for his services in laying out a general system of Russian railways.

CLARK, SIR JAMES, BART. [E. C. vol. ii. col. 260]. At the date which our memoir reached, Sir James Clark had retired from general practice, though he continued as long as his health permitted to attend her Majesty and the younger members of the Royal Family in the capacity of consulting physician. During his last years he lived chiefly at Bagshot Park, which had been assigned to him by the Queen as a residence, and here he died on the 30th of June, 1870. Scarcely a year before his death he published 'A Memoir of John Conolly, M.D., D.C.L.; comprising a Sketch of the Treatment of the Insane in Europe and America,' 8vo, London, 1869. The greater part of the work is taken up with the Sketch, and it is treated in a discursive and unmethodical manner; but is interesting, not only for the large amount of information it embodies, but also as testifying to the zeal with which to the last Sir James continued to watch the progress of medical improvement.

* CLARK, LATIMER, telegraphic and civil engineer, was born at Great Marlow, in March, 1822. He commenced life as an analytical and manufacturing chemist, but turned his attention to civil engineering at the time when railway enterprise was becoming active and important, in 1846. In 1848 he (like his brother, Mr. Edwin Clark) was employed by Robert Stephenson in the engineering superintendence of the Britannia Tubular Bridge, and remained on that work until its completion in 1851. In this year he became assistant engineer, and afterwards engineer-in-chief, to the Electric Telegraph Company; his connection with that company, under the extended form of the Electric and International Telegraph Company continued until 1870, when the telegraphs were taken by the Government. In 1853 Mr. Clark invented and patented the pneumatic despatch, that is, a system of pneumatic transmission of letters, parcels, and telegrams through tubes. The tubes at first employed were about 30 inches in diameter; but in 1856 and following years he laid down a tube of four feet and a half diameter from Euston Station to the General Post Office. The system is not yet, however (1870), completely developed. Mr. Clark has superintended the erection of an extensive mileage of land telegraphs, and is the inventor of the double inverted bell insulator. Between 1858 and 1870 he assisted in laying submarine telegraphic cables for the Indian Government, the Atlantic Telegraph Company, and various other companies in the Atlantic, the Mediterranean, the Red Sea, the Persian Gulf, and the Indian Ocean. One invention by him, a method of protecting submarine cables by asphalt and silica, has come into extensive use. Mr. Clark has published 'A Description of the Britannia Tubular Bridge' (a pamphlet), 1850; an 'Experimental Investigation of the Laws which govern the Propagation of the Electric Current in long Submarine Cables,' 8vo, London, 1861; an 'Elementary Treatise on Electrical

BIOG. DIV.—SUP.

Measurement,' 1868; and 'Electrical Tables and Formulæ for the Use of Electricians and Telegraph Operators,' 1870.

CLARK, THOMAS, was born in Ayr, 31st March, 1801, and educated at the Ayr Academy. In 1816 he entered the counting-house of C. Macintosh & Co., at Glasgow; he was not an apt accountant, and his employers, seeing the true bent of his mind, recommended him to the post of chemist in Tennant's Chemical Works at St. Rollox. In 1826 he became lecturer on chemistry to the Glasgow Mechanics' Institution. Some idea may be formed of his advanced views on the atomic theory from the fact, that in the programme of his first course of lectures, he gives 16 as the atomic weight of oxygen, and 12 as that of carbon, hydrogen being 1. He also paid great attention to the theory of the constitution of salts, as consisting of a metal or hydrogen united to a radical, simple or compound. His discovery of the pyrophosphate of soda was memorable from the support it gave to the doctrine of isomerism, then in its birth throes; a support gracefully acknowledged by Sir John Herschel, in his Preliminary Discourse in Lardner's Cyclopædia (1830, p. 170), though Mitscherlich, who first announced the law, was less grateful, while he took no notice of Clark's letter to him in 1836, 'On a difficulty in Isomerism and on the received constitution of the oxygen salts.'

With a view to the teaching of chemistry in a medical school, Clark entered the University of Glasgow in 1827, as a medical student. In 1829 he became apothecary to the Glasgow Infirmary, and published in the Glasgow Medical Journal three papers on pharmacy: (1) 'On the precipitated Carbonate of Iron;' (2) 'On Singleton's Golden Ointment;' (3) 'On Medicinal Prussic Acid.' In 1831 he took his Doctor's degree. In 1832 he contributed to the Westminster Review an elaborate inquiry into the existing system of weights and measures, and collected materials for a second article 'On the lost History of English Weights and Measures,' but this was not completed. In 1833 he was appointed to the chair of chemistry in Marischal College, Aberdeen. He was a good lecturer, taking nothing upon trust, and never seeking to make his teaching popular by omitting difficulties. Instead of an exhaustive classification of the elements, he selected important and typical bodies for representing general classes and doctrines.

Clark paid much attention to hydrometry, the instrument constructed by him giving, by its own readings, the true specific gravity. He introduced improved methods of detecting arsenic; he gave the true explanation of the value of the hot-blast in the iron manufacture; but he is best known to the public for his water tests, and his process of softening hard water, patented in 1841.

In the session of 1843—44 he exerted himself greatly on the question of the abolition of the University Tests, when an illness came on which lasted some years, and suspended his work. He was afflicted with such severe headaches as to confine him to his bed for days in succession. After four years of this suffering he was induced to try a course of hydropathic treatment, which restored him to health. In 1849 he married, and although he did not resume the direct teaching of his class, he was very useful in the contest which ended in the union of the Aberdeen universities in 1860. Clark was an ardent politician of the liberal school, sagacious, accurate, and practical in all his work. He died somewhat suddenly on the 27th November, 1867, his latter years having been clouded by the death of the only child of his marriage.

CLAUDET, ANTOINE FRANÇOIS JEAN, an eminent photographer, was born at Lyons in 1797. After receiving a good education, he went into the office of his uncle, M. Roux, the banker, who, after a few years, placed him at the glass-works of Choisy-le-Roi, as director, in conjunction with M. Bontemps. He afterwards visited London in order to introduce the productions of the Choisy glasshouse. In 1833 he invented the machine now in use for cutting cylindrical glass, for which in 1853 he received the medal of the Society of Arts. When Daguerre's process was first published to the world in August, 1839, Claudet saw an opening for the exercise of his scientific tastes, and becoming possessed of a share in a patent which Daguerre had taken out in this country, Claudet commenced in 1840, the practice of portraiture in the Adelaide Gallery. He improved the process, and in June, 1841, laid before the Royal Society his paper on the increased sensitiveness of chloride of iodine over iodine itself. From this time to his death in December 1867, he was one of the most successful practitioners of photography in London, and his improvements in the art were numerous as they were valuable. He was elected a Fellow of the Royal Society in 1853,

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and a Chevalier of the Legion of Honour in 1865. A Memoir of him, published in the 'Scientific Review,' was reprinted for distribution at the meeting of the British Association at Norwich in August, 1868, and contains in an appendix, a list of forty papers communicated by him between 1841 and 1867, to the Royal and other societies.

CLENELL, LUKE, was the son of a farmer near Morpeth, Northumberland, where he was born in 1781. He was apprenticed to a tanner, but his passion for art proving incurable, he was removed, and articled to Bewick, the celebrated wood-engraver. His progress was remarkable, and when, on leaving Bewick, he established himself in London, he speedily took rank with the leading men in his profession. Among the happiest efforts of his graver are the charming vignettes, reproductions of Stothard's pen drawings, which adorn the 12mo edition of Rogers's poems, 1816. But Clennell was not content with merely reproducing other men's drawings. He designed with facility, and he was ambitious of fame as a painter. His pictures of 'The Day after the Fair,' and 'The Arrival of the Mackerel Boat,' were much admired; and in 1816 his finished 'Sketch of the Overthrow of the French Army at the Battle of Waterloo,' was awarded a prize of 150 guineas at the British Institution. This led to his receiving a commission from the Earl of Bridgewater to paint a picture of the banquet given by the City of London to the allied sovereigns, but the obstacles and vexations which he met with in executing the work preyed on a too sensitive nervous system, and his mind gave way. He was removed to a lunatic asylum; and his wife, a daughter of Charles Warren, the engraver, dying shortly after, a committee was formed for the purpose of having the Waterloo sketch engraved for the benefit of the bereaved children. The print under the title of 'The Decisive Charge of the Life Guards at the Battle of Waterloo' was very popular, and fully served its purpose. Clennell, who never recovered his reason, was maintained by the aid of that excellent society, the Artist's Annuity Fund, till his death, which occurred at Newcastle-on-Tyne, February 9, 1840.

CLERY, or O'CLERY, MICHAEL, an Irish antiquary, and the principal author of the 'Annals of the Four Masters,' was a native of Donegal, and born about the year 1580. His family were hereditary historians to the O'Donnells, princes of Tyrconnel, now the county of Donegal, and from them held extensive grants of land, on which they resided at their castle of Kilbarron, the ruins of which still remain in the neighbourhood of Ballyshannon. Early in life Michael, who up to this time had been known by his secular name of Tadhg-ant-sleibhe, or Tiede of the Mountain, became a member of the order of St. Francis, and retired to the Irish Franciscan Monastery at Louvain, where his countryman, Hugh Ward, at that time a lecturer at Louvain and guardian of its monastery, encouraged him to rescue from oblivion the annals and antiquities of Ireland. Eagerly embracing the proposal, O'Clery returned to his native country, and for 15 years occupied himself in going from place to place, and from library to library, in order to collect together all the ancient records, civil and ecclesiastical, that could be obtained. He afterwards spent many years in arranging his mass of materials for publication. In the compilation of the 'Annals of the Four Masters' Michael O'Clery bore a chief part, but he was assisted, besides others in a less degree, by Cucogry, or Peregrine O'Clery, and Conary O'Clery, together with Peregrine O'Duigenan; and it was from this combination of labour that the work received its name, while, from the fact of its having been composed in the Franciscan Convent of Donegal, it is sometimes called the 'Annals of Donegal.' Amongst the collections enumerated as used in the compilation of the 'Annals' are the Annals of Clonmacnois; the Annals of Innisfallen; the Book of the Three Bruadins; the Annals of Ulster; the Book of the O'Duigenans of Kilronan, in Roscommon; the Book of the Island of All Saints, in Loughrea, and others. Michael O'Clery died at the Monastery of Donegal, in the year 1643. The 'Annals of the Four Masters,' which O'Clery declared to have been undertaken on the 22nd of January, 1632, in the convent of Donegal, and finished there on the 10th of August, 1636, commence at the earliest period of Irish history, and are carried down to 1616. Part of these, in the original Irish, accompanied by a Latin translation, were published in 1824 by Dr. Charles O'Connor in his great work, 'Rerum Hibernicarum Scriptores Veteres,' bringing down the Annals to the time of the English invasion in 1172. More than 20 years later appeared the 'Annals of Ireland, translated from the original Irish of the Four Masters,' 4to, Dublin, 1846, by Owen Connellan, and annotated by the translator and Dr. Philip MacDermott, which

comprised the 'Annals' from 1171 to their termination in 1616, and contained an ample account of the English invasion. The most elaborate and complete edition of the work, however, is that by Dr. John O'Donovan, who gives the Irish text, and an English translation, with copious notes, from MSS. in the library of the Royal Irish Academy, and of Trinity College, Dublin, 'Annals,' &c., 7 vols. 4to, Dublin, 1851. Dr. O'Donovan, who was a barrister, and professor of Celtic literature in the Queen's College, Belfast, also translated from the original Irish another work of Michael O'Clery's, 'The Martyrology of Donegal: a Calendar of the Saints of Ireland,' 8vo, Dublin, 1864, which was published by the Irish Archaeological and Celtic Society, under the editorial care of James Henthorn Todd, D.D., and William Reeves, D.D.

CLIVE, CATHARINE, an actress who has left an unrivalled reputation for the variety and excellence of her comic powers, was born in the year 1711. Her father was William Raftor, who, from having been a man of considerable landed property in Kilkenny, was ruined by the forfeiture of his estate on account of his adherence to the cause of James II., whom, after the battle of the Boyne, he followed to France. Here he obtained a commission, and afterwards a company, in the service of Louis XVI.; but at length returned to England, where he received a pardon, and married the daughter of a substantial citizen on Fish Street Hill, London. It was whilst residing here that Catharine, of whose early years no details are known, gave the first indications of her genius for the stage, to indulge which she obtained, in 1728, an introduction to Colley Cibber, then one of the managers of Drury Lane Theatre, who engaged her at a small salary to take the part of Ismenes, the page of Ziphores, in Nathaniel Lee's play of 'Mithridates, King of Pontus.' Her duty as a debutante was to appear in boy's clothes and to sing a song, but this she performed so as to please the public, who upon the occasion shortly after of the introduction of Cibber's 'Love is a Riddle,' a pastoral in imitation of the 'Beggars' Opera,' would, owing to party feeling, vouchsafe a hearing to none of the actors except Catharine Raftor, who played the part of Phillida. But her first emphatic triumph dated from the introduction of a ballad farce written chiefly by Coffey, to which, however, several authors had contributed, and which was originally entitled 'The Devil to Pay,' and afterwards, when condensed or curtailed into one act, 'The Wives Metamorphosed.' Miss Raftor's impersonation of Nell in this little operatic piece fixed at once its popularity and her own position as the greatest performer of her time in that species of character. In 1732 she became the wife of George Clive, brother of Mr. Baron Clive, from whom, for some unascertained reason, but without scandal or reproach, she soon and finally separated. For nearly forty years after this event Mrs. Clive—or Kitty Clive, as she was affectionately designated—continued the delight of the stage. She was not beautiful; her features were plain, but flexible, and her figure good. Her eyes were shrewd and mirthful, and her forehead fine and intellectual. Her talents were varied, and her walk in comedy extensive. In the "sprightliness of her humour," Dr. Johnson pronounced her unrivalled. "What Clive did best," he said, "she did better than Garrick; but could not do half so many things well. She was a better romp than any I ever saw." As the chambermaid, she was perfect; but she could soar to the high-bred Lady Fanciful or descend to the vulgar Mrs. Heidelberg. She could personate the country girl, the virago, the superannuated beauty, the dowdy old maid. With the charms of her voice she carried away all her hearers; and nature, in giving her that, had done much in her behalf. But it was the native joyousness of her character, her good humour, her freedom from all art, that constituted, on the stage as in private life, her attraction. No one could be grave when Catharine Clive was gay; and it was gaiety without malice or impropriety. On the 24th of April, 1769, while still in the height of her power and popularity, Mrs. Clive took her leave of the stage; on which occasion the epilogue she spoke was written for her by her neighbour, Horace Walpole, who bestowed upon the home at Twickenham, at which she already resided, and to which she now retired, the name of Cliveden. Here she passed the rest of her life in modest ease and independence, respected by the world, and beloved by her friends, amongst the dearest of whom she reckoned David Garrick, who addressed her as the "Pivy," and with whom she had a retrospect of long professional and social connection. The close of her life, except for the glimpses we gain of it in the 'Letters' of Horace Walpole, is almost as unknown in its details as her earliest years. She died, after a short illness, on the 6th of December, 1785.

Mrs. Clive is not widely known as a dramatic author; but at different benefits of hers she introduced five several slight pieces on the stage, which are not devoid of merit. They are (1) 'The Rehearsal: or Bays in Petticoats. A Comedy in Two Acts. The music composed by Dr. Boyce,' 8vo, London, 1753; (2) 'Every Woman in her Humour,' 1760; (3) 'Sketch of a Fine Lady's Return from a Rout,' 1763; (4) 'The Faithful Irishwoman,' 1765; and (5) 'The Island of Slaves,' 1761. Of these only the first was published, whilst the last is rather a translation made for her than by her of Marivaux' 'Isle des Esclaves.'

CLOSTERMANN, JOHANN, German portrait painter, was born at Osnaburg in 1656, and learnt the rudiments of art from his father, a painter in that city. In 1679 he went to Paris, where he worked with De Troye. Two years later he came to London, and was engaged by Riley as drapery-painter, but later he assisted him in the heads, and at Riley's death Clostermann completed several of his unfinished pictures. He now attracted the notice of the Duke of Somerset, who was for a while a warm patron, but offended by Clostermann's conduct in the purchase of a picture by Guercino, he broke off the connection, and transferred his patronage to Dahl. Clostermann painted the great Duke and Duchess of Marlborough, Queen Anne, Dryden, Purcell, Blackmore, and other distinguished persons; but as works of art the best of his portraits are dull, heavy, and commonplace. His last years were spent in comparative indigence. He died in Covent Garden probably in 1713.

CLOUET, or CLOËT, FRANÇOIS, called JEHNNET or JANET, an eminent French portrait painter, was born, probably at Tours, about 1510. Of a family of painters, he learned his art from his father, whom he succeeded in 1541 in the double office of painter and valet de chambre to the king, Charles IX. He painted many of the distinguished personages of his time, and his works are highly esteemed for their truth, character, and beauty of execution. The Louvre possesses fine portraits of Charles IX. and his wife, Elizabeth of Austria, by François Clouet, and several that are with less certainty attributed to him. Our National Gallery has 'A Man's Portrait in the costume of the 16th century,' of small size (No. 662). F. Clouet died between 1571 and 1574; probably in 1572.

CLOUGH, ARTHUR HUGH, was the son of a cotton merchant at Liverpool, where he was born January 1st, 1819. When Arthur was about four years old his father migrated to Charleston, U.S. There he remained with his family till 1828, when they returned to England. Arthur was now sent to school at Chester, but in 1829 removed to Rugby. Here, under Dr. Arnold, he made great progress; became head of the school, and in November, 1836, won the Balliol scholarship, and went up to Oxford, his schoolfellows and masters anticipating for him a brilliant career there. But his mind had been overstimulated at Rugby. He had accepted too seriously the responsibility of his position as head scholar, he had laboured hard to establish the 'Rugby Magazine,' and still harder to maintain its reputation. He went to Oxford too at a trying time, when the whole atmosphere was redolent of Tractarianism. Without neglecting his academical studies, Clough entered eagerly into the prevalent theological disputes. For awhile he was carried away by the new opinions, but though he recoiled, as was inevitable with a mind constituted like his, when he at length saw their necessary consequence, it was only, in the words of his biographer, to find "when the torrent had subsided, that not only had it swept away the new views which had been presented to him by the leaders of the Romanizing party, but also that it had shaken the whole foundations of his early faith." He did not become an unbeliever, but his opinions were unsettled, and he was never again able to rid himself of scepticism. Still the reputation he had brought from Rugby, and his work at Balliol, kept expectation alive, and it was a great disappointment to his friends, and among others to Dr. Arnold, when at the university examination he only obtained a second class, instead of the double first, on which his friends had confidently reckoned. In the following autumn (1841) he tried for a fellowship at Balliol without success; but in the spring of 1842 he was elected fellow, and in 1843 tutor, of Oriel. He now settled down to hard work as a college tutor, usually spending the long vacation among the Welsh mountains, the Cumberland lakes, or the Scotch Highlands, with a reading party, such as is commemorated in 'The Bothie of Tober-na-Vuolich,' reading the Greek poets, doing Latin prose, and finding matter for many of the verses printed in his works.

But the feeling of religious doubt was not to be got rid of or permanently laid aside; he could not use language

and hold convictions entirely at variance, and thus he found his position at Oxford becoming every day more intolerable. In the early part of 1848 he resigned his tutorship, and in the following October gave up his fellowship also. He had formed a close intimacy with Emerson, who was at this time in England, and with him he went over to Paris, where he "spent a month in seeing the sights of the Revolution." Now, too, he wrote his principal poem, 'The Bothie of Tober-na-Vuolich.' An offer was about this time made to him to become principal of University Hall, London, and after a visit to Rome (where he witnessed the siege of the city by the French), he entered upon his duties in October, 1849. He retained the headship of University Hall about two years. He then resolved to try America, and about the end of 1852 settled at Cambridge, Massachusetts. Here he took private pupils, wrote some articles for periodicals, and began the revision of 'North's Translation of Plutarch's Lives.' But though he met with excellent friends, it was evident that there was no suitable opening for him there, and he returned to England (July, 1853) on receiving the offer of an examinership in the Education Office. Henceforth his time was pretty much occupied by the duties of his office, and the completion of his Plutarch. He had married, and household affections and cares turned aside the current of his thoughts from overmuch introspection. The writing of an occasional poem served as a vent for deeper thoughts, susceptibilities, and perplexities. He was busy and content, but in the midst of his happiness he was seized with illness. Six months leave of absence being granted him, he went in the autumn of 1860 to Malvern; to Freshwater, in the Isle of Wight; and then, as the winter came on, to Greece and Constantinople. After returning home for a few weeks in June, he again set out for Auvergne and the Pyrenees, and went on by way of Switzerland to Florence, whence he was to have gone to Rome; but at Florence he had an attack of fever, and his already enfeebled frame succumbed. He died on the 13th of November, 1861, and was buried in the little Protestant cemetery, just outside the walls of Florence. During this journey he wrote his 'Mare Magno'; as his 'Dipsychus' was written during a hasty visit to Vienna in 1850, and the 'Amours de Voyage' whilst at Rome in 1849.

Clough was greatly beloved, and the personal regard felt for the man has perhaps influenced the criticisms on his poems. He wrote gracefully, sweetly, often with deep feeling and earnestness. But he is deficient in vigour and concentration. He seldom fairly grasps his subject, and where he deals, as he is fond of doing, with the graver problems of life, he plunges into unfathomable depths, or loses himself in a vague and dreamy scepticism. To some extent the vagueness of thought was wearing off with advancing years, and as he came to have a settled purpose; but with the mellowness came some loss of freshness. There were more clear, bright, distinct pictures, but they did not reveal a new nature.

(*Poems and Prose Remains of Arthur Hugh Clough, with a selection from his Letters, and a Memoir, edited by his Wife, 2 vols. 8vo, London, 1869.*)

CLYDE, COLIN CAMPBELL, BARON [E. C. vol. ii. col. 55]. Sir Colin Campbell was decidedly the popular hero of the latter stages of the Crimean war. On his return to England he was made a G.C.B.; and his countrymen presented him with a sword of honour at Glasgow. When the news of the serious nature of the Indian revolt reached England in June, 1857, the general voice pointed to Sir Colin Campbell as the officer most fitted to meet the emergency; and on reception of the intelligence (July 11) of the death of General Anson, commander-in-chief in India, a Cabinet Council was at once called, and Sir Colin Campbell was sent for and offered the command on condition that he could depart immediately. Sir Colin was ready, and actually started for India the next day. He reached Calcutta, August the 14th. The vast labour of organising a sufficient force to take the field with effect occupied his best energies till the 27th of October, when he left Calcutta chief of a small but well-appointed army, impatient to relieve their countrymen still pent up in Lucknow, and to punish the treacherous Sepoys. The events which followed till Sir Colin was able to announce the complete accomplishment of the duty confided to him are narrated at length in the GEOGRAPHICAL SUPPLEMENT of the E. C. cols. 703—706. Here, therefore, it will suffice to say that he reached Cawnpore on the 3rd of November; attacked and took the Secundar Bagh after a desperate conflict, on the 16th, and the next day, after more hard fighting, relieved Generals Outram and Havelock, who with their troops and the sick and wounded of the old

garrison were shut up in the Residency. Having accomplished this, Sir Colin decided on sending the women and children, the sick and the wounded, to Cawnpore. It was a difficult thing to effect, they being in all 2000 in number, in the face of an enemy far more numerous than his own little army; but he carried it out with entire success, while he left a sufficient garrison under General Outram to maintain the Alum Bagh. After defeating the Gwalior Contingent, Sir Colin spent the winter in collecting men and stores, and making preparations for the final attack. His army when on the march in the spring of 1858 consisted of about 18,000 of all arms, but owing to Indian habits it was necessary to have in attendance no fewer than 60,000 non-combatants, and with 6000 camels and twice as many oxen, it formed a very unwieldy mass. However, by the beginning of March, Lucknow was reached, with hardly a misadventure; on the 8th Sir Colin commenced the attack, and, proceeding with deliberate unshaking resolution, by the 19th of March the entire city was in his possession. The rebellion was now effectually crushed. Detached and dispirited bands had still to be scattered, a few strongholds to be taken, partial risings to be suppressed, but the war was at an end. Sir Colin remained in India to complete the work he had undertaken, to assist in the reorganisation of the Indian army, and to suggest plans for future military arrangements. But he had accomplished the task entrusted to him, and was now to receive his reward. Thanks were voted to him by both Houses of Parliament. In August, 1858, he was created Baron Clyde of Clydesdale. He returned to England in July, 1860, and was received with every demonstration of respect and admiration. In November, 1862, he was made field marshal. His arduous labours had, however, undermined his constitution, and he died at Chatham on the 14th of August, 1863. It was felt that England had never lost a truer hero or a nobler soldier, or a commander more faithful to his duty, less heedful of himself, more careful of his soldiers. A statue by Marochetti was in 1867 erected to his memory near the York monument, and not far from the Crimean Memorial. Waterloo Place, Pall Mall: the statue chiefly modelled from Sir F. Grant's portrait is a good and characteristic likeness of him in his ordinary Indian campaigning costume. A fine statue, by Foley, was erected in Glasgow, in 1868, close by Flaxman's statue of Sir John Moore.

* COBBOLD, THOMAS SPENCER, zoologist, was educated at Edinburgh, and is lecturer on botany, zoology, and comparative anatomy at the Medical College, Middlesex Hospital. He has written on various branches of natural history, but his specialty is the subject of *Entozoa*. Most of his papers in scientific and medical journals relate to these internal parasites, as also his principal separate work, '*Entozoa*,' published in 1864, to which a supplement was added in 1869. The complete work is a valuable book of reference on our present knowledge of these creatures. He also drew up the bibliographical account of the *Entozoa*, or *Scolecida*, for vol. i. of the '*Record of Zoological Literature*.' He has edited new editions of the '*Museum of Natural History*' and of '*Maunders' Treasury of Natural History*.' He has written several papers on the anatomy of the giraffe, and is the author of the article '*Ruminantia*' in Todd and Bowman's '*Cyclopædia of Anatomy and Physiology*.' He is an M.D. and a Fellow of the Royal and other learned societies.

COBDEN, RICHARD [E. C. vol. ii. col. 298]. Mr. Cobden's persistent opposition to the Crimean war, and to the foreign policy of Lord Palmerston in general, cost him his seat for the West Riding of Yorkshire at the general election of 1857, and he contested in vain the boroughs of Salford and Huddersfield. Thus shut out from the House of Commons, Mr. Cobden withdrew to his seat at Dunsford, in the hope by country air and rest to restore his enfeebled health. By way of diversion he translated his friend Michel Chevalier's essay, '*De la Basse probable de l'Or*,' which he published, with an original preface and notes, under the title '*On the probable Fall of the Value of Gold*,' 8vo, 1859. About this time he made a visit to America, and during his absence there was elected member for Rochdale at the general election, May, 1859. On his return to England he re-entered eagerly upon his old course of politics, but his attention was soon diverted for a time to a narrower field, he having been selected by Lord Palmerston to negotiate a treaty of commerce with the Emperor of the French. This delicate and difficult undertaking he carried through to the satisfaction of the government, and the treaty was signed in February, 1860. A good deal of feeling was aroused when its terms were published, but after some discussion the treaty was approved as a whole by both

Houses of Parliament, and met with very general favour in the centres of commerce and manufacturing industry. In recognition of his services, Mr. Cobden received the freedom of the City of London at a splendid entertainment given at the Mansion House in celebration of the French Treaty. The treaty was not altogether in accordance with the principles of political science of which Cobden declared himself the disciple and advocate, but he rejoiced over it, and was proud of the share he had in effecting it, because he believed that not only would it tend to increase the national prosperity, but also that in proportion as nations were banded together by commercial and trading interests would peace be rendered more secure, and that as these bonds multiplied it would become more and more difficult for rulers to fling nations into war at their will—a delusion, perhaps, and it may be not altogether a safe one for a nation to adopt, but still possessing a basis of truth.

In the House of Commons Mr. Cobden spoke on various occasions on maritime law and the rights and duties of neutrals and belligerents, on the affairs of Denmark and Prussia, electoral reform, administrative economy, the supply of cotton, navy estimates, and other important questions of public and international policy; but the great struggle between the Northern and Southern States of America broke out, and soon had for him an overwhelming and absorbing interest. From the first he was the avowed and thorough partisan of the North, and for the rest of his days it was his chief thought how he could arouse or deepen the sympathy of his countrymen for her, he from first to last refusing to see in the conduct of the South anything but a wilful and unprovoked rebellion which must be crushed at any cost. The last speech he made in public, delivered at Rochdale, November 23, 1864, was one avowedly on Our Foreign Policy, but was throughout a fervid eulogium on American institutions and the people of the Northern States. He did not live to see the triumph of the cause he had so much at heart. After a short illness, he died at his London residence on the 2nd of April, 1865. The House of Commons was not unmindful of the loss of one of its most distinguished members. On the morrow of his death, before proceeding to the regular business of the day, speeches marked by clear appreciation of his merits as a politician and his worth as a man were delivered by the Prime Minister, Lord Palmerston; by Mr. Disraeli, as leader of the opposition; and by Mr. Bright. Memorials to his memory have been erected in Manchester, Peel's Park, Salford, and several other places, and a marble bust by Woolner has been placed in the north transept of Westminster Abbey. A memorial of a different but not less interesting kind is the work edited by Professor J. E. Thorold Rogers and Mr. John Bright, entitled '*Speeches on Questions of Public Policy*,' by Richard Cobden, 2 vols. 8vo, 1870. The Cobden Club, an association of his political friends and followers, has been formed on the suggestion of Mr. Bright to commemorate his name and carry out his principles, those especially of freedom of trade and the preservation of peace.

COCKERELL, CHARLES ROBERT, R.A. [E. C. vol. ii. col. 301]. Mr. Cockerell resigned the professorship of architecture in the Royal Academy in 1856, and withdrew about this time from active professional practice. His merits as an architect received the highest testimony of professional approbation by his election in 1860 as President of the Institute of British Architects. In 1862 he resigned his position as R.A., and became one of the first of the "honorary retired academicians." He died on the 17th of September, 1863, in his 76th year.

COCKERILL, JOHN, founder of the great machine-works at Seraing, was born at Haslingden, Lancashire, August 3rd, 1790. His father, a machine-maker, went to Belgium in 1797; and three sons, William, James, and John, followed him in later years. James and John set up in business at Liège in 1807; and the latter commenced business alone at Seraing, near Liège, in 1816. Purchasing the summer palace of the Prince Bishop of Liège, he made it the nucleus of an engineering establishment which grew to be one of the largest in the world. John Cockerill owned coal-mines and iron-mines, made iron and steel, and converted those metals into all kinds of engines and machines. The revolution in the Netherlands in 1830, which led to the separation of Belgium from Holland, compelled the king to get rid of a share in the property at Seraing, which he had held; Cockerill bought it, and became sole owner. He travelled into various countries, established commercial and manufacturing arrangements with them, and brought home experienced men whom he placed in responsible positions as heads of departments. His prosperity was suddenly checked by the failure of the Bank of Belgium in 1838; this led to his own failure, for nearly a

million sterling, in 1839. After this he set out for Russia to establish iron-works there, but died on his way in 1840. The wonderful organising power of John Cockerill, however, was not lost to Seraing; the great establishment was purchased by a joint-stock company, and, being conducted on the principles introduced by him, became more complete than ever. The works at Seraing now cover 181 acres, of which 22 acres are occupied by buildings. Coal and ironstone are raised, iron and Bessemer steel made, stationary and marine steam-engines, locomotives, iron steam-boats, iron bridges, armour-plates, railway wheels and axles, are manufactured. When a party of English iron-masters and machine-makers visited Seraing in 1870, they found that there were 7000 persons employed, representing with their families 23,000 souls; that 156 steam-engines supplied 2840 horse power; that the establishment produced in one year 50 locomotives, 70 steam-engines, 1500 machines for various purposes, 2680 tons of iron bridge work, and 5000 tons of iron steam-boats. The company trade under the name of John Cockerill & Co.

CŒUR, JACQUES, a French merchant and financier, was born just before the close of the 14th century, at Bourges, where, after receiving but slight education, he was early introduced by his father to the practice of commerce, for which he developed such a genius that he became the greatest merchant and the richest subject of his time. About the year 1429 he entered into partnership with the brothers Pierre and Barthomé Godart, for carrying on a trade in every kind of merchandise. This association continued until the death of the brothers Godart in 1439, and its object was to divert from the Venetians and the Genoese the trade of the Levant. The better to secure this end, Cœur paid a visit to Egypt and Syria in the course of the year 1432, and upon his return to France founded factories at Montpellier, which enjoyed special privileges in the way of trading with the infidels. His enterprise was so instantaneously and so magnificently successful that he seemed to some of his contemporaries to have discovered the philosopher's stone, a supposition which he appears not entirely to have disfavoured. He had 300 factors in his employ in the different ports of Italy and the Levant, and in the principal inland cities. His prosperity attracted royal countenance and regard; and in 1435 Cœur was made master of the mint at Bourges, the coinage of which he had formerly debased, when from 1427 to 1429 he farmed it from Ravau le Danois. He was next appointed argentier, or treasurer of the household, to King Charles VII., in which capacity he created those resources which made it possible for his master to throw off the yoke of England. In April, 1440, he received a patent of nobility for himself, his wife, and their descendants; in 1444 he was commissioned, along with the Archbishop of Toulouse, to organise the new parliament of Languedoc; and in September of the same year was one of the royal commissioners for presiding over the States General of that province. In 1446 and 1447 he was sent successively upon important missions to Geneva and to Rome; and in both acquitted himself with great ability. He lent 200,000 gold crowns to the king, and by so doing ensured the recovery of Normandy from the English; and when Charles VII. entered Rouen on the 20th of November, 1449, Jacques Cœur, the noble and merchant, had a place of honour in the procession. His prosperity and enterprise were now at their height. He was the proprietor of a paper manufactory, of silver, lead, and copper mines in Lyonnais and Bourbonnais, of more than thirty châtellenies and seigneuries, and of splendid houses at Paris, Tours, Lyon, Beaune, Béziers, St. Pourçain, &c. But his good fortune was his ruin. He became the object of odium at once to the nobles and the traders, the former of whom resented his intrusion into their order and his absorption of the estates of so many of its improvident members, whilst the latter repined at the unprecedented exaltation of one of their own class. Upon the death of Agnes Sorel, the beautiful mistress of Charles VII., which happened in 1450, the envy against Cœur took the form of an accusation that he had poisoned her, and he was arrested on the 31st of July, 1451. The charge fell to the ground by its own weight; but being at length brought to trial on some minor indictments, he was iniquitously condemned at Poitiers to be imprisoned, to make the *amende honorable*, to pay a fine of 400,000 crowns, and to have the rest of his estate confiscated to the king. He made the *amende*, kneeling on a scaffold at Poitiers on the 5th of June, 1453; and in January, 1455, was taken to the convent of the Cordeliers of Beaune, from which he effected his escape, and fled to Rome, where he was honourably entertained by Pope Nicolas V. He passed most of the year 1455 at Rome; and in 1456 was commissioned by Calixtus III.,

the successor of Nicolas, to command a fleet—with the title of Captain-General of the Church against the Infidels—equipped for the defence of the Greek islands against the Turks. On his arrival at the Isle of Chio, Cœur fell sick, and died on the 25th of November, 1456. In compliance with a dying request which he wrote to Charles VII., that monarch, by letters patent dated 5th August, 1457, restored a small portion of their father's property to Ravau and Geoffrey Cœur, the latter of whom subsequently obtained from Louis XI., to whom he acted as *maître-d'hôtel*, a more complete restitution, and the rehabilitation of his father's memory. But this concession did not take full effect till the reign of Charles VIII., and after the death of Geoffrey Cœur, with whose son, Jacques Cœur, named after his grandfather, the direct line of the illustrious and unfortunate financier terminated.

Amongst the works conversant about Jacques Cœur may be mentioned the 'Procès de Jacques Cœur, argentier du roi Charles VII.' 8vo, Paris, 1867, by M. Gabriel Joret-Desclousières; 'Jacques Cœur, the French Argonaut, and his Times,' 8vo, London, 1847, by Louisa Stuart Costello; M. Pierre Clément's 'Jacques Cœur et Charles VII., ou la France au xv^e Siècle. Etude Historique,' &c., 2 vols. 8vo, Paris, 1853, new edition, revised and corrected, 8vo, Paris, 1866; 'Les Grand Ministres Français,' 8vo, Rouen, 1859, a work by M. Jean Louis T. Bachelet, in which Cœur is associated with Suger, Sully, Richelieu, Mazarin, and Colbert; and finally M. Auguste Vallet de Viriville's 'Jacques Cœur. (Extrait de la "Revue des Provinces.") Etude Historique sur le xv^e siècle,' 8vo, Paris, 1864.

* COLENZO, RIGHT REVEREND JOHN WILLIAM, D.D., first Bishop of Natal, the son of John William Colenso, Esq., of Lostwithiel, who was for many years an officer of the Duchy of Cornwall, was born at St. Austell, on the 24th of January, 1814. He was educated successively at the Devonport Proprietary School and at St. John's College, Cambridge; and took his B.A. degree in 1836, when he was second Wrangler and Smith's prizeman, which distinctions were naturally rewarded with a fellowship. He graduated as M.A. in 1839, and in 1853, upon his appointment to the bishopric of Natal, took the degrees of B.D. and D.D. by accumulation. In 1838 he accepted the mathematical mastership at Harrow, and continued to hold it for some years; after which, in 1842, he returned to Cambridge, where he was very successful as a private tutor. In 1846 he became rector of Fornsett St. Mary in Norfolk, and held this preferment until after his promotion to the episcopate. During this period of his life he was chiefly known for his admirable series of elementary mathematical works, the sale of which has been so extensive that each page of the copyrights has been said to be as valuable as a bank-note. They may be indicated or represented rather than exhausted. They comprise 'Elements of Algebra,' 12mo, Cambridge, 2nd edition, 1841, 6th edition, 12mo, London and Cambridge, 1849, &c.; 'Elements of Algebra, adapted for Teachers and Students in the University,' 8vo, London, 1849; 'The Elements of Algebra, adapted for the use of National and Adult Schools,' 18mo, London, 1852, new edition, 12mo, London, 1864; 'Miscellaneous Examples in Algebra,' &c., 12mo, London and Cambridge, 1848; 'Arithmetic, designed for the use of Schools,' 12mo, London, 1843, new edition, stereotyped, 12mo, London and Cambridge, 1848, new edition, thoroughly revised, "with the addition of Notes and Examination Papers," 12mo, London, 1864; 'A Text Book of Elementary Arithmetic,' 16mo, London, 1853, and 'Progressive Examples in Arithmetic,' 16mo, London, 1853, both "designed for the use of National, Adult, and Commercial Schools;" 'Plane Trigonometry,' 12mo, London, second edition, 1851; 'Geometrical Problems, as given in the editions of Euclid's Elements,' 24mo, London, 1846; many of which were followed by 'Keys,' 'Solutions,' and 'Appendices,' by himself and others. Of another order, but belonging to the time of his residence in England, are his 'Cottage Family Prayers,' 12mo, Cambridge, 1846; 'Village Sermons,' 1853, second edition, 16mo, Cambridge and Norwich, 1854, against which the 'Record,' in a review of the book, protested on account of its detection of a tendency to those theological and exegetical positions for which the name of Colenso has since been conspicuous. Against the judgment of the 'Record' the author of the volume appealed in 'A Letter to his Grace the Archbishop of Canterbury, in reply to a Review of "Village Sermons," in the "Record" newspaper of November 10th, 1853. [With the text of the Review], 8vo, London, 1853. Amongst his other activities, Mr. Colenso for some time held the post of organising secretary to the Society for the Propagation of the Gospel, and edited their serial, 'The Church in the Colonies,' 16mo, London,

1844—51, as well as the 'Monthly Record of Church Missions, in connection with the Society for the Propagation of the Gospel in Foreign Parts,' 8vo, London, 1852, &c.

During the year 1847 the attention of the Church of England was attracted by the spiritual wants of South Africa; the bishopric of Cape Town was established, and Dr. Gray was appointed to preside over the diocese, which included the Cape Colony, British Kaffraria, Kaffriland, Natal, the sovereignty beyond the Orange River, and the Island of St. Helena. In 1853 Bishop Gray succeeded in convincing the government and two of the religious societies of the claims of his enormous diocese to subdivision, and two new sees were constituted out of it. On the 30th of November, in the same year, Dr. Armstrong and Dr. Colenso were consecrated at St. Mary's Lambeth, respectively to the sees of Graham's Town and Natal. A very considerable opposition was offered to the appointment of Dr. Colenso. The 'Record' engaged in one of the longest and bitterest of its warfares, founding its antagonism on the 'Village Sermons' just mentioned, and Dr. Colenso's endorsement of the principles of Mr. Maurice. Dr. Colenso's first visit to the colony lasted only ten weeks, and of this he has written an account in a volume entitled 'Ten Weeks in Natal. A Journal of a First Tour of Visitation among the Colonists and Zulu Kaffirs of Natal,' 8vo, London and Cambridge, 1855. Dr. Colenso commenced his missionary work with ardour; and his fervour and charm of manner and address made him one of the most conspicuous ornaments of colonial society. Gradually, however, the divergence of views between Dr. Colenso and Dr. Gray became more evident, and the latter listened to and enforced complaints of the manner in which Dr. Colenso discharged the duties of his bishopric. This brought a reply from Dr. Colenso in the shape of 'Remarks upon the recent Proceedings and Charge of Robert, Bishop of Cape Town, at his primary Metropolitan Visitation of the Diocese of Natal,' &c., 8vo, London, first and second editions, 1864. On the other hand, the Rev. Lewis Grout, an American missionary, with fifteen years' knowledge of South Africa, who published a work called 'Zulu Land; or, Life among the Zulu Kaffirs of Natal,' praises the "resolution, zeal, and perseverance" of Dr. Colenso's devotion to missionary work in 1858, notwithstanding that the latter had not only not realised, but not even begun, much that his more sanguine inexperience had at first suggested. Mr. Grout found the native schools in good order, and Mrs. Colenso an active coadjutor in some branches of instruction; whilst Dr. Colenso's labours, "aside from a general superintendence of the stations, seem to be mainly directed to the preparation of Zulu books—a department in which he has done much, and done it well, and in which there is also much to be done." These words may serve as an introduction to the following works, published by Dr. Colenso, which are concerned with Zulu life and philology:—'First Steps in Zulu-Kafir; an Abridgment of the Elementary Grammar of the Zulu-Kafir Language,' 12mo, Ekukanyeni (Anglicè, In the Light), 1859; 'Three Native Accounts of the Visit of the Bishop of Natal to Umpunde, King of the Zulus; edited, with explanatory Notes, and a literal Translation, and a Glossary,' 12mo, Maritzburg, 1860; and a 'Zulu-English Dictionary,' 12mo, Pietermaritzburg, 1861. The question of native polygamy was one in which Dr. Colenso took a decided part; and in his first visit to Natal he formed the opinion that a convert with a plurality of wives was not required to put any of them away. On this subject he published a 'Letter to the Archbishop of Canterbury upon the question of the proper Treatment of Cases of Polygamy, as found already existing in Converts from Heathenism,' 8vo, Cambridge, 1862.

The Journals and Letters of the Bishop of Natal have to a large extent been published, and from these, and from the publications of the S. P. G., a more favourable idea of his character and labours is impressed on the mind than is left by the narrative of Dr. Gray, and the statements of various other persons. From the Report of the Propagation Society for 1860 it appears that Dr. Colenso was "seriously contemplating a noble and most disinterested scheme for the evangelisation of the country. That scheme is, to resign his present diocese, and to go forth as a missionary bishop, accompanied by his fellow-labourers, to plant the Gospel in the heart of the heathen land." He proposed to take only 500*l.* a year himself, and 1000*l.* a year for his band of missionaries, and this the Society for the Propagation of the Gospel was prepared to grant. The Report for the ensuing year is, however, silent on the subject; and it appears that the Bishop was then engaged with a new scheme—the formation of a distinct settlement for the Christian converts, that they might at

once engage in labour, and obtain such a position as would ensure self-respect and self-dependence.

The "philosophising theories" of the Bishop were now destined to bring about perhaps the most important theological controversy of the generation, in which his theological positions were attacked, and his calculations impugned, by dozens of champions—Jews, Episcopalians, Presbyterians, Baptists, Wesleyans, &c.—for the veracity and integrity of the Pentateuch, which his criticism seemed to have endangered. This was by the publication of the 'Pentateuch and Book of Joshua critically examined. Part I. The Pentateuch examined as an Historical Narrative,' 8vo, London, 1862, fifth edition, revised, 1863, &c. The next three parts were each published in 8vo, London, 1863, and were entitled respectively 'The Age and Authorship of the Pentateuch considered;' 'The Book of Deuteronomy;' and 'The First Eleven Chapters of Genesis;' whilst the fifth part appeared as 'The Book of Genesis analysed and separated, and the Ages of its Writers determined,' 8vo, London, 1865. Many editions of the Pentateuch, &c., have been issued, of which may be specially mentioned a 'People's Edition,' in five parts, the first of which was published in 8vo, London, 1864, and the remaining four in 1865. During the whole time of the publication of this work and its preparation for the press, which was completed by the issue of 'The Preface and Concluding Remarks of Part V. of the Pentateuch,' &c., 8vo, London, 1865, and "printed separately by request," Dr. Colenso was in England. Towards the end of the year 1863 proceedings were at the instance of Bishop Gray taken against the author of this work upon a charge of heresy contained in it and in a former publication. The trial came off in St. George's Cathedral, Cape Town, on the 17th of November. Bishop Gray, of Cape Town, who claimed that the diocese of Natal was within his metropolitan jurisdiction, Bishop Cotterill, the successor of Dr. Armstrong in the see of Graham's Town, and Bishop Twells, of Orange Free State, sat as judges. The accusing clergy were Dean Douglas and two provincial archdeacons. So far as Dr. Colenso could be said to be represented, he was represented by Dr. Bleek. The result of these proceedings, which are recorded in the 'Trial of the Bishop of Natal for Erroneous Teaching,' &c., 8vo, Cape Town and London, 1863, and against which Dr. Colenso on the 16th December protested as being illegal, was a decree of deposition from his see, which was to take effect, unless in case of retraction, on the 16th of April, 1864. When Dr. Bleek, on behalf of Bishop Colenso, gave notice of appeal, the Bishop of Cape Town expressed his inability to "recognise any appeal except to his Grace the Archbishop of Canterbury." The effect of this decision was a lively discussion on the subject of the judicial functions of metropolitans, and a challenge to Convocation to express its condemnation of the book which had occasioned it, and the two Houses of Convocation of the Province of Canterbury did in 1864 condemn it accordingly. Meanwhile the Bishop of Cape Town and his assessors had issued a 'Letter to the Clergy and Faithful Laity of the Diocese of Natal,' to which Dr. Colenso replied by an appeal to the laity, 'A Letter to the Laity of the Diocese of Natal,' &c., 8vo, London, second edition, 1864. A subscription, opened in February, 1864, in aid of the defence of Dr. Colenso was furthered by many persons of culture in England, including several clergymen who gave their names and livings, the occurrence of which on the list was not understood as pledging them to any of the Bishop's opinions, but only as affording a protest in favour of free discussion and inquiry. A petition which Dr. Colenso presented to the Privy Council was referred to the Lords of the Judicial Committee, by her Majesty's order in Council of the 10th of June, 1864; and on the 20th of March, 1865, judgment was delivered to the effect that the Bishop of Cape Town had no jurisdiction. "There was no power," it was decided, "to confer any jurisdiction on the respondent as metropolitan. The attempt to give appellate jurisdiction to the Archbishop of Canterbury is equally invalid. This important question can be decided only by the Sovereign as head of the Established Church, and depository of the ultimate appellate jurisdiction. . . . Their lordships, therefore, will humbly report to her Majesty their judgment and opinion that the proceedings taken by the Bishop of Cape Town, and the judgment and sentence pronounced by him against the Bishop of Natal, are null and void in law." The ecclesiastical position of Dr. Colenso as thus defined, has been discussed in 'Reports,' 'Observations,' &c.; his own view of it, as given in the 'Preface' to Part V. of the 'Pentateuch,' &c., dated June 13th, 1865, may be quoted:—"As Bishop of Natal, I am now at full liberty to continue and complete the laborious work in which I have been engaged, and to publish the result of my inquiries,—relieved

from the intolerable yoke of absolute church authority, but subject always to that of her Majesty the Queen, from whom I received my appointment, and from whom I may at any time, for just cause shown, receive my dismissal." Soon after the decision thus given in his favour, and the complete publication of his 'Pentateuch,' &c., Dr. Colenso returned to his diocese of Natal; whilst Dr. Gray gave effect to his theories of spiritual or ecclesiastical supremacy by the consecration of the Rev. W. K. Macrorie to the rival diocese of Pietermaritzburg.

A few of the works of Dr. Colenso remain to be mentioned. They include 'The Communion-Service from the Books of Common Prayer, with select Readings from the Writings of the Rev. F. D. Maurice,' 16mo, Cambridge, 1855; 'The Epistle of St. Paul to the Romans, newly translated, and explained from a Missionary Point of View,' 8vo, London, 1861; 'The Worship of Baalim in Israel. Based upon the Work of R. Dozy, "The Israelites at Mecca." Translated from the Dutch, and enlarged with Notes and Appendices,' 8vo, London, 1865; 'The Pentateuch and the Book of Joshua critically examined. Translated from the Dutch of Abraham Kuenen, and edited with Notes,' 8vo, London, 1865; 'An Ordination and three Missionary Sermons,' 12mo, Cambridge, 1855; 'Abraham's Sacrifice: a Sermon on Genesis xxii. 1, 2, for Claybrooke Sunday School,' &c., 12mo, London, 1864; 'Sermons on 1 Cor. iv. 5; Heb. ii. 10—13; Rom. xv. 4—7,' separately published in 8vo, Maritzburg, 1865; 'Two Sermons (on Phil. i. 9, 10, and Isa. xxxiii. 14) preached in St. Paul's, Durham, November 12th, 1865, and in the Cathedral Church of St. Peter's, Maritzburg, November 19th, 1865,' 4to, London, 1866; and 'Natal Sermons. A Series of Discourses preached in the Cathedral Church of St. Peter's, Maritzburg,' 2nd series, 8vo, London and Bungay, 1866—68.

*COLES, CAPTAIN COWPER PHIPPS, was born at Ditcham House, near Petersfield, Hants, in 1819. Entering the navy in 1831, he gradually worked his way up in the service: was appointed mate of the *Ganges*, 84, in 1838; mate of Sir William Parker's flag-ship, the *Hibernia*, in 1846; and lieutenant soon afterwards. In 1853, as flag-lieutenant to Admiral Lyons, in the *Agamemnon*, he was in a position to take a busy part in the naval operations connected with the Russian war, which broke out soon afterwards. He was engaged successively in the bombardment of Odessa, the reduction of the forts on the Circassian coast, the attacks on the sea defences of Sebastopol, the operations in the Sea of Azof, and the attack on Taganrog. For these services he was made commander in 1854, second captain in 1855, and senior captain in 1856, and was decorated with various honours. Since the last-named year he has been on half-pay. Captain Coles invented tripod iron masts of peculiar construction. He is, however, best known as the chief inventor of the now celebrated turret principle of ship-building, in which a few very heavy guns are placed in revolving turrets on deck, instead of numerous smaller guns being arranged in broadside. Having patented his invention in England, he sought to bring it into practical use. After long-continued discussion with the Admiralty, Captain Coles was permitted to finish the *Royal Sovereign* as a turret ship, it having been commenced as a wooden three-decker. Notwithstanding the disadvantage attendant on this change of structure, the *Royal Sovereign* gave many evidences of great power and adaptability, and led, in 1866, to the adoption of the turret principle in the *Scorpion* and the *Wyvern*. The Earl of Derby's government, in the year just named, ordered the construction of powerful iron-clad turret ships. Two turret cruising frigates have been launched in 1870, to test the relative merits of two modes of construction—the *Captain*, by Captain Coles; and the *Monarch*, by Mr. Reed. The *Captain* has two turrets, each in effect a revolving fortress, containing two enormous guns of 25 tons weight each; the turrets, as well as other parts of the ship, being protected by very thick armour-plates: in a carefully-conducted trial, May, 1870, the ship proved remarkably successful. Captain Coles has, however, had much difficulty in inducing the Admiralty to adopt his plans; and it is still doubtful how far they will be carried out. The *Devastation* and the *Thunderer*, supposed to be the most powerful ships in the world, are now (1870) being built on the turret principle, but rather on Mr. Reed's than Captain Coles's plan.

COLLAS, ACHILLE, an ingenious inventor of engraving-machines, was born at Paris, on the 25th of February, 1795. After learning the trade of a watch-tool maker, and turning his hand to many modes of employment, he invented in 1822 a machine for making clasps and lockets; in 1825 a machine for engraving the ground or neutral tints on copper-plates; in 1826 a machine for engraving iridescent buttons; in 1826 a machine for engraving

wave-lines on cylinders for calico-printing; and (about 1830) a machine for producing copper and steel-plate engravings of coins and medallions. This last-named invention was brought into practical use for a beautifully illustrated work, Lenormant's *Treasure of Numismatique et de Glyptique, ou Recueil Général de Médails, &c.* . . . gravé par les procédés de Achille Collas, fol. Paris, 1834. An English work illustrated in a similar way was Chorley's *Authors of England, a series of Medallion Portraits* . . . engraved by Achille Collas, 4to, London, 1838. In 1836 Collas invented a mode of applying the pantograph to copying sculptures and other works of statuary on a reduced scale. The first antique statue reproduced in this way was the *Venus of Milo*, in 1839. The method was not wholly new, something like it having before been used in England and in Germany, but Collas brought it to a higher degree of completeness. Between 1840 and 1844 he devoted his attention to new modes of moulding clay into ornaments, hollow bricks, and draining tiles. Collas died at Paris on the 6th of June, 1859. The sculpturing machine, which was rewarded with medals by the juries of the International Exhibitions in 1851 and 1855, has been largely used by M. Barbedienne of Paris in the reproduction of works of art.

COLLIER, ARTHUR, a divine and metaphysician, was born at the rectory of Langford Magna, or Steeple Langford, in Wiltshire, on the 12th of October, 1680. His great-grandfather, Egidius Collier, a clothier of Bristol, who held the advowson, presented his grandfather, the Rev. Joseph Collier, to the living of Langford in 1608; and Arthur Collier was the fourth of the family who enjoyed that benefice. It is probable that after a preliminary education at home he was sent to the Grammar School of Salisbury, and certain that he was entered at Pembroke College, Oxford, in July, 1697; whence, on the 22nd of October, 1698, he migrated to Balliol College in the same university. Having graduated and been admitted into holy orders, he was instituted in 1704 to the family living of Langford, on the presentation of his mother, who had been left a widow in 1697. He held this preferment until his death, the precise day of which is unknown. His burial, however, took place on the 9th of September, 1732, in Langford Church. His eldest son is described in Coote's *Lives of the Civilians* as an advocate at the Commons, and as an ingenious but eccentric person. His daughter, Jane Collier, was the author of *An Essay on the Art of Ingeniously Tormenting*; and the other daughter, Mary, accompanied Fielding the novelist in his voyage to Lisbon. No descendants of Arthur Collier are supposed to be now alive.

The early determination of Collier's genius was to philosophical speculation; and at the age of 23 he came to the conclusion that there is no such thing as an external world, to which proposition he adhered with great pertinacity throughout the remainder of his life. Among his MSS., under the date of January, 1708, there remains the outline of an essay, in three chapters, on the question of the visible world being without us or not. In 1712 he wrote two Essays, still in manuscript, one of which was on 'Substance and Accident,' and the other entitled 'Clavis Philosophica.' At length, as the result of what he declares to have been "a ten years' pause and deliberation," he published the work on which his reputation as a philosopher depends, *Clavis Universalis*: or, a New Inquiry after Truth; being a Demonstration of the Non-existence or Impossibility of an External World, 8vo, London, 1713. This work, which had grown extremely scarce, was privately printed and edited, with an introductory notice and appendix of letters, by Mr. Thomas Maitland, 8vo, Edinburgh, 1836. The impression, which was intended chiefly for presentation, was limited to forty copies. The *Clavis Universalis*, as well as the *Specimen of True Philosophy*; in a Discourse on Genesis, the first chapter and the first verse, 8vo, London, 1730, was made more readily accessible by being incorporated in Dr. Samuel Parr's *Metaphysical Tracts of English Philosophers of the 18th Century*, 8vo, London, 1837, a collection of posthumous publication, but which Dr. Parr had left in a state of preparation for the press. The *Clavis Universalis*, which enjoyed the commendation of Reid, Dugald Stewart, and others, was made known in Germany by Professor Eschenbach's translation in 1756; and its author claimed complete independence of the reasoning of Bishop Berkeley, although the latter's *Principles of Human Knowledge*, and *Theory of Vision*, had been published respectively three and four years before the appearance of the *Clavis*. Collier's theological opinions were closely connected with his metaphysics, and his views of the Second Person of the Trinity, as stated in his own words, were nearly identical with those of Apollinaris, Bishop of

Laodicea towards the latter end of the fourth century. He held "that the pre-existent Word, or Son of God, was not united to a created human soul or spirit, but was himself the man called Jesus, or the Christ." This position, which he deemed essential to the doctrine of the atonement, he embodied, as one of the last acts of his life, in a volume entitled 'Logology: or, a Treatise on the Logos or Word of God, in seven Sermons on the 1st, 2nd, 3rd, and 14th verses of the First Chapter of St. John's Gospel,' a work of extreme rarity, of which an analysis is given in Dr. Parr's 'Metaphysical Tracts.' Collier published a small treatise 'Of Justification by Faith, as in opposition to Justification by Works: in a Sermon upon Romans 1, v. 17, preached at the Cathedral Church of Sarum, July 8, 1716,' 8vo, London, 1716; and wrote on various controversial subjects, particularly those of Occasional Conformity, and the Sacheverell and Bangorian controversies. He left also in manuscript a 'Commentary on the Septuagint Version of the Bible,' which, except a few sheets, was employed for fire-lighting by an ignorant housemaid, who had access to it in the lumber-room of a house in the Close at Salisbury, where fifty sermons and other productions, principally correspondence, were likewise found by the late Robert Benson, M.A., Recorder of Salisbury, the author of 'Memoirs of the Life and Writings of the Rev. Arthur Collier, M.A., Rector of Langford Magna, in the County of Wilts, from A.D. 1704 to A.D. 1732; with some Account of his Family,' 8vo, London, 1837.

* COLLOMB, ÉDOUARD, geologist, has been for many years one of the officers of the Geological Society of France, first as a councillor and a secretary, and latterly as the treasurer, which last-mentioned office we believe he still holds. He is best known for his original observations on glaciers, more especially those of the Vosges Mountains, and for his researches into the geological structure of Spain, undertaken in conjunction with Verneuil, with whom he travelled in that country in 1851 and 1852, and on more than one occasion since that period. In 1853 he explored most parts of the Italian peninsula and adjacent islands. His principal writings are 'Preuves de l'existence d'anciens glaciers dans les vallées des Vosges,' 1847; 'Mémoire sur les glaciers actuels' in 'Annales des Mines,' xi. pp. 177—216, (1857); 'Essai sur l'ancien glacier de la vallée d'Argeles,' 1868, written in conjunction with M. Martius. In connection with M. Verneuil he has written 'Coup d'œil sur la constitution géologique des quelques provinces de l'Espagne,' in 'Bull. Soc. Geol. Fr.,' 2nd series, x. pp. 61—147 (1853); 'Observations géologiques et barométriques faites en Espagne en 1855,' in vol. xiii. pp. 674—728, of the same series; and 'Note sur une partie du Pays Basque espagnole, accompagnée par une carte,' in vol. xvii. pp. 333—372 (1860). He has written many other papers for these 'Bulletins,' as also for the 'Supplément à la Bibliothèque Universelle et Revue Suisses,' 'Comptes Rendus,' and one or two other serials.

COLT, SAMUEL, whose name is associated with the revolving pistol, was born at Hartford, Connecticut, July 19th, 1814. When a young man, assuming the name of Dr. Coult, he lectured on chemistry in various towns of the United States, and thereby obtained money sufficient to enable him to make experiments on a revolving pistol, which he had designed and modelled in wood at the age of 15, while at sea as a sailor-boy. In 1835 he secured patents for his invention in America, England, and France. New York capitalists subscribed 300,000 dollars, and established the Patent Arms Company at Paterson, New Jersey. In 1837 some of Colonel Harney's troops used Colt's revolvers in the Florida war, and the beautifully constructed weapon excited much admiration; but the slackness of the demand during peace led to the suspension of the manufacture. In 1843 Mr. Colt introduced one of the first submarine electric cables, for local use, in the waters near New York; the copper wire was wrapped round with cotton yarn, saturated with asphaltum and beeswax, and enclosed in a leaden pipe. When the Mexican war began in 1847, Colt recommenced operations as pistol manufacturer, at the same time introducing many improvements in construction. The migration consequent on the discovery of gold in California gave a great impetus to the demand for revolvers; and Colt thereupon built a factory on a vast scale just outside Hartford. At this place, stocked with fine machinery, 1000 revolving pistols could be made per day. While in England in 1851, Mr. Colt read a paper before the Institution of Civil Engineers, minutely explaining the points of difference between the various kinds of revolvers known up to that time. The rush of emigrants to Australia in 1852—53, the Russian war in 1854—56, and the Indian mutiny in 1857—58, all tended to increase the demand for the arms made at Hartford.

An important part of the work carried on by Mr. Colt was the fabrication of the machines for making revolvers; he furnished many sets of such machines to the English, Russian, and other governments. The factory supplied balls, cartridges, bullet-moulds, powder-flasks, and lubricators, to be used with the arms. Mr. Colt, who held the militia rank of Colonel, died on the 10th of January, 1862.

COMBE, GEORGE [E. C. vol. ii. cols. 340, 341], the celebrated Scotch phrenologist, died at Moor Park, Surrey, Aug. 14, 1858, wanting just two months to the completion of his 70th year.

COMBE, WILLIAM, a prolific writer, was born at Bristol in 1741. His birth, like his life, is veiled in obscurity; by some he is said to have been the illegitimate son of Alderman Alexander, by others the legitimate son of a merchant named Combe, of that city. By one or other of these he was sent to Eton, and thence, about 1761, proceeded to Oxford University, but left abruptly after residing there a year or two. At the age of 24 he came into possession of a legacy of 2000*l.* (not 16,000*l.* or 20,000*l.* as is commonly said), bequeathed to him by Alderman Alexander, who calls him his godson, and spells his name Combes. Assuming the habits and extravagances of a man of extreme fashion (and gaining thereby the sobriquet of Count Combe), he soon managed to dissipate his legacy, and then settled in London, professedly to study law, but trusting to authorship for a livelihood. He had already published a few essays under the title of 'The Philosopher in Bristol,' 1775; his first venture in London was a satire, which owed its success to its personality, 'The Diaboliad,' 1776. From this time for forty years he continued to write on all sorts of subjects, and in the most various classes of literature. Much that he wrote was for magazines and newspapers, his separate works being all booksellers' jobs, and all published anonymously. Their number, considering the strange life he led, was surprising. He appears to have been always in debt, often in the debtor's prison, and his last years were spent within the rules of the King's Bench. His conduct during a large part of his life appears to have been profligate, but towards the end became more regular; and he went much into society, where he was greatly admired for his gentlemanly manners, animation, and conversational skill. Yet he was distrusted by every one, and even his personal honesty has been impeached. The most popular of his works is the well-known 'Three Tours of Doctor Syntax'—First Tour, 1812 (originally published in the 'Poetical Magazine,' 1809—11); Second, 1820; Third, 1821. This work had an amazing run, but its popularity was doubtless at least as much due to Rowlandson's clever designs as to Combe's text. In the same vein, and illustrated like Dr. Syntax by Rowlandson, followed 'The Military Adventures of Johnny Newcome,' 1815; 'The English Dance of Death,' 1815—16; 'The Dance of Life,' 1816—17; and the 'History and Life of Johnny Quæ Genus, the Little Foundling,' 1822. All these were published by Ackermann, who appears to have been Combe's chief employer. He also wrote for Ackermann the text accompanying his splendidly illustrated Histories of the Universities of Oxford and Cambridge, and the great Grammar Schools, Harrow, Rugby, Westminster, the Charter House, Christ's Hospital, St. Paul's, &c.; his Picturesque Tours along the Rhine, the English Lakes, the Thames, the Ganges and Jumna, and many more of the same kind, as well as the 'History of Madeira,' Cave's 'Antiquities of York,' and many miscellaneous works. He also furnished the text for Boydell's magnificent 'History of the River Thames' (one of the finest specimens of Bulmer's press), 2 vols. folio, 1794—96, and wrote the descriptions to Turner's 'Southern Coast,' vol. i. 1817. He claims further to be the author of 'Lord Lyttleton's Letters,' to which some importance was attached as long as they were assumed to be genuine; the Letters supposed to have passed between Sterne and Eliza; and it is pretty certain that these are not the only letters by many which he forged. The satire, 'All the Talents,' 8vo, 1807, which ran through some twenty editions, is probably correctly attributed to him, as are also 'The Devil upon Two Sticks in London,' and 'The First of April;' but the Hudibrastic jingle called the 'Life of Napoleon Bonaparte,' the 'Heroic Epistle to Sir William Chambers,' and various other productions, have been given to him on very insufficient grounds. Those who wish to know what he really wrote may be content with the list drawn up by himself, and printed in the 'Gentleman's Magazine' for May, 1852. Combe died at his residence, South Lambeth, on the 19th of June, 1823. Shortly after his death appeared what purported to be his 'Letters to Marianne,' the perusal of which will probably satisfy any one of the writer's

thorough want of principle. A new edition of 'The Three Tours of Doctor Syntax in Search of the Picturesque, Consolation, and a Wife,' with 'The Life and Adventures of the Author,' by J. C. Hotten, and "80 illustrations drawn and coloured after the originals by T. Rowlandson," was published in 1868, but the life is inaccurate and the adventures legendary, while the illustrations libel the originals. A good deal about Combe appeared in 'Notes and Queries' for 1869, and his name frequently occurs in the 'Diary of H. Crabb Robinson,' 8vo, 1869.

COMBERMERE, STAPLETON COTTON, VISCOUNT [E. C. vol. ii. col. 341]. Notwithstanding his advanced age, Lord Combermere continued to take part in his old employments and in the occupations of the society in which he moved; and in the summer of 1864 the gallant old general, then turned of 91, rode over to Chester along with Baron Marochetti to select a site for the statue which the people of Cheshire proposed to erect in his honour. He lived but a few months longer, dying at Clifton on the 21st of February, 1865. He was born in 1773. The statue, which has been erected just outside the castle gates, Chester, is of bronze, 12 feet high, on a granite pedestal of the same height. It represents Lord Combermere on horseback, in his field-marshal's uniform, and is a good unaffected likeness. The artist was Baron Marochetti.

COMTE, ACHILLE JOSEPH, biologist, was born at Grenoble, Sept. 29, 1802. Imbued from a very early age with a desire for the study of natural history, he retained this liking throughout his career as a medical student at Paris. Soon after his education was completed he obtained the post of professor of natural history at the Charlemagne College, and then that of principal clerk to the minister of public instruction; but in the stormy period of 1848 he was obliged to seek other occupation. He subsequently became director of a preparatory school, where he himself taught the natural history. He was a member of several societies, amongst others that of the 'Gens de Lettres,' of which he was first vice-president and then president. He died in 1866. His works are numerous, but those which are best known are the books he wrote for the use of students. The following may be mentioned:—'*Règne Animale de Cuvier, disposé en tableaux méthodique*,' 1832—41; '*Physiologie pour les collèges et les gens du monde*,' &c., 1834, 4th edition, 1841; '*Traité complet d'histoire naturelle*,' 1844—48. He helped M. Milne-Edwards in drawing up the '*Cahiers d'histoire naturelle à l'usage des collèges*,' &c., 1836—45; edited an edition of Buffon's works, and contributed to Bouillet's '*Dictionnaire Universel des Sciences*,' &c. His wife also obtained some reputation as a writer of educational works, and of comedies.

COMTE, AUGUSTE, [E. C. vol. ii. col. 344]. The author of the positive philosophy (whose full name was Isidore Auguste Marie François Xavier Comte), died at Paris on the 5th of September, 1857. A '*Notice sur l'Œuvre et sur la Vie d'Auguste Comte*,' by M. E. Robinet, Paris, 1860; '*A General View of Positivism, Translated from the French of Auguste Comte*,' by J. H. Bridges, M.D., 8vo, London, 1865; Mr. John Stuart Mill's '*Auguste Comte and Positivism*,' 8vo, 1865; and M. Littré's '*Comte et la Philosophie Positive*,' 8vo, Paris, 1863, may be usefully added to the list of works on Comte and his philosophy given in the original article.

CONDAMINE, CHARLES MARIE LA [LA CONDAMINE, C. M., E. C. vol. iii. col. 763].

CONECTE, THOMAS, a Carmelite monk, who acquired great popularity as a preacher in the early part of the 15th century, and whose death has invested his name with a painful interest. He was by birth a Breton, and is first mentioned as a monk in the Carmelite convent at Rennes, distinguished by holiness of life, austerity of manners, and fervid eloquence. "He was the most persuasive preacher of his age," says a writer of the time, and incredible numbers flocked to his sermons. In 1428 he set out on a missionary crusade against the dissolute manners and extravagant fashions then prevalent. He travelled through Amiens, Artois, and Flanders, denouncing everywhere the popular vices. Wherever he went he was followed by multitudes of all classes; "by the common people he was received as if he had been an apostle of our Lord Jesus Christ sent down from heaven," writes Monstrelet; "the mule on which he rode was led by knights or persons of high rank;" when he entered a town, the churches not being large enough to contain the thousands who came to listen to him, platforms were erected for him to preach from. These the chief burghers hung with costly tapestries, and a band of priests attended to perform mass. Crowds of 15,000 or 16,000, says Argentre, ordinarily assembled at his sermons, and Conecte caused them to be separated by a cord, the women

on one side, the men on the other. Bonfires used to be made within sight of the platform, into which the women cast their obnoxious ornaments and gaudy apparel, the men their dice and cards. His remonstrances were not, however, confined to the vices of the vulgar and the luxury of the rich; he condemned in the strongest language the licentiousness of the clergy, and deplored the unhappy condition of the church. Later (1432) he made a journey into Italy, where he preached with almost equal success. At Mantua he reformed the order of the Carmelites. At Venice he was received with great respect and distinction, and he accompanied the Venetian ambassadors to Rome. Shortly after his arrival, the Pope, Eugenius IV., sent for him, "desiring to hear him preach." But Conecte hesitated; he had denounced the evil lives of the clergy, had condemned the immorality of the papal court, and questioned the authority of a papal excommunication; he knew the perfidy of the Pope, and he shrank from trusting himself in his hands. His prudence was too late. The Pope caused him to be seized and handed over to the Inquisition. He was thrown into prison, condemned as a heretic, and burned alive, 1434.

CONEGLIANO, GIOVANNI BATTISTA, called CIMA, an eminent Venetian painter, was born at Castello di Conegliano, near Treviso, about 1460. He is said to have been a pupil and afterwards the rival of Giovanni Bellini, whom he surpassed in technical skill, but hardly equalled as a colourist, and to whom he was decidedly inferior in poetical feeling and elevation of style. His works are numerous in Venice, but good examples are comparatively scarce elsewhere. The National Gallery possesses two of his pictures, both signed—No. 300, 'The Infant Christ standing on the knees of the Virgin,' and No. 634, also 'A Madonna with the Infant Christ standing on her knees,' but smaller in size. The time of Conegliano's death is uncertain. The latest date on a painting by him is 1517.

CONINGTON, JOHN, professor of Latin literature in the University of Oxford, was born on the 10th of August, 1825, at Boston, Lincolnshire, where his father, the Rev. Richard Conington, held the incumbency of the chapel-of-ease. He was educated at Rugby, from which he passed in July, 1843, to Oxford, where he was demy of Magdalen College. In March, 1846, and May, 1847, respectively, he became scholar and fellow of University College; and, having been first class in Literis Humanioribus in the B.A. examination in Michaelmas Term, 1846, took his bachelor's degree in 1847, and graduated as M.A. in due course. He was Ireland and Hertford scholar in 1844, prizeman for Latin verse in 1847, for the English essay in 1848, for the Latin essay in 1849, in which year he was also Eldon scholar. This last distinction indicates some taste for the law, and Mr. Conington did actually become a student of Lincoln's Inn in June, 1849, although he was never called to the bar. In 1854 the professorship of Latin literature at Oxford was instituted by the president and fellows of Corpus Christi College, in accordance with the intention of their founder, Bishop Fox, and endowed from the revenues of the college. To this office Mr. Conington was elected, and *ipso facto* became an honorary fellow of the college from which he derived his title of "Corpus" Professor. In the fulfilment of his duties his encouragement and friendship were open to every youth of promise; and when he died, suddenly and prematurely, at his mother's house at Boston, on the 30th of October, 1869, it was felt not only that the university had lost a scholar, but that every student had lost a friend.

In 1850 Mr. Conington edited Dr. Maginn's 'Homeric Ballads,' to which he contributed a preface and annotations; but before this he had published a spirited version of the 'Agamemnon,' with the title of 'The Agamemnon of Æschylus; the Greek Text, with a Translation into English Verse, and Notes critical and explanatory,' 8vo, London, 1848. In 1852 he addressed Dr. Gaisford on the subject of certain Fragments of Greek Plays, in a pamphlet entitled 'Epistola Critica de quibusdam Æschyli, Sophocles, et Euripidis Fragmentis,' the Latinity of which seemed to revive the times when scholars corresponded only in the dead languages. In 1855 Professor Conington published his inaugural lecture 'On the Academical Study of Latin;' two years after which he brought out what has been regarded as his completest contribution to classical literature, 'The Choephore of Æschylus: with Notes, critical and explanatory,' 8vo, London, 1857; and furnished to the 'Oxford Essays,' 8vo, London, 1858, an article on the 'Poetry of Pope,' an interesting contribution to the study of English literature, in which the author compares Pope with various ancient and modern poets, and analyses his characteristics as they appear in the more important of his works. The

next work of Professor Conington was the production, for Messrs. Long and Maclean's 'Bibliotheca Classica,' of the first volume of 'P. Vergili Maronis Opera. The Works of Virgil, with a Commentary,' 8vo, London, 1858. In the preparation of this volume the editor was much assisted by Mr. Goldwin Smith, at that time professor of Modern History at Oxford. The first volume contained the Eclogues and Georgics, and the second, 8vo, London, 1863, comprised the first six Books of the *Æneid*; whilst the third, in completion of the work, was in the press at the time of the editor's death. The text of Professor Conington's Virgil was published with the title of 'Publi Vergili Maronis Opera,' as one of the 'Cambridge Greek and Latin Texts,' 8vo, Cambridge and London, 1859. He next published 'The Odes and Carmen Seculare of Horace, translated into English Verse,' 8vo, London, 1863, fourth ed., 1870; which he followed up with the most generally known of all his works, 'The *Æneid* of Virgil, translated into English Verse,' 8vo, London, 1866, third edition, 1870. He completed his Horatian translations with 'The Satires, Epistles, and Art of Poetry of Horace, translated into English Verse,' 8vo, London, 1870, which, in spite of the date, was published shortly before his death. It may, in addition, be mentioned that Professor Conington contributed in 1863 a very moderate pamphlet with reference to the controversy about the Greek professorship, in which he insisted on the moral obligation of the university to the Crown, and on the circumstance that the published opinions of Professor Jowett were not a sufficient ground for withholding an augmentation of his stipend; and that on the 9th of March, 1867, he delivered a lecture, afterwards published, on 'The Style of Lucretius and Catullus as compared with that of the Augustan Poets,' 8vo, Oxford and London. He was further a contributor to the 'Edinburgh Review,' the 'Rheinisches Museum,' the 'Athenæum,' in which he reviewed Lord Derby's translation of the *Iliad*, and the 'Academy,' to the first number of which—the second number, November 13th, 1869, contained an obituary notice of him—he contributed a short review of Dr. A. Weidner's Commentary on Virgil's *Æneid*, 'Commentar zu Vergil's *Æneis*, Buch i. und ii., Leipzig, 1869.

CONNELL, ARTHUR, born at Edinburgh, 30th November, 1794, died 31st October, 1863. He was educated at the High School, and entered the university in 1808. He also became a student at the University of Glasgow, and having obtained a Snell exhibition, went to Balliol College, Oxford, in 1812. In 1817 he passed advocate at the Scotch bar, but never practised, preferring to study chemistry. In 1840 he was appointed professor of that science in the University of St. Andrew's, and continued to teach until 1866. He became Fellow of the Royal Society of Edinburgh in 1829, in whose 'Transactions' and in the 'Edinburgh Philosophical Journal' many of his papers appeared. He became Fellow of the Royal Society in 1855. He had great skill in mineral analysis. He determined the constitution of greenockite from a single grain of that mineral. He established several new mineral species, and showed that in certain minerals baryta exists in combination with silicic acid.

CONOLLY, JOHN, M.D., was born in 1794 at Market Rasen, Lincolnshire; served awhile as an officer of militia; in 1817 entered on the study of medicine at Edinburgh University, and in 1821 graduated M.D. He commenced practice as a physician at Chichester; removed after awhile to Stratford-upon-Avon, and finally settled in London in 1827 on his appointment to the professorship of medicine in the London University (now University College). Resigning this post in 1833, he returned to private practice till 1839, when he was elected resident physician to the Middlesex County Lunatic Asylum, Hanwell. Here the great work of his life was accomplished. Before his time much had been done to improve the treatment of the insane, but, generally speaking, their treatment was still harsh and often cruel. One of Conolly's first measures upon assuming the control of Hanwell Asylum was to remove all instruments of mechanical restraint, "amounting to about 600, half of them being handcuffs and leg-locks," and to abolish restraint entirely. The non-restraint system had already been tried under Dr. Charlesworth and Dr. Gardner Hill, at Lincoln Asylum; but that was a small institution, whereas Hanwell contained 800 inmates. And he carried his reform throughout the entire establishment in a much more thorough and systematic manner than his predecessors, combining with the freedom from restraint on the part of the patients, ample occupation, amusement, and absence of seclusion; with constant kindness of manner and sleepless vigilance on the part of the attendants, and unceasing watchfulness by the superiors. And this course he pursued with

unfailing success during the many years he resided in the hospital, and afterwards urged by counsel and remonstrance when, having resigned the superintendence, he acted as consulting physician to the asylum. The wonderful success of the system at Hanwell brought to it visitors from all parts of the world, and, with Dr. Conolly's Reports, which were everywhere read by professional men and the public at large with great interest, contributed to the general adoption of the system in a more or less complete form. The effect of Dr. Conolly's labours on behalf of the insane it is impossible to overrate, but looking at recent cases of death from violence (whether accidental or otherwise) in our own overgrown establishments, and the accounts given of asylums abroad, it is to be feared that there has, in the last few years, been a marked deterioration, partly from insufficient superintendence, but perhaps still more from the neglect to make provision for a succession of properly educated attendants.

Dr. Conolly died at his residence, the Lawn, Hanwell, on the 5th of March, 1866. Besides his numerous Reports, and various contributions to the 'British and Foreign Medical Review,' the 'Lancet,' &c., he wrote an essay on 'The Construction of Lunatic Asylums;' 'An Inquiry concerning the Indications of Insanity;' and a 'Study of Hamlet' (1863), the result of his retirement, in which he sought to prove that Hamlet's madness was not simulated, and that Ophelia became insane from sympathy. Dr. Conolly took an active share in founding the Earlswood Asylum for Idiots, of which he acted as honorary physician.

(A *Memoir of John Conolly, M.D., D.C.L.; comprising a Sketch of the Treatment of the Insane in Europe and in America.* By Sir James Clark, Bart. K.C.B., M.D., F.R.S., 8vo, London, 1869).

* CONRAD, TIMOTHY ABBOTT, an American geologist and conchologist, was born in the State of New Jersey in 1803. At first he gave his attention to geology with the intention of making a life-long study of it, but he afterwards directed his researches to shells also, more especially the extinct forms. In the early days of the geological survey of the State of New York he was attached to it as palæontologist, and as such he contributed the palæontological portion of the Annual Reports on the Survey of that State, prior to Hall's appointment in 1843. He also contributed to the palæontological portion of Gilliss's Report of his expedition to the Southern Hemisphere; to Blake's Reports on the Geology of California; and to the 'Report on the U. S. and Mexican Boundary Territory,' 1857. He has also written 'New Fresh-water Shells of the United States,' 1834; 'American Marine Conchology,' 1831; and a Monograph of the Unionidae, 1835—38. In addition he has contributed numerous papers to the 'Proceedings' and 'Journal' of the Academy of Science at Philadelphia, mostly relating to shells and the tertiary strata of the United States; and latterly he has furnished several papers to the 'American Journal of Conchology.'

* CONSCIENCE, HENDRIK, a distinguished novelist, and the reviver of modern Flemish literature, is the son of a shipbroker of French origin, and was born at Antwerp on the 3rd of December, 1812. Being left very much to himself in the conduct of his education, he indulged his passion for reading in the most desultory manner. In 1830, at the time of the Belgian revolution, he gave up the calling of a teacher, which he had adopted in 1829, in order that he might volunteer for military service. He soon became the poet of the soldiers; and his stirring songs achieved a great popularity in the army, which he quitted in 1836 with the rank of serjeant-major. The unhappy temper and disposition of his step-mother estranged him from his family, and forced him to unassisted efforts to gain a livelihood. Through various employments, at first very humble, but gradually rising in importance, he received in 1845 the appointment of assistant professor, and in 1847 that of professor, in the University of Ghent, and became the instructor of the children of King Leopold in the Flemish language and literature, to the revival of which, as an assertion of independence against the French, he now devoted himself with enthusiasm. He was subsequently appointed commissary of the administrative arrondissement of Courtrai.

As a writer of fiction, Conscience is remarkable for the quiet humour which underlies the most homely and trivial of his incidents, and for the faithfulness and photographic reality of his descriptions—qualities which, by a happy gift of nature, do not exclude breadth of treatment, movement, vigour, tenderness, gentleness, and simplicity. His works, which are exceedingly numerous, include the Year of Wonders, a series of dramatic pictures of the Spanish period of Flemish history, 'In't Wonderjaer [1566]. Historische Tafereelen uit de xvi^e Eeuw,' 8vo,

Antwerp, 1837; 'Phantazy,' 8vo, Antwerp, 1837, a collection of Legends and Flemish Poetry; a Romance entitled 'De Leeuw van Vlaenderen; of de Slag der Gulden Sporen,' 1838, third edition, 3 vols. 12mo, Antwerp, 1848, of which an English translation was published as the 'Lion of Flanders; or the Battle of the Golden Spurs,' 8vo, London, 1855; the History of Count Hugo van Craenhove and his Friend Abulfaragus, 'Geschiedenis van Graef Hugo van Craenhove en van zynen vriend Abulfaragus,' 4to, Antwerp, 1845, English translations, 8vo, London, 1855, and 12mo, Baltimore and Philadelphia, U.S., 1867; History of Belgium, 'Geschiedenis van België,' 8vo, Antwerp and Brussels, 1845; a Page out of the Book of Nature, 'Eenige Bladzijden uit het Boek der Natuur,' 8vo, Antwerp, 1846; 'Jacob van Artevelde,' 1849, second edition, 2 vols. 8vo, Antwerp, 1857; Historical Picture, &c., entitled 'De Boerenkryg [1798]. Historisch Tafereel uit de xviii^e Eeuw,' 1853, second edition, 2 vols. 8vo, Antwerp, 1857; Historical Pictures of the 5th century entitled 'Hlodwig en Clothildis,' &c., 1854, second edition, 2 vols. 8vo, Antwerp, 1857; Historical Picture of the 17th century, entitled 'Batavia,' &c., 3 vols. 8vo, Antwerp, 1858. Among his more familiar novels and stories of modern life may be mentioned his 'Lambrecht Hensmans,' 2 vols. 16mo, Antwerp, 1847; 'Siska van Roosemael,' 8vo, Antwerp, fourth edition, 1857; The Conscript, 'De Loteling,' 1850, fourth edition, 8vo, Antwerp, 1857, English translations, 8vo, Edinburgh, 1854, 12mo, Baltimore, &c., 1856 and 1867; 'Baes Gansendonck,' 1850, second edition, 8vo, Antwerp, 1857, English translation, with the title of 'The Village Innkeeper,' 12mo, Baltimore, &c., 1867; Wooden Clara, 'Houten Clara,' 8vo, Antwerp, 1850, English translations, 8vo, London, 1855, and 12mo, Baltimore, &c., 1867; 'Blinde Rosa,' 8vo, Antwerp, 1851, second edition, 1853, English translations, 8vo, Edinburgh, 1854, and 12mo, Baltimore, &c., 1867, Spanish translation, as 'Rosa la Ciega' in the second volume of a South American periodical, 'Semana Literaria de "El Porvenir,"' 8vo, Bogota, 1858; The Poor Nobleman, 'De Arme Edelman,' 1851, second edition, 8vo, Antwerp, 1857, English translations, 8vo, Edinburgh, 1854, and 12mo, Baltimore, &c., 1867; The Curse of the Village, 'De Plaeg der Dorpen,' and The Happiness of being Rich, 'Het Geluk van Ryk te zyn,' 8vo, Antwerp, 1855, English translations, 8vo, London, 1855, and of the latter, 12mo, Baltimore, &c., 1867; Mother Job, 'Moeder Job,' 8vo, Antwerp, 1856; 'De Jonge Doctor,' 2 vols. 4to, Antwerp, 1860, and 'De Geldduivel,' 2 vols. 8vo, Antwerp, 1856, both of them described as Pictures of our own Time, 'Tafereelen uit onzen Tyd,' and of the latter of which an English translation was published as 'The Demon of Gold,' 8vo, London, 1857; 'De Gierigaerd,' and 'Rikke-Tikke-Tak,' 8vo, Antwerp, second edition, 1857, English translations, entitled respectively 'The Miser,' and 'Ricketicketack,' 8vo, London, 1855, and 12mo, Baltimore, &c., 1867; The Progress of a Painter, 'Hoe Men Schilder word't,' 8vo, Antwerp, sixth edition, 1861, English translation, 12mo, New York, 1852; The Land of Gold, 'Het Goudland,' 2 vols. 8vo, Antwerp, 1862, being the adventures of three Flemings in California; 'Veve,' &c., or the War of the Flemish Peasants against the French in 1793, of which an English translation was published in 8vo, London, 1855, and reprinted in 12mo, Baltimore, &c., 1856; Pictures of our own Time, entitled 'Moederliefde,' 2 vols. 8vo, Antwerp, 1862; The Merchant of Antwerp, &c., 'De Koopman van Antwerpen. Eene Geschiedenis onzer Dagen,' 2 vols. 8vo, Antwerp, 1863; Human Blood, &c., 'Menschenbloed; Zedetafereel onzes Tyds,' 8vo, Antwerp, 1864; a Story of our own Days, entitled 'Valentijn,' 2 vols. 8vo, Antwerp, 1865; Story of two Labouring Children, 'Baro en Lieveken,' 8vo, Antwerp, 1865; The Imaginary Sickness, 'De Ziekte der Verbeelding,' 8vo, Antwerp, 1865; and a novel called 'Levenslust,' 3 vols. 12mo, Antwerp, 1868. Almost all the works of Hendrik Conscience have been promptly translated into German; and many are to be found in Danish, and, as has been shown, in English, and a few in Italian. In France two volumes of his works have been translated and published by M. Léon Wocquier, as instalments of what was intended should be the 'Œuvres Complètes de Henri Conscience,' 8vo, Paris, 1854 and 1855.

CONYBEARE, VERY REV. WILLIAM DANIEL, Dean of Llandaff [E. C. vol. ii. col. 369]. This distinguished geologist and excellent man died on the 12th of August, 1857.

* COOKE, EDWARD WILLIAM, R.A., F.R.S., was born in London in 1811. His father, Mr. George Cooke, was a good engraver of landscapes and buildings, and he himself commenced his career as an engraver with every promise of success. At this time he made numerous sketches, drawings, and etchings in a

style of distinctive originality and spirit. It was not till about 1831 or '32 that he began to paint in oil. From the first he has chiefly painted views of mingled land and sea—our low sea-banks and river mouths, the Dutch coast, the lagoons of Venice, the sandy dunes of France, peopled each with its own barges, boats, and luggers, all unimpeachably drawn, and sitting on the waters like a gull or puffin. With the coasts and craft of Holland he is as familiar as a Dutch boatman, and seems to love them as well. Of late he has toyed much with Venice ashore as well as afloat, but neither the craft nor the climate seems exactly to suit him. Mr. Cooke was elected A.R.A. in 1851, and R.A. in 1863. In this latter year he was also chosen F.R.S., and about the same time became member of the Linnean, Geological, and several other learned societies. Whether his scientific studies have given something too much of precision to his thoughts, or his scientific honours have weighed heavily on his hand, or his theory of painting has become somewhat more severe, it is certain that the character of his pictures has of late years greatly changed. The old firmness and accuracy of drawing and clearness of style are there, but the play of touch and freedom and spontaneity of manner are missing. All is hard and sharp and precise, as though modelled for a demonstration; the waves are in curves that would satisfy a mathematician; the rocks along the shore are studies for a geologist; and, without referring to his book, the botanist would determine the species and genera of every plant growing upon them. Several of Mr. Cooke's earlier pictures are in the Vernon and Sheepshanks collections.

COOKE, HENRY, English historical painter, was born in 1642, and studied painting in Italy under Salvator Rosa. "On his return," writes Walpole, "neither rich nor known, he lived obscurely in Knave's Acre, in partnership with a house-painter." Cooke and his partner were not what are now called house-painters; they decorated walls and ceilings of halls and staircases with pictorial designs in the manner then fashionable of Verrio and Laguerre. Thus in the sentence following that just quoted, Walpole remarks that Cooke was paid 150*l.* for painting the house of Sir Godfrey Copley. He seems to have been engaged in copying and assisting other painters. Walpole says that having killed a man in a quarrel, he fled to Italy, stayed there some years, and returning, lived privately till the affair was forgotten. In his later years he was much employed. He made a copy in tempera of Raffaele's Cartoons at Hampton Court, and was employed by King William to repair the originals—and he deserves our gratitude for not having irreparably injured them. He painted the staircases at Ranelagh, at Lord Carlisle's house, and elsewhere; but his great work in this way was the choir of New College chapel, Oxford, a very elaborate composition with a representation of the Salutation in the centre: it was all, however, cleared away for Wyatt's restorations in 1789. Cooke sometimes painted portraits, but he must not be confounded with the Henry Cooke who in 1640 painted several of the portraits still in the Hall of the Ironmongers' Company, London, as well as others that have disappeared. The subject of this notice died November 18, 1700.

COOKE, THOMAS, telescope and scientific instrument maker, was born at Allertorpe, Yorkshire, on the 8th of March, 1807. His father, a shoemaker, could only give him two years' education at a National-school, and then took him to work at the lapstone. The boy, disliking the trade, managed to pick up a little further instruction, and in 1824 opened a village school, educating himself in spare hours. From 1829 to 1836, while an usher and a private teacher at York, he studied mathematics and optics, made a reflecting telescope, and then a refractor, with an object-glass ground out of the thick bottom of a tumbler. Encouraged by Professor Phillips, he set up in York as an optician. His first important work was a 4½-inch equatorial telescope. At that period, owing partly to the influence of the glass duty in discouraging improvements in manufacture, 4½ inches were regarded as rather a large diameter for an English made lens. Mr. Cooke gradually became famous for his large telescopes. In 1851 he made an equatorial of 7-inch aperture for Mr. Pattinson, of Newcastle; this was the instrument with which Professor Piazzi Smyth made his astronomical observations at Teneriffe. In 1855 Mr. Cooke established the Buckingham Optical Works at Bishopscill, near York, which grew to considerable magnitude. Within a few years he made nine equatorials, of 8 to 10 inches diameter each, and 12 others of 5 to 8 inches. In 1863 he commenced, for Mr. Newall, of Gateshead, the largest equatorial refractor ever made. Up to that period the greatest diameter of lens known in an actually mounted

equatorial was 15 inches, in a telescope at Paris; Mr. Newall's was to be 25 inches. This gigantic instrument, for which Mr. Cooke had to invent new tools, machines, and processes, occupied him till his death, and was finished by his son. Mr. Cooke invented a new form of graduated dividing engine for his own use; constructed surveying instruments for the Ordnance Survey of India; made several astronomical clocks, some with sidereal time and solar time shown on the same dial; invented a machine for engraving figures on graduated instruments; and made, for the Ordnance Survey of India, the largest portable transit instrument ever constructed, with aluminium bronze axes. He died October 19th, 1868.

* COOKE, SIR WILLIAM FOTHERGILL, was born at Ealing, near London, in 1806; was educated at Durham School and Edinburgh University; entered the army of the East India Company in 1826, and filled various staff appointments till 1831. Returning to Europe, he studied anatomy and physiology at Paris and Heidelberg. In 1836 a circumstance occurred which determined his future course of life. Being at Heidelberg preparing wax anatomical models for the use of his father (who was professor of anatomy at Durham), Mr. Cooke attended a lecture given by Professor Müncke, during which was explained the action of an electro-magnetic telegraph, which had been invented some years previously by Baron Schelling. Struck with the possible applicability of the system to railways, which were then becoming important, Mr. Cooke devoted himself closely to the subject, constructed a pair of three-needle telegraphs, with key and reciprocal systems, invented a telegraph alarm and detector, made five clock-work telegraphs and alarms, and drew up a scheme for an organisation of railway telegraphs. In November, Faraday saw the instruments, and expressed a favourable opinion concerning them. Early in 1837, Mr. Cooke introduced the subject to the London and Birmingham (London and North-Western) Railway Company, and elucidated his plan by means of a pamphlet and instruments. The pamphlet, published at the end of 1838, sketches a comprehensive scheme:—"Plans for establishing on the most extensive scale, and at a trifling expense, a rapid telegraphic communication for political, commercial, and private purposes, especially in connection with the extended lines of railroad now in progress between the principal cities of the kingdom, through the means of electro-magnetism." In the spring of 1837 Mr. Cooke was introduced by Dr. Roget to Professor Wheatstone [WHEATSTONE, CHARLES, E. C. vol. vi. col. 1030], who had made many important discoveries and inventions connected with electric currents and their application to useful purposes. A patent was taken out in the joint-names of both inventors in May, 1837. In November, in accordance with terms settled by Sir Benjamin Hawes as arbitrator, a deed of partnership was executed. Circumstances, three years afterwards, rendered desirable a settlement of the question as to whom the honour was due of being the originator of practical electro-telegraphy. Sir M. I. Brunel and Professor Daniell were appointed arbitrators; all necessary documents and testimony were placed in their hands; and they gave their award April 27th, 1841, as quoted under WHEATSTONE, E. C. vol. vi. col. 1031. In 1843 the patents were by agreement made over wholly to Mr. Cooke, Professor Wheatstone to receive a royalty on the mileage of telegraph constructed. Lines were laid down on Cooke and Wheatstone's system from Paddington to West Drayton in 1838—9, from the Minories to Blackwall in 1840, from the terminus to Cowlairs station at Glasgow in 1841, and from West Drayton to Slough in 1842. In this year Mr. Cooke published a pamphlet entitled 'Telegraphic Railways; or the Single Way recommended by Safety, Economy and Efficiency, under the safeguard and control of the Electric Telegraph.' The system was extended by two or three short English and Irish lines in 1843, and from London to Southampton in 1844. In 1846 Mr. Cooke assisted in forming the Electro-Telegraph Company; Professor Wheatstone received payment for the reversion of his royalties, Mr. Cooke's remuneration depending rather on the actual profits of the company. In 1854 an article in the 'Quarterly Review,' on the electric telegraph, assigned the honours of invention in a marked way to Professor Wheatstone, ignoring the claims of Mr. Cooke. This led to the publication by Mr. Cooke of 'The Electric Telegraph: was it invented by Professor Wheatstone?' 1854; 'A Reply to Professor Wheatstone,' 1856; and 'Arbitration Papers and Drawings,' 1857. In 1866, when the success of the Atlantic Cable drew all men's attention, hints were thrown out in some of the public journals that such honours as the Crown could legitimately bestow were due to Professor Wheatstone, as the

organiser of practical telegraphy. This brought forward a renewed protest from Mr. Cooke, who appealed to the award of 1841 as defining clearly the relative degree of credit due to the two inventors. A volume of documents, in support of this claim, was published in 1868 by Mr. Cooke's brother, the Rev. T. F. Cooke, 'Authorship of the Electric Telegraph of Great Britain.' In 1867 the Society of Arts awarded the Albert Gold Medal to each of the two inventors, on equal terms. Mr. Cooke received the honour of knighthood November 11th, 1869, as had Mr. Wheatstone previously; and both names will go down to posterity in connection with one of the greatest inventions ever known.

COOPER, ABRAHAM, R.A., was born September, 1787, in Red Lion-street, Holborn. At this time his father was a tobaccoist in a small way; he afterwards kept a public-house in Holloway, but being unsuccessful, Abraham was sent out a mere boy to earn his own living. He at first obtained employment at Astley's Amphitheatre, and afterwards, it is said, as groom to Mr. Meux, the brewer. Being very fond of horses, he had long drawn them in a rude way, but he was now ambitious of painting a favourite horse of his master's, and knowing nothing of the mode of procedure, he bought a shilling book on Oil Painting (Laurie's Introduction), and taught himself to paint. The picture pleased Mr. Meux, who advised him to devote himself to art, and procured him many commissions for the portraits of horses. In this line he soon found ample employment, and especially for portraits of celebrated race-horses and hunters, in which he greatly excelled. He did not, however, venture to offer a picture for exhibition till 1812, when he sent a 'Horse and Goats' to the British Institution. From this time he was a pretty regular contributor both to the Royal Academy and British Institution, sending mostly battle pieces and skirmishes, and especially scenes from the wars of the Cavaliers and Roundheads, of whom he came to regard himself as in a special manner the painter. In 1816 he was awarded a premium of 150 guineas by the Directors of the British Institution for his 'Finished Sketch of the Battle of Ligny.' In 1817 he was elected Associate of the Royal Academy, and full member in 1820, the year following his exhibition of 'The Battle of Marston Moor.' The rest of his life was spent in the quiet pursuit of his profession. He was one of the first to avail himself of the new law by which an academian could withdraw from the list of active members and become an Honorary Retired Academician. This he did in the beginning of 1867. He died at his residence, Woodlands, East Greenwich, on the 24th of December, 1868. Mr. Cooper displayed to the last his imperfect technical training, but he was an excellent painter of horses; a diligent and conscientious artist, and a kind-hearted and worthy man. Among his best known pictures are—'The Battle of the Standard'; 'The Battle of Marston Moor'; 'The Battle of Naseby'; 'The Death of Harold'; 'The Battle of Waterloo'; and 'Hawking in the Olden Time'; all of which, with several others, have been engraved. He also painted, but without much success, various Oriental subjects.

COOPER, EDWARD JOSHUA, a distinguished amateur astronomer, while receiving his early education at the endowed school of Armagh, imbibed a taste for astronomy by frequent visits to the observatory of that city. After studying at Eton and at Christchurch, Oxford, he commenced a series of travels which continued through many years. He visited Italy, Egypt, Persia, Turkey, Germany, Scandinavia, and the North Cape, taking with him a telescope, sextant, and chronometer. During these journeys he made a large number of accurate determinations of the latitudes and longitudes of places. On his return to Ireland he built a fine observatory near his mansion at Markree, which he stocked with instruments of high excellence. In 1831 he purchased from Cauchoix of Paris an excellent object-glass of 13½ inches diameter, which Mr. Grubb fitted to an equatorial telescope 25 feet long, this being the first large telescope made of cast-iron. Another instrument of great value was a meridian circle by Ertel. The discoveries made by Mr. Cooper with these instruments were recorded in the Memoirs of the Royal Irish Academy and the Royal Astronomical Society, of which bodies, as well as of the Royal Society, he was a fellow: he was assisted in his researches by Mr. A. Graham. One of the discoveries made by them, or rather by Mr. Graham alone, was that of the asteroid Metis, on the 25th of April, 1848. Mr. Cooper's great work was an examination of the ecliptic stars, with a view to the tabulation of all those down to the 12th magnitude. The results were published by the aid of a government grant to the Royal Society:—"Catalogue of Stars near the Ecliptic, observed during

the years 1848, 1849, and 1850, 8vo, Dublin, 1856, &c. Mr. Cooper, who was awarded the Cunningham medal by the Royal Irish Academy for his star-tables, died on the 23rd of April, 1863.

COQUEREL, ATHANASE LAURENT CHARLES, for above thirty years pastor of the Reformed Church, and president of the Presbyterian Council of Paris, was born at Paris, August 27, 1795. He received his early education from his aunt, Helen Maria Williams, and completed it at the Protestant Institute, Montauban. In 1816 he was ordained minister, and the following year was invited to take charge of the Episcopal Chapel, Jersey, but was unable to sign the Thirty-Nine Articles. He settled in Holland, where for twelve years he preached with great success in the cities of Leyden, Utrecht, and Amsterdam. At the suggestion of Cuvier, he was in 1830 invited to Paris, and in 1833 entered the Consistory. From the first he acquired a high reputation as a preacher, which was greatly increased by his writings and personal character. In the general ferment caused by the Revolution of 1848, the Pasteur Coquerel thought himself called to take part in the settlement of public affairs, and offered himself, "a moderate Republican," as a candidate for the National Assembly. He was elected for the department of the Seine by 100,934 votes, two of his colleagues for the same department being the famous Roman Catholic divines Lacordaire and Lamennais. In the Assembly he distinguished himself by the moderation of his views, but his eloquence proved less successful than in the pulpit; he was, however, nominated a member of the Constitutional Commission. The *coup d'état* of the 2nd of December relegated M. Coquerel to his pastoral duties, and he did not again interfere with politics. In early life M. Coquerel was a Calvinist, but as he advanced in years, and especially after settling in Paris, he receded far from the doctrines of the great doctor of Geneva. Late in life his teaching assumed the character of a "spiritualistic philosophy," and he was even suspected of a tendency to rationalism. He retained, however, his popularity and influence to the end, continuing to be regarded as the greatest master of pulpit oratory in the Reformed Church of France. He died on the 10th of January, 1868. Besides eight volumes of sermons, his principal works are:—*Biographie Sacrée, ou Dictionnaire Historique, critique et moral, de tous les personnages de l'Ancien et du Nouveau Testament*, 8vo, Paris, 1837; *Histoire Sainte et analyse de la Bible, avec une critique et un ordre de lecture*, 12mo, Paris, 1839; *Réponse au livre du Dr. Strauss: la Vie de Jésus*, 8vo, 1841; *Orthodoxie Moderne*, 12mo, 1842; *Le Christianisme expérimental*, 12mo, 1847; *Christologie; ou Essai sur la Personne et l'Œuvre de Jésus-Christ*, 2 vols. 1858. Several of these works have been translated into English, Dutch, or German. He also established and edited the periodicals entitled *Le Protestant*, 1831, which lasted only six months; *Le Libre Examen*, 1834–36; and *Le Lien*, 1841, afterwards edited by his son.

* ATHANASE COQUEREL, born about 1819, who, like his father, acknowledged his obligations for his early training to his aged relation, Helen Maria Williams, and like him became a pasteur of the French Reformed Church. Without attaining celebrity equal to his father as an orator, his sermons have been greatly admired for their vigour, and depth of thought, and beauty of expression. In doctrine he advanced beyond his father as a "liberal Protestant," and the offence his teaching gave to the orthodox culminated on his publishing an examination of Renan's *Life of Jesus*. In May, 1864, he was solemnly suspended from his ministerial functions by the Consistory of Paris, M. Guizot being one of his most earnest opponents. Outside the orthodox communion he has, however, continued his pastoral duties with eminent success. In addition to numerous sermons, pamphlets, and elementary works, he has published *Jean Calas et sa Famille: Étude historique d'après les documents originaux*, 12mo, Paris, 1858; *Précis de l'Église Réformée de Paris, d'après les documents en grande partie inédits*, 8vo, 1862; *Le Catholicisme et le Protestantisme considérés dans leur Origine et leur Développement*, 8vo, 1864, &c. In 1858 he printed a remarkable series of letters in *Le Lien*, on the influence of Catholicism on Italian art, which he afterwards remodelled and published separately, and which were translated into English under the title of *The Fine Arts in Italy in their religious Aspect*, by Edward and Emily Higginson, with an English preface by the author, 8vo, 1859.

COQUES, GONZALES. The recent researches of M. Th. Van Lerius have proved that the real name of this eminent Flemish painter was Coo or Cox; that he was born at Antwerp in December, 1614 (he was baptised December 8); and that the

date 1618, hitherto assigned to his birth on the faith of an inscription on a portrait painted by Coques himself is erroneous.—(*Supplément au Cat. du Musée D'Anvers*, p. 71.) The archives of the confraternity of St. Luke show that Gonzales was in 1627 apprenticed to Peter Breughel, and in 1640 admitted master. At this time he signed his name Cox; three years later, on his marriage with a daughter of David Ryckaert, the painter (whose pupil he is supposed to have been), he wrote it Coques.—(*Van Lerius*.) Gonzales acquired fame chiefly as a portrait painter. Some contemporary Flemish verses compare him with Apelles, say that kings eagerly sought after his works, and that though England may boast of Holbein, and the Netherlands, Vandyck, in great works, in small none can equal Gonzales. His small whole-length portraits are, indeed, of exceeding beauty; full of life and character, excellent in composition and colour, and painted with singular delicacy, brightness, and vigour. He especially excelled in small full-length groups. One of his best, 'the Family of M. Verhelst,' is in the Royal Collection, and the Marquis of Hertford has another, admirably painted, called the 'Music Lesson.' Generally his works are rare both on the Continent and in this country. The National Gallery is without a specimen; the Museum of Antwerp, his native city, has only one. Gonzales died on the 18th of April, 1684, and was buried in the church of St. George, alongside his first wife; his second wife, who only survived him till November, was buried in the Cathedral, Antwerp.

CORDIER, PIERRE LOUIS ANTOINE, French geologist, was born March 31, 1777, at Abbeville. His earlier education was received in his native town, and his later, commencing from 1794, in Paris. In 1795 he entered the École des Mines, and in 1797 he was appointed a supernumerary mining engineer, in which capacity he accompanied his master, Dolomieu, in his Alpine explorations. Dolomieu had so great a liking for young Cordier, that he calls him his adopted son, and states that although a young man, he is one of the best mineralogists of his day. He accompanied the French army in Egypt along with Dolomieu, and when the latter proposed to return to Europe on account of ill health, Cordier again associated himself with him. On their voyage, however, the vessel was driven on to the Neapolitan coast, and both were thrown into prison by the Neapolitan officials. Cordier was liberated at the end of three months, and used his freedom in endeavouring to procure the release of his friend, but without avail. Dolomieu's case was taken up by the scientific world generally, but his imprisonment lasted two years. Cordier returned to France, and devoted himself to his studies. A favourite method of acquiring knowledge was by excursions of greater or less duration which he undertook almost every year; and in executing these he visited almost every spot of geological interest in Europe. These excursions were conducted with extraordinary care and foresight, the object to be pursued, the country to be examined, the persons to be consulted, being all arranged beforehand; and in order to secure liberty of action and the utmost economy of time, he seldom allowed any one to accompany him. He was a strong, active man, and did an immense deal of good work in this way. In 1819 he was appointed professor of geology of the Museum of Natural History at Paris, in succession to Faujas St. Fond; and one of the principal tasks he set himself was to form a useful geological museum. When he first became professor there were only 1500 specimens of very little value, without any arrangement, and without any indication as to what they were, or the circumstances under which they were found. He communicated with scientific men of all countries, with a view to obtaining well characterised objects, and at the time of his death he had brought together about 200,000 specimens, so well arranged, ticketed, catalogued, and described as to constitute the collection one of the finest of its kind in existence. Some of the catalogues, which were drawn up by himself, are valuable works of reference. The method of classification employed was the result of many years of thought, but he never published a full account of it. He has some notice of it in his *Traité des Roches*, but the fullest record will be found in the *Description des Roches composant l'Ecorce Terrestre, et des terrains cristallins constituant le sol primitif*, 1868, which was drawn up by his pupil, Ch. D'Orbigny, partly from Cordier's notes.

In 1822 M. Cordier was elected a member of the Academy of Sciences, in place of Haüy, and he took an active part in all its proceedings, but chiefly in drawing up instructions for geological observations in almost every quarter of the globe. In 1832 he became inspector-general of mines, having already passed

through the subordinate grades. For many years he held several Court offices, amongst others that of State counsellor. In 1859 he was nominated grand officer of the Legion of Honour. Endowed with remarkable vigour of constitution, he retained his activity of mind and body up to the very last; and even shortly before his death he seemed to expect his decease was then far off, since he had scarcely ever known a day's illness, and was still fully equal to his numerous official duties. When approaching his 85th year he was full of an excursion to Scotland, which he was planning for the ensuing autumn, but he was soon after attacked by some stomach complaint, which brought him to his end on March 30, 1861. His scientific writings are very numerous, comprising 130 items, and extend over a wide range of subjects. They are almost entirely made up of papers, reports, and occasional notices; and it has been regretted that he did not write some large work on geology. He has described a great number of minerals, and in one of them, named *Cordierite* by Haüy, but usually known as *dichroite*, he discovered the optical phenomenon known as dichroism. This property consists in the mineral appearing to be of different colours when looked through in different directions. In the examination of rocks and minerals he contrived new methods of analysing, whereby he was able to obtain a precision of description unknown before his time. In determining rocks he was probably unrivalled; and although his classification has its defects, it is regarded by some as the most complete and logical yet proposed. One of his finest memoirs is that entitled '*Essai sur la température de l'intérieur de la terre*,' in '*Annales des Mines*,' vol. ii. pp. 53—138 (1827). But his great work, as we have already said, is the museum which he formed, and it is there only that one can appreciate the immense extent and accuracy of his knowledge.

(*Notices of the Life of P. Cordier have been published by Charles Read, Comte Joubert, and Victor Raulin, the last mentioned being in the Actes Soc. Linn. Bordeaux*, vol. xxii.)

CORDUS, VALERIUS, a German botanist, was born February 18, 1515. His father, who was himself something of a botanist, superintended his early education. He afterwards went to the then recently established University of Marburg, and he was the first person invested by it with the degree of bachelor. He subsequently attended the lectures of Melanchthon at Wittenberg, and became intimately acquainted with Conrad Gesner. He then went to Leipzig, where he conceived the idea of reforming pharmacy, and with that object he spent several years in exploring Europe on foot, and surveying its botanical, zoological, and mineralogical productions. Wherever he went he was admired for his modesty and for the immense scope of his knowledge. While journeying in Italy he was seized with a fever, which terminated his existence at Rome, September 25, 1544. His career promised to be so fruitful that the learned men of the day considered his early death to be a public calamity. His writings include the following works:—'*Dispensatorium pharmacorum omnium quæ in usu potissimum sunt* ; ex optimis auctoribus tam recentibus quam veteribus collectum, ac scholiis utilibus illustratum,' 8vo, Nürnberg, 1535, 8vo, Leyden, 1626, and translated into French, 12mo, Lyon, 1575; '*Annotationes in Pediani Dioscoridis, De Materia Medica*,' 1549; and a few small works in which he described many new plants, and announced that the ferns were reproduced by means of spore cases on the backs of the fronds. An edition of his works was edited by Gesner, folio, Strasburg, 1562.

CORMENIN, LOUIS MARIE DE LA HAIE, VICOMTE DE [E. C. vol. ii. col. 388]. The Vicomte De Cormenin was made a member of the Council of State when that body was reconstituted by Napoleon III., and an ordonnance of the Emperor in 1855 opened to him the doors of the Institute. But he had lost his old influence with the reading public, and his '*Droit de tonnage en Algérie*' attracted little notice. His last years were remarkable for his efforts in promoting various benevolent objects. He died in Paris, May 7, 1868, in the 81st year of his age.

CORNELIS VAN HAARLEM, an eminent Dutch painter, was born at Haarlem in 1562, studied painting under Pieter le Long, and afterwards in the atelier of G. Coignet, at Antwerp. He early made himself known by some portraits and other pictures of large size. He painted many scriptural subjects, but preferred such as admitted the introduction of nude figures, and he treated them in a coarse realistic manner. His '*Bathsheba Bathing*,' in the Dresden Gallery, is a good example of his style. He also painted Venuses, Dianas, and other mythological personages and themes, but with little classical feeling. He died at

Haarlem in 1638. He must not be confused with the subject of the following article.

CORNELISSEN, or CORNELISZ, JACOB, a native of East Zaandam, in North Holland, was born about 1480. Little is known of his life. He lived in Amsterdam, painted religious pieces and occasionally portraits, and practised engraving on wood. C. Van Mander says that he enjoyed a great reputation; was employed to paint several altar pieces; was the second master of Jan Schoorel, and that his son Dirk was also a good painter, especially of portraits. The known works of Jacob Cornelissen, which are in the manner of Lucas Van Leyden, are rare, but some doubtless pass under more familiar names. In the gallery of Cassel is a '*Triumph of Religion*,' dated 1523, formerly attributed to Mabuse; and the Museum at Amsterdam has an '*Herodias*,' dated 1524. Our own National Gallery possesses two small panels by him, (No. 657), '*Portraits of a Dutch Gentleman and Lady*,' who are represented kneeling with their patron saints, Peter and Paul, standing behind them. Bartsch, Brulliot, and Passavant enumerate 127 woodcuts of his engraving. The most noteworthy are a series of 12, representing the '*Passion of Our Lord*,' dated 1511—14. Cornelissen was still painting in 1553. He is believed to have died between that year and 1560.

CORNELIUS, PETER VON [E. C. vol. ii. col. 391]. The most famous of modern German painters lived to see the great school he had formed, and which he had hoped was to regenerate the art of the Fatherland, fast losing its hold on the public sympathy, and the new generation of painters ignoring the principles he held so dear. He died at Berlin on the 7th March, 1867, in the 80th year of his age. His great work, the cartoons for which are described in col. 393 of the memoir above cited, remains, and is likely to remain, unpainted, the Royal Mausoleum which it was intended to adorn not having been built.

* COROT, JEAN BAPTISTE CAMILLE, a leading French landscape painter, was born at Paris in July, 1796, and was brought up to a commercial life, but in 1822, being able to follow his own inclination, entered the atelier of Michallon, and on his death removed to that of Victor Bertin. He afterwards stayed for several years in Italy, where, among the works of the great masters, and still more in solitary converse with Nature, he formed his style, and laid the germs of that peculiar theory of art of which his works are the illustration. Though avowedly a landscape painter, and commencing his career with views in Italy and the like, almost all the pictures of his mature and later years are of a poetical or subjective character, with such titles as '*A Landscape*,' '*A Dance of Nymphs*,' '*Souvenir de Marcoussy*' (a celebrated picture purchased by the Emperor), '*An Idyll*,' '*Sunset*,' '*Sunrise*,' '*L'Incendie de Sodome*,' '*Le Christ au Jardin des Oliviers*,' '*Dante et Virgile*,' '*Macbeth*,' and so forth, the personages in these last being entirely subservient to some effect of light and shadow or atmosphere. M. Corot, wrote a smart French critic, "imitates nothing, not even Nature, and is himself inimitable;" which, in its way, is true. As direct imitations of Nature his landscapes would be absurd, and the colour—sometimes mere misty monochrome—is often detestable; but over all is shed a tender poetic feeling—of which his imitators make sad havoc. M. Corot received a medal of the 2nd class (paysage) in 1833, of the 1st in 1848 and 1855; and the Cross of the Legion of Honour in 1846.

CORT, HENRY, to whom the greatness of the iron manufacture in this country is mainly due, was born at Lancaster in 1740. Little is known of him till 1765, when he was settled in London as a navy agent. He became cognisant of the fact, that on account of the bad quality of English iron, the Government refused to employ it at the dockyards, preferring to give 35*l.* per ton for iron from Sweden and Russia. He commenced experiments on new modes of manufacturing iron; and the success attained induced him to establish a small factory at Fontley, near Fareham, Hants. He entered into partnership with Samuel Jellicoe, son of the Deputy Paymaster of Seamen. In 1783-84 the firm took out two patents, for inventions due to Cort. Numerous minor improvements were specified; but the two processes which chiefly engaged attention were *puddling* and *rolling*. To drive off the carbon from crude iron, Cort devised the puddling furnace, in which the heat of flame is reverberated down on the molten mass, which mass is stirred about until the carbon is driven off, the slag separated, and the iron brought into a pasty state. In the rolling, Cort passed red-hot iron between grooved rollers, instead of hammering it, to make it into bars, plates, &c. Neither process was absolutely new; but they were never of much importance until Cort took up the matter. In

1787 the Government caused experiments to be made on Cort's iron; and finding it both better and cheaper than Swedish, they adopted it. The ironmasters from other districts came to Fontley to see the processes, and agreed to pay 10s. per ton royalty for the use of the patents; Crawshaw of Cyfarthfa, Homfray of Pen-y-darran, and Reynolds of Coalbrookdale, were among those who so acted. New ironworks were established by the partners at Gosport, where profits and royalties brought in large returns. But the whole enterprise suddenly collapsed. Adam Jellicoe, the paymaster, had advanced large sums to the firm; it was not known till his death, in 1789, that he had obtained this money by defrauding the Government. The whole of the property—works, patents, and royalties—was seized by the law officers of the Crown; the affair was, however, so badly managed that Cort was ruined, the Government realised scarcely anything, and the ironmasters all over England used Cort's process without paying any more royalties to any one. Cort failed in all his attempts to obtain a renewal or restitution of the patent, although he would have received 55,000*l.* in royalties alone in 1789–91, had not the break-up occurred. The Government granted him a pension of 200*l.* a-year in 1794, in consideration of his family of twelve children; but he died a broken man in 1800. The equitable claims of his family have since frequently been advocated, but with very slender results. His widow obtained a pension of 125*l.* in 1800; the ironmasters subscribed 900*l.* for the family in 1811; an annuity of 60*l.* was granted to his last surviving son in 1856; and a sum of 200*l.* was given in 1858 (out of the royal bounty) to his three surviving daughters. Meantime, the iron manufacture in Great Britain has risen from 90,000 tons to 5,000,000 tons annually, in great part owing to the introduction of Cort's puddling furnaces and grooved rollers.

* CORTAMBERT, PIERRE FRANÇOIS EUGÈNE, a French geographer, was born at Toulouse, Oct. 12, 1805. He has taught geography at several of the colleges of Paris, especially the Charlemagne Lyceum, and is principally known for his numerous excellent school books on geography, some of which have gone through several editions. Amongst others we may cite 'Cours de Géographie,' 1st ed., 1829; 5th ed., 1864; 'Elements de Cosmographie,' 8vo, 1859; 'Traité élémentaire de géographie physique et politique,' 2 vols. 1852; and a series of small atlases in 8vo and 12mo, published in 1861. Amongst works of a more erudite character may be mentioned his 'Tableau générale de l'Amérique. Rapport sur le progrès de l'ethnographie et de la géographie en Amérique pendant les Années 1858 et 1859,' 8vo, 1860; and a similar work on Cochinchina, 8vo, published in 1862. He is also the author of many of the geographical articles in the 'Annuaire Encyclopédique.' His son, RICHARD CORTAMBERT, born at Paris in 1836, is the secretary of the Geographical Society of Paris, and is connected with the geographical department of the imperial library. He has published several light books on geography.

CORTOT, JEAN PIERRE, an eminent French sculptor, was born at Paris, April 20, 1787. He was a pupil of Bridan, and having carried off the grand prize of the Institute, was sent to complete his studies at Rome, where he stayed several years. He early acquired great celebrity, was decorated in 1824, and in 1825 was elected member of the Académie des Beaux-Arts, and one of the professors in the École Royale. He died on the 12th of August, 1843. M. Cortot produced a vast number of works, which comprised the usual range of classical, mythological, and allegorical subjects, of the kind in his day so much in favour with Frenchmen; religious compositions, monumental pieces, and portrait busts and statues. He was much employed in the execution of public works, his chief productions being Government commissions. Among these may be mentioned, as illustrating his range of subjects, the grand bas-relief in the pediment of the Chamber of Deputies; the figures of Brest and Rouen on the monument in the Place de la Concorde; a Soldier of Marathon in the garden of the Tuileries; a statue of Justice for the Palais de la Bourse; a Daphnis and Chloe in the Museum of the Luxembourg; the large bas-relief of the Resurrection in the church of Calvary; a statue of Corneille at Rouen; one of Marshal Lannes at Lectoure; and many other similar figures, groups, and bas-reliefs.

COSIN, COSINS, COSYNS, or COZENS, JOHN, a learned Bishop of Durham in the 17th century, was born on the 30th of November, 1594, at Norwich, in the Free Grammar School of which city he was educated till the age of fourteen. In 1610 he was entered of Caius College, Cambridge, of which he became successively scholar and fellow; and where he regularly took his degrees in arts. When about 20 years of age he was

appointed first librarian, and afterwards secretary, to Dr. Overall, Bishop of Coventry and Lichfield, who encouraged him to the study of divinity. Being left without a patron by the death of Dr. Overall in May, 1619, who at that time had been not quite a year Bishop of Norwich, Mr. Cosin, who had been admitted to holy orders, was soon after appointed domestic chaplain to Dr. Richard Neile, Bishop of Durham, afterwards Archbishop of York. He was collated to the tenth stall in the cathedral church of Durham, on the 4th of December, 1624; and in September, 1625, to the archdeaconry of the East Riding of the county of York. On the 20th of July, 1626, he was further collated by Bishop Neile to the rich rectory of Brandspeth in the diocese of Durham; and in the same year took the degree of Bachelor, and in 1628 that of Doctor of Divinity. He was employed by Charles I. to draw up a manual of devotion for the maids of honour who attended the Queen Henrietta Maria, a task which he fulfilled by the production of 'A Collection of Private Devotions: in the Practice of the Ancient Church, called the Hours of Prayer. As they were much after this manner published by Authority of Q. Eliz. 1560. Taken out of the Holy Scriptures, the Ancient Fathers, and the Divine Service of our owne Church,' 12mo, London, 1627, ninth edition, 12mo, London, 1693, and since frequently reprinted. This book was very obnoxious to the Puritans, and was severely animadverted upon by Henry Burton in his 'Examination of Private Devotions; or the Hours of Prayer,' &c., 4to, London, 1628; and by William Prynne, in his 'Brief Survey and Censure of Mr. Cozens, his couzening Devotions,' 4to, London, 1628. His intercourse with Laud, then Bishop of Bath and Wells, and with other reputed high churchmen, together with the exactness of ritual upon which he insisted at Durham, also added to the suspicion of Popish tendencies with which Cosin was regarded by the Puritans. In 1628 he was concerned, with other members of the chapter of Durham, in prosecuting Peter Smart, one of the Prebendaries, for preaching a seditious sermon in the cathedral, directed against those bishops and divines who were thought to favour Papacy, from the text, Ps. xxxi. 7, "I hate them that hold of superstitious vanities." Refusing to recant, Smart was degraded, and by sentence at common law deprived of his prebend and livings. On the 8th of February, 1635, Dr. Cosin was admitted to the Mastership of Peter-House, Cambridge; and served as Vice-Chancellor of the University in 1639. On the 31st of October, 1640, he was nominated to the Deanery of Peterborough, and was installed on the 7th of November following. Three days after, Peter Smart, the dispossessed prebendary, who seems erroneously to have regarded Dr. Cosin as his prosecutor-in-chief, retaliated by presenting a petition to the House of Commons, in which he complained of the Doctor's superstition and innovations in the church of Durham, and of his own severe prosecution in the High-Commission Court. A majority of the House of Commons received Smart's petition with favour, and by a vote of the whole House, on the 22nd of January, 1641, sequestered Dr. Cosin from his ecclesiastical benefices. On the 21st of March, they sent up to the House of Lords twenty-one articles of impeachment against him, for the introduction of various supposed Popish observances in Durham Cathedral, which he afterwards either denied to exist, or averred that he did not originate. He was dismissed by the Lords upon his putting in bail for his appearance; but he was not summoned to appear again. Some time after, having exasperated the Puritans by being concerned with others in sending the plate of the University to the king at York, he was ejected from his mastership, by a warrant from the Earl of Manchester, dated March 13th, 1643; and being thus deprived of the last of his preferments, he left the kingdom and proceeded to Paris, where he formed a congregation, and held several discussions with the Jesuits and Romish priests. He officiated as chaplain to the Protestant members of Queen Henrietta Maria's family; and is said to have rendered essential service to Charles II., and to the Church of England, when both were in danger from the machinations of the Papists. At the Restoration, in 1660, Dr. Cosin returned to England, and took possession of all his preferments, the Mastership of Peter-House being restored to him on the 3rd of August; but before the year was out he was raised to the See of Durham, to which he was consecrated on the 2nd of December. As a bishop, Dr. Cosin was remarkable for his munificence, and it is computed that during all the incumbency of his see, he spent 2000*l.* a-year upon ecclesiastical, educational, charitable, and other benevolent objects. He died at his house in Pall-Mall, London, on the 15th of January, 1672, after having, for the last two years of his life, suffered grievously from the stone. For

some time his remains were deposited in a vault in London; but on the 29th of April, 1672, they were finally interred at Bishop's Auckland, Durham, in the chapel belonging to the palace. The particulars of his life have been preserved by Dr. Isaac Basire, Archdeacon of Northumberland, in a small volume entitled 'The Dead Man's Real Speech. A Funeral Sermon preached on Hebr. xi. 4, upon the 29th day of April, 1672. Together with a Brief of the Life, Dignities, Benefactions, Principal Actions, and Sufferings; and of the Death of the late Lord Bishop of Durham,' 12mo, London, 1673, and in Dr. Thomas Smith's 'Vita reverendissimi et eruditissimi viri Joannis Cosini Episcopi Dunelmensis,' which is inserted in that writer's 'Vitæ quorundam eruditissimorum virorum,' 4to, London, 1707. The 'Works of Bishop Cosin,' which are at present chiefly of historical interest, and which are conversant about devotion, theology, church order, and controversy, were for the first time collected and published as part of the 'Library of Anglo-Catholic Theology,' in five volumes, 8vo, Oxford, 1843-1855; of which vol. i. (1843) contained 'Sermons;' vol. ii. (1845), 'Miscellaneous Works;' vol. iii. (1849), 'A Scholastic History of the Canon of Holy Scripture;' vol. iv. (1851), 'Miscellaneous Works;' and vol. v. (1855), 'Notes and Collections on the Book of Common Prayer.' The 'Life of Bishop Cosin,' published in the first volume of this collection, is merely a transcript of that which occurs in the 'Biographia Britannica.'

COSMAS, an Alexandrian monk, who lived in the 6th century of the Christian era. In early life a merchant, he travelled far, and, being of observant habits, acquired so much geographical knowledge during his travels through North Africa and India, as to be commonly known as Indicopleustes (the Indian voyager). He wrote a description of the world as known in his time; but the work has been lost. His contemporaries treated the accounts given in it of the burning sands of Africa as fables, and this led to his writing a second work, 'Τοπογραφία χριστιανική,' which still exists. This latter work is of great interest, on account of the information which it gives us as to the state of geographical knowledge in his day. He contended against the sphericity of the earth, which he maintained was of a long rectangular shape, surrounded by high walls, and that towards the north pole were high mountains, around which the solar and sidereal systems revolved. The chief value of the book lies, however, in his narrative of what he himself saw in his travels. He refers at greater or less length to Abyssinia, Zanguebar, Arabia, India, and Ceylon; and he has a notice of China. His description of the natural productions of these various countries are said to be generally accurate. His account of Abyssinia seems to indicate an intimate acquaintance with that country. The whole work was first published by B. de Montfaucon in vol. ii. (pp. 113-346) of his 'Collectio Nova Patrum et Scriptorum Græcorum,' fol., Paris, 1706; and again by Gallandi, in vol. ix. of the 'Bib. Vet. Patrum,' Venice, 1765.

* COSSON, ERNEST ST. CHARLES, French botanist, born at Paris, July 22, 1819. The persons who had most influence on him during his educational career were the celebrated botanists, Jussieu, Richard and Brongniart. In 1847 he gained his degree of M.D., and in 1851 joined the Algerian scientific commission, and from 1852 to 1858 he was chiefly occupied in exploring Algeria. He has been secretary and vice-president of the Botanical Society of France, and librarian of the Acclimatization Society. His writings chiefly relate to the flora of Algeria, and of the neighbourhood of Paris; and have mostly been drawn up in conjunction with other botanists. Amongst the writings which came from his own pen may be mentioned numerous articles in the 'Bulletins' of the Botanical Society of France; 'Considérations générales sur le Sahara Algérien, et ses cultures,' 8vo, Paris, 1859; and 'Rapport sur un voyage botanique en Algérie, de Philippville à Biskra et dans les Monts Aures, entrepris en 1853,' 1856. In conjunction with M. de St. Pierre, he has drawn up 'Flore descriptive et analytique des environs de Paris,' 12mo, 1845; 2nd ed. 1859, and two or three other works referring to the same subject. In union with M. Durieu de la Maissonneuve he commenced a 'Flore de l'Algérie,' 4to, in 1854, but which is not yet finished.

COSTA, LORENZO, an able Italian painter, was born at Ferrara in 1460; was the scholar of Francesco Cossa, and a fellow student with Benozzo Gozzoli; settled in Bologna and became the assistant of Francia; removed to Mantua, where he was patronised by Francesco Gonzaga, and where he died, March 5, 1535. Costa's style is formed on that of Francia, but is less earnest and animated. He had, however, great technical

skill, and his teaching exerted considerable influence on the schools of Mantua and Bologna. The National Gallery has a large and unusually fine painting by Lorenzo Costa (No. 629), 'The Madonna and Child Enthroned with Angels.' It is in five compartments, and has on the right and left figures of Saints John the Evangelist and Philip, John the Baptist and Peter. It was formerly the altar-piece of the Oratorio delle Grazie, at Faenza.

* COSTA, SIR MICHAEL [E. C. vol. vi. col. 988].

* COSTE, JEAN JACQUES MARIE CYPRIEN VICTOR, was born at Castries, in Hérault, May 10, 1807. Stimulated by the attention which the Germans were giving to the development of the egg and embryo, he devoted himself to the same line of study, and in 1834 produced his 'Recherches sur la Génération des Mammifères et la Formation des Embryons,' which at once established his reputation, and in recognition of the merits of the work the Academy of Sciences awarded him a gold medal. Shortly after he was requested to give lectures on the subject at the Museum of Natural History, and these were so successful that a special chair was created for him in the College of France. These lectures were published under the title of 'Cours d'embryogénie comparée,' 8vo, 1837, accompanied by an atlas in 4to. At a latter date he brought out a more elaborate work, entitled 'Histoire Générale et particulière du développement des corps organisés,' 2 vols. 4to, with an atlas in folio, 1847-60, under the auspices of the Minister of Public Instruction. In addition to these he has written several papers on subjects connected with embryology. From about 1849 his attention began to be directed to the preservation of fishes and other marine animals, with a view to ensuring their rapid multiplication and observing their habits. In company with Milne-Edwards he visited the piscicultural establishments of MM. Gehin and Remy in the Vosges, and induced the French Government to establish something similar at Huningue, but on a much larger scale. The management was entrusted to Coste, and in the course of a short period he introduced upwards of half a million salmon and trout into the Rhône; and restocked some of the lakes and rivers of France with these and other fish. He also took an active part in promoting the rearing of edible crustaceans and oysters. In 1853 he published 'Instructions Pratiques sur la Pisciculture, suivies de Mémoires et de Rapports sur le même sujet,' 12mo, of which more than one edition has since appeared. In 1855 he issued 'Voyage d'Exploration sur le littoral de la France et d'Italie,' 4to, of which a second edition appeared in 1861. It relates mainly to the efforts made to cultivate fish. In 1862 he was appointed inspector-general of fisheries. In 1869 he published 'De l'Observation et de l'Expérience en Physiologie.'

* COTTA, BERNHARD, German geologist, was born at Kleinen Zillbach, Oct. 24, 1808. His father, Henri, belonged to an old Thuringian family, and was well known as an authority and a teacher in all matters connected with forestry. He himself taught his son the natural sciences, more especially mineralogy and geology, and in due course sent him to the School of Mines at Freiberg, and then in 1832 to Heidelberg. On leaving Heidelberg Cotta went to Tharand, near Dresden, where his father was director of an academy, the principal object of which was to teach forestry, and in 1841 became the secretary of the academy. From 1832 to 1842 he was engaged along with Naumann in executing a fine geological map of Saxony; and this finished, he undertook a similar map for Thuringia, which occupied him four years. In 1842 he succeeded Naumann as professor of geognosy at the School of Mines at Freiberg. His writings are numerous, and extend over a wide range of subjects. His earliest scientific paper was 'Beitrag zur Untersuchung über die Entstehung des Kammerbühls bei Eger,' in Oken's 'Isis' for 1827. In 1832 he published a 'Monographie des Dendrolithes,' Dresden, which attracted some attention. Amongst his other works may be mentioned 'Anleitung zum Studium der Geognosie und Geologie,' 1839, of which a third edition appeared in 1849; 'Gangstudien,' 1847; 'Briefe über Alex. v. Humboldt's Kosmos,' Leipzig, 1848-51, of which he wrote the first part only; 'Ueber den innern Bau der Gebirge,' 8vo, Freiberg, 1851; 'Die Gesteinslehre,' 8vo, Freiburg, 1855, which has passed through two or three editions in its German form, and was translated into English by P. H. Lawrence, and published in 1866 under the title of 'Rocks Classified and Described.' He was one of the writers of the 'Gäavon Sachsen,' 1843. He has also contributed numerous papers on rocks, fossils, and geology to the 'Annales des Mines,' Leonhard v. Broun's 'Neue Jahrbuch für Mineralogie,' &c. From 1842 to 1847 he edited the 'Forst-

und Landwirthschaftliches Jahrbuch der Academie zu Tharand.' He wrote a book called 'Gedanken über Phrenologie,' which was published in 1845; and has contributed a great many articles to various periodicals with the object of popularising his views on palaeontology and geology. These views are, in the main, that the earth and its inhabitants have developed progressively according to certain natural laws; the earth has been gradually cooling from an original molten condition, and the creatures have been gradually evolved from a simple to a more and more highly complex structure culminating in man.

COUCH, JONATHAN, a well-known zoologist, was born March 15, 1788, at Polperro, in Cornwall, with which county he was connected all his life. By profession he was a surgeon, but all his leisure time was spent in investigating the natural history of Cornwall. No branch of zoology escaped his attention; but he gave most time to fishes. One of his earliest papers was entitled 'Some Particulars of the Natural History of Fishes found in Cornwall,' in the 'Linnean Transactions,' xiv. pp. 69—92, 1825; and his earliest, or one of his earliest, books was a 'History of the Fishes of Cornwall.' Yarrell repeatedly refers to him as one of his most valued correspondents on fish lore, and much of the information thus obtained was incorporated in Yarrell's 'History of British Fishes,' 1836. For many years he himself collected materials for a similar 'History,' which was at length published in four volumes under the title of 'The History of the Fishes of the British Islands,' 8vo, London, 1862—65. The work contains an immense mass of information on the habits of British fishes, and is illustrated with nearly 250 coloured plates. He wrote a few other works of minor importance, and contributed more than sixty papers to the various scientific periodicals, such as the 'Transactions of the Polytechnic Society of Cornwall,' 'Transactions of the Geological Society of Cornwall' (of both which bodies he was a distinguished member), 'Annals and Magazine of Natural History,' &c. He was a fellow of the Linnean and Zoological Societies of London. He died at Polperro, April 13, 1870.

* COURBET, GUSTAVE, celebrated French landscape painter, was born at Ornans, Department of Doubs, on the 10th of June, 1819. He was educated for the bar, but when at liberty to pursue his own course, commenced the study of painting. He took lessons of MM. Steuben and Hesse, but formed his style and method of painting by close study of the works of the old Venetian and Flemish masters, and working directly from nature. His first picture was sent to the Salon in 1844, but it was only by degrees that M. Courbet evolved the art-theories and practice which have given him so conspicuous a place in the artistic world of Paris. M. Courbet was making his way as a promising painter at the outbreak of the Revolution of 1848. He embraced with ardour the cause which promised to free the minds as well as the bodies of men from the yoke of law and precedent. He proclaimed that new times required new principles. The artist should not adopt the practice of a school or copy the manner of a master, but, apart from system or precedent, follow the promptings of his own individuality. He became the acknowledged leader of the "realistic" school of landscape painting. M. Courbet exhibited a number of large paintings as illustrations of his principles, and for some time those who cared for such things were amused by the fiery assaults of the critics, and the energy with which they were replied to by M. Courbet and his friends. In its way, though pursued with greater ardour, it resembled the strife over Pre-Raphaelism in our own country; and in Paris, as here, the artistic innovators had on their side the majority of the younger journalists. M. Courbet was charged, like the Pre-Raphaelites, with being a worshipper of ugliness, but he insisted that he had no such devotion; his principle was that of representing what he saw, and all that he saw, in the way in which he saw it, and rigorously abstaining from selection. "The basis of realism," he wrote, "is the negation of the ideal, and of all that follows from it." Unhappily, at least in his figures, he was so far unfortunate in his models that in avoiding the conventionally graceful he too often stumbled upon deformity, and laid himself open to the sarcasm of his critics. His real power is best seen in his landscapes. He paints solidly and firmly, but his handling is peculiar and wayward, and the colouring far from agreeable, whilst from his habit of rendering everything with equal emphasis, his paintings are, as has been often said, rather studies than pictures. His landscapes are numerous, frequently of large size, and embrace such subjects as a 'Paysage des Bords de la Loue,' 'Vue et Ruines du Château de Scey,' 'L'Enterrement d'Ornans,' 'Les Communaux de Chassagne,' an effect of

sunset, &c. A large proportion of his works, however, belong to the class of *genre*, such as 'Baigneuses,' one of his most defiant productions; 'Les Cribleuses de Blé,' 'Les Demoiselles de Village,' 'Les Demoiselles des Bords de la Seine,' another wilful departure from Parisian conventional art; 'Combat de Cerfs,' and a wide range besides. He has also painted many portraits, chiefly of notable friends, both male and female, whose countenances he has seldom rendered more amiable.

M. Courbet obtained a medal of the second class (*genre et paysage*) in 1849, in 1859, and in 1861; and in June, 1870, was awarded the Cross of the Legion of Honour. This, however, to the astonishment of the Parisian public, he peremptorily refused to accept, alleging, in a letter he published, that as a republican he could receive no honour from the Government of the Emperor, and that as an artist he looked for his only reward from the public. As a consequence, M. Courbet was for nine days the best abused and most talked-of man in Paris. But, the incident forgotten, he has returned to his pencils, from which he is not likely to be again diverted by a similar offer.

COUSIN, VICTOR [E. C. vol. ii. col. 407]. The principal works published by M. Cousin after the date of the above memoir were 'La Société Française au XVII^e Siècle, d'après le Grand Cyrus de Mlle. de Scudéry,' 2 vols, 8vo, 1858; a recasting of his 'Cours de l'Histoire de la Philosophie,' under the title of 'Histoire Générale de la Philosophie depuis les temps les plus reculés jusqu'au XVIII^e Siècle,' 8vo, 1863; 'La Jeunesse de Madame de Longueville,' 12mo, 1864; and 'La Jeunesse de Mazarin,' 8vo, 1865. For several years the state of M. Cousin's health had caused him to spend his winters at Caen, and it was there he died, on the 14th of January, 1867.

* COUSINS, SAMUEL, R.A., an eminent engraver in mezzotint, was born at Exeter, May 9, 1801. As a boy he attracted notice by the skill with which he copied engravings with the lead pencil, and in 1813 and 1814 the Society of Arts awarded him a silver medal and a silver palette for them. This led to his being apprenticed in the latter year to the celebrated mezzotint engraver, S. W. Reynolds, with whom, upon the expiration of his apprenticeship, he remained four years as an assistant. Working on his own account, he rose steadily to the head of his branch of the profession. In 1835 he was elected A.R.A.; in 1854 he became Associate Engraver, and on the admission of engravers to full membership, he was the first to receive that distinction, being elected Academician Engraver in 1855. Of Mr. Cousins' numerous engravings it will be enough to mention his 'Bolton Abbey in the Olden Time,' 'Saved,' 'The Return from Hawking,' 'A Midsummer Night's Dream,' and 'The Maid and the Magpie,' after Landseer; 'Christ Weeping over Jerusalem,' after Eastlake; 'The Mitherless Bairn,' after Faed; 'The Order of Release,' after Millais; 'The Heroine of Saragossa,' after Wilkie; 'The Infant Samuel,' after Sant; portraits of Pope Pius VII., Metternich, the Duke of Wellington, Sir Robert Peel, Miss Eliza Peel, the Countess Gower and Child, and several others after Sir Thomas Lawrence; Sir Thomas Watson, after Richmond; and the series of royal portraits, the Queen, the Prince Consort, and Royal Family, the Princess Royal, the Sailor Prince, and others, after Winterhalter. All Mr. Cousins' plates are not, of course, of equal excellence, but all are well drawn and carefully and beautifully executed, and the best of them, and notably those after Landseer, Lawrence, and Eastlake, have that combination of painter-like breadth and brilliancy of chiaroscuro, with richness and softness of effect, which mezzotint alone seems capable of producing, and which in that is only seen in the choicest samples.

COX, DAVID [E. C. vol. ii. col. 413]. This admirable artist died on the 7th of June, 1859. In the year of his death an exhibition of his pictures, sketches, and water-colour drawings was held in London, and the 200 works there collected bore out to the fullest extent all that was said in the above memoir of his rare powers.

CRAIK, GEORGE LILLIE [E. C. vol. ii. col. 420]. Whilst lecturing to his class, February 23, 1866, Professor Craik was suddenly seized with paralysis. He recovered partially, but lived only four months, dying at his residence, Belfast, on the 25th of the following June. Shortly after, pensions of £30 a year each were granted from the Civil List to his two daughters, Mary and Georgiana (the authoress of some very pleasing novels), "in consideration of the services of their father as Professor of History and English Literature in the Queen's College, Belfast;" something more might well have been added in consideration of his services to English literature in general.

CRAMER, JOHANN BAPTIST, born at Mannheim, Feb-

ruary 24th, 1771, was the son of Wilhelm, and the grandson of Joachim Cramer, German musicians of note. Wilhelm came to England in 1772, bringing with him his three sons, Johann Baptist, Carl, and Franz. The young Johann studied the pianoforte under Benser, Schöter, and Clementi, and also made himself familiar with the harpsichord compositions of Bach and Handel. At the early age of thirteen he began to play in public, and attracted much notice by his mastery of the pianoforte. In 1785 he went through a course of study in composition under Abel. From 1788 to 1791 he made a musical tour through the chief cities of Europe. From 1791 to 1832 he resided mostly in London, where he arrived at great distinction as a teacher, player, and composer; from thence till 1845 his residence was chiefly at Paris. In the latter year he returned to England, where he remained till his death, which occurred April 16, 1858. As a pianist, Cramer was remarkable for the delicacy of his touch, the production of various qualities of tone by exquisite gradation of pressure in fingering; he had little taste for brilliant difficulties, mere *tours de force*. As a composer he was very prolific. There came from his pen 105 pianoforte sonatas, 7 orchestral concertos, 7 duets for four hands, and a great number of quartettes, quintettes, trios, nocturnos, rondos, marches, waltzes, airs with variations, fantasias, studies, morceaux, &c. His 84 'Études' are among the classics of pianoforte writing; they were the foundation of a school, which has included many distinguished players and composers. His 'Méthode' for the piano was first published in 1846.

CRAWFORD, THOMAS [E. C. vol. vi. col. 398].

CRAWFORD, JOHN, was born in the island of Islay, August 13, 1783, and, after attending the medical curriculum at Edinburgh, proceeded to India in 1803, as an assistant-surgeon in the East India Company's service. He was soon engaged in the warfare against Holkar, and in 1805 was in Rampoor when it was besieged. In or about 1808 he went to Penang, and there occupied himself in learning the Malay language, and studying the Malay people. In 1811 he went to Java, along with Lord Minto, and remained there as the British representative for about six years. In 1817 he returned to England, but in 1821 he was again on his way to India, having been entrusted with a diplomatic mission to Siam and Cochin China. In 1823 he succeeded Sir Stamford Raffles as Governor of Singapore. After holding this post a few years, he returned to England, and occupied himself mostly with political affairs, taking an active part in promoting trade, in endeavouring to destroy the commercial monopoly of the East India Company, and in making efforts to be elected a member of Parliament. In this last object he could not succeed, and this seems to have induced him to devote himself almost entirely to his favourite studies in philosophy, ethnology, geography, and statistics. In 1861 he became President of the Ethnological Society, and till his death was one of its hardest working and most influential members. He was also an active Fellow of the Royal Geographical Society. His principal works are 'History of the Indian Archipelago,' 8vo, Edinburgh, 1820; and 'Descriptive Dictionary of the Indian Islands and the Adjacent Countries,' 8vo, 1856. These two works embody an immense mass of information respecting the districts they treat of. We also have from him, 'Malay Grammar and Dictionary,' the high merits of which were recognised by William von Humboldt. His mission to Ava and Siam resulted in his writing two works, entitled, 'Journal of an Embassy to the Court of Ava, in 1827,' 4to, 1829; and 'Journal of an Embassy to the Courts of Siam and Cochin China, exhibiting a View of the actual state of those Kingdoms,' 2 vols, 8vo, 1830. His connection with the Ethnological Society led to his writing an immense number of papers, embodying the knowledge he had accumulated in his earlier life, and remarkable as indicating his exceedingly active mental powers, even in his last years. From his 78th year, up to his death, he contributed thirty-eight papers to the journal of the Ethnological Society, and he is said to have left sixteen others in manuscript. His contributions to the 'Examiner' and other papers are said to have been very numerous. His death occurred on May 11, 1868, brought on by a sudden attack of inflammation of the lungs.

CRESCIMBENI, GIOVANNI MARIO IGNAZIO GIROLAMO XAVIER GIUSEPPE ANTONIO, an Italian poet, critic, and historian, who dropped the last five of his Christian names as practically worse than redundant, was born on the 9th of October, 1663, at Macerata, near Ancona. After being for some time under the tuition of a French ecclesiastic at Rome, he returned in 1675 to his native place, where he became a pupil of the Jesuits, under whose instruction he made his first literary

effort in a tragedy upon the Fall of Darius; in acknowledgment of which, and of his translation into Italian verse of two books of Lucan's 'Pharsalia,' he was admitted at 15 years of age a member of the Accademia de' Disposti, which was established at the small city of Jesi. On the 3rd of October, 1679, he was admitted doctor of laws, and about a year after repaired again to Rome, where he pursued his studies in jurisprudence and in belles-lettres. As a tribute to his practical talent he was named in 1685 a member of the Accademia degli Infecondi; and in 1690 was the principal founder of the Accademia degli Arcadi, a society instituted for the revival of learning and for the reformation of public taste, over which Crescimbeni presided as *Custode Generale* under the assumed name of Alfesibeo Cario. He subsequently took orders, and through the patronage of Pope Clement XI., who presented him in 1705 to a canonry in the church of Santa Maria in Cosmedin, of which, in 1715, he became arciprete, or senior priest, was enabled to devote himself almost exclusively to science and literature. He died on the 8th of March, 1728. His principal works are a valuable History of Italian Poetry, 'L'Istoria della Volgar Poesia,' 4to, Rome, 1698, and 1714; Commentaries on the above, 'Commentarij di Giov. Mario de Crescimbeni intorno alla sua Istoria della Volgar Poesia,' 5 vols. Rome, 1702—11, both of which, the 'Istoria' and the 'Commentarij,' were published together in 6 vols. 4to, Venice, 1730—31; 'La Bellezza della Volgar Poesia, spiegata in otto Dialoghi, &c., con varie Notizie, e col Catalogo degli Arcadi,' 4to, Rome, 1700, and 1712; 'Notizie Istoriche di diversi Capitani illustri,' 4to, Rome, 1704; a Translation of the Homilies of Pope Clement XI., 'Le Omilie ed Orazioni di Papa Clemente XI. volgarizzate,' folio, Florence, 1704, 8vo, Venice, 1708; 'Storia dell' Accademia degli Arcadi,' Rome, 1712; a biographical work, written by himself and other authors, but edited by Crescimbeni, entitled 'Le Vite Degli Arcadi illustri,' 2 vols. 4to, Rome, 1708 and 1710, which was at length supplemented by 'Notizie degli Arcadi Morti,' 3 vols. 8vo, Rome, 1720—21.

CRESWICK, THOMAS, R.A. [E. C. vol. ii. col. 433.] The last years of this excellent artist were passed under the pressure of almost continuous ill-health, yet he retained his old simplicity, and much of his old cheerfulness of habit, and continued to paint as long as he could hold a pencil. He died at his house, The Limes, Linden Grove, Bayswater, on the 28th of December, 1869, aged 58. The Royal Academy Exhibition of 1870 contained his last and hardly finished works—'Mill near Whitby,' and 'Afternoon.'

CREUZER, GEORG FRIEDRICH, a German philologist and antiquary, was born on the 10th of March, 1771, at Marburg, and was educated successively at that town and at the University of Jena. In 1798 he was engaged as a private tutor at Leipzig; became in 1802 professor at Marburg; and in 1804 was appointed to the chair of philology and ancient history at Heidelberg, where in 1807 he established a flourishing philological seminary. In 1825 he became a foreign member of the Paris Académie des Inscriptions et Belles Lettres; in 1826 was appointed a privy councillor of the Grand Duchy of Baden; and was also made Commander of the Order of the Zähringen Lion. Through a long series of years he devoted himself without intermission to his literary pursuits, and to the discharge of his academical duties until his resignation in 1845. He died at Heidelberg on the 16th of February, 1858. Of his numerous works the most important is that entitled Symbolism and Mythology of the Nations of Antiquity, especially of the Greeks, 'Symbolik und Mythologie der alten Völker, besonders der Griechen,' 6 vols. 8vo, Leipzig and Darmstadt, 1810—23, another edition, of which the fifth and sixth volumes were contributed by F. G. Mone, 6 vols. 8vo, Leipzig, &c., 1819—23, the first volume of a third edition, 8vo, Leipzig, &c., 1837, French translation by J. D. Guignaut, assisted by A. Maury and E. Vinet, 4 vols. 8vo, Paris, 1825—51. In this work the author taught the existence of a very ancient school of Greek poetry and philosophy, in which Homer and Hesiod were but scholars, and which in a far distant antiquity had been derived from the East. His opinions gave rise to some controversy, and were combated by J. G. J. Hermann, the philologist, whose views are stated in Letters on Homer and Hesiod, &c., 'Briefe über Homer und Hesiodus vorzüglich über die Theogonie,' 8vo, Heidelberg, 1818, and by J. H. Voss in his 'Antisymbolik,' 2 parts, 8vo, Stuttgart, 1824—26. Other scholars, of whom K. O. Müller may be mentioned, likewise took part in the discussion. Amongst the numerous other works of Creuzer occur his Origin and Development of the Historic Art of the Greeks, 'Die historische Kunst der Griechen in ihrer Entstehung und Fortbildung,' 8vo,

Leipzig, 1803; 'Historicorum Græcorum antiquissimorum Fragmenta collegit, emendavit, explicuit, ac de cujusque Scriptoris ætate ingenio fide commentatus est,' &c., 8vo, Heidelberg, 1806; 'Dionysus, sive Commentationes academicæ de rerum Bacchicarum Orphicarumque originibus et causis,' 4to, Heidelberg, 1809, of which the first volume only was published; Epitome of Roman Antiquities, &c., 'Abriss der Römischen Antiquitäten zum Gebrauch bei Vorlesungen,' 8vo, Leipzig and Darmstadt, 1824, second edition, 1829; an Essay on the History of Roman Civilisation on the Upper Rhine and the Neckar, 'Zur Geschichte altrömischer Kultur am Oberrhein und Neckar,' 8vo, Darmstadt, 1833; a Treatise on Precious Stones, 'Zur Gemmenkunde,' &c., 8vo, Darmstadt, 1834; and on the History of Classical Philology, 'Zur Geschichte der classischen Philologie,' 8vo, Frankfurt, 1854. Creuzer also distinguished himself by learned editions of Greek authors, and by other works in philological and philosophical criticism, in connection with which his labours in the field of Neo-Platonism ought especially to be mentioned, as exhibited in the 'Plotini omnia Opera,' &c., 3 vols. 4to, Oxford, 1835, of which the 'Plotini Enneades,' &c., underwent publication in 8vo, Paris, 1855, as part of a series entitled 'Scriptorum Græcorum Bibliotheca.' The collected German works of Creuzer, including all of any importance which had been produced up to that date, were published with the title of 'Deutsche Schriften,' 9 vols. 8vo, Leipzig and Darmstadt, 1836—48, the last volume of which contained an Autobiography with the title of 'Aus dem Leben eines alten Professors,' the omissions in which were supplied by a supplementary volume entitled 'Paralipomena der Lebensskizze eines alten Professors,' 8vo, Frankfurt, 1858. Professor Creuzer was a frequent contributor to various serials and periodicals. He supplied the 'Mythologie,' to the 'Real-Encyclopädie der classischen Alterthumswissenschaft,' 8vo, Stuttgart, 1839—52; and for several years subsequent to 1820 edited the Heidelberg Yearbook of Literature, 'Heidelbergsche Jahrbücher der Literatur,' 8vo, 1808, &c.

CRIVELLI, CAVALIERE CARLO, an eminent early Italian painter, was born at Venice about 1420—30, and is said to have been the scholar of Jacobello del Fiore. He settled at Ascoli; painted religious subjects, and a few portraits; and was knighted in 1490 by Ferdinand II. of Naples. The year of his death, as of his birth, is unknown: his dated pictures range between 1468 and 1495. He painted exclusively in tempera. His manner somewhat resembles that of his contemporary, Bartolommeo Vivarini, but is more severe, and the drawing firmer. For his time he was a good colourist. Generally, however, his pictures have an archaic air. Works by him occur at Ascoli; in the Vatican, Rome; the Brera, Milan; and the Berlin Museum. The Louvre is without a specimen. Our own National Gallery is exceptionally rich in his works, and all the examples are signed and some dated. They are—No. 602, 'A Pietà,' two infant angels, seated on the edge of the tomb, supporting the dead body of Christ; No. 668, 'The Beato Ferretti,' a large composition of several figures, with a village street in the background, and, what he was fond of introducing in his works, a festoon of fruit in the upper part of the picture; No. 724, 'The Madonna and Child Enthroned, with St. Jerome and St. Sebastian,' known as 'The Madonna della Rondine,' from the swallow he has introduced somewhat conspicuously: it is in the original frame, and in a predella below are representations of St. Catherine, St. Jerome in the Wilderness surrounded by animals, the Nativity of our Lord, the Martyrdom of St. Sebastian, and St. George and the Dragon; No. 739, 'The Annunciation,' a characteristic and interesting picture, dated 1486, presented to the nation by Lord Taunton in 1864; No. 788, 'The Madonna and Child Enthroned, surrounded by Saints.' This last is the most remarkable of the series. It is of considerable size (16 feet high by 10 feet 6 inches wide), is on wood, and was painted in 1476, when the artist was in the maturity of his powers. It consists of thirteen compartments in three stages, the lower stage containing five pictures (the Madonna with the Infant occupying the centre), the second and third stages each four pictures. The more important parts formed the altar-piece of the old church of San Domenico, Ascoli. It was put together as it now appears, and the costly frame made, when it was set up in 1853 as the altar-piece in the private chapel of Prince Anatole de Demidov at San Donato near Florence. It was purchased for the National Gallery in 1868 at a cost of 3360*l*. In this picture Crivelli's realism, and indeed most of his characteristics, are well shown, though parts have been materially repainted. All the heads are on gold grounds; gems and pearls have adorned the Virgin's crown and the robes of the saints, and some of them are

still in their places; and in some instances extraordinary expedients have been adopted to give an appearance of reality, as in the case of St. Peter, whose keys are so solidly painted as to stand out from the panel like actual keys, and they are suspended from a piece of real cord.

CROKER, THE RIGHT HON. JOHN WILSON [E. C. vol. ii. col. 436]. After long illness, Mr. Croker died at his residence, Molesey Grove, on the 10th of August, 1857, and was interred in the neighbouring churchyard of West Molesey. The edition of Pope's Works mentioned in the above memoir as in preparation by him, was transferred to the Rev. W. Elwin, his coadjutor in the 'Quarterly Review,' and is announced as now (1870) "just ready" for publication.

CROLY, REV. GEORGE, LL.D. [E. C. vol. ii. col. 438]. Dr. Croly died suddenly, whilst walking in Holborn, on the 24th of November, 1860. By special permission of the Home Secretary his remains were interred in his own church of St. Stephen's, Walbrook. A brief expository work by him has since appeared, 'The Book of Job. With a Biographical Sketch of the Author by his Son [Frederic W. Croly],' 8vo, Edinburgh and London, 1863.

CROME, JOHN, known among picture collectors as OLD CROME, to distinguish him from other members of the family who painted in his manner, was the son of an innkeeper at Norwich, in which city he was born on the 21st of December, 1769. He was apprenticed to a coach-painter, when coach-painting was still an artistic occupation. From this occupation, however, he turned, probably because the change of fashion left little employment for the painter of coach-panels, and set up as a drawing master in his native city. He continued to teach, but preferred to paint, and his landscapes soon acquired great local popularity. He contributed many years to the exhibitions of the Royal Academy, but his works never attracted sufficient attention to secure for him academic distinction, or to induce him to establish himself in London. Yet he was in truth in his particular line one of the best landscape-painters we possessed at a time when the English school of landscape-painting was at its highest. His pictures are usually transcripts of the scenery around Norwich; but they are something more and better than mere topographical views. They exhibit almost always a selection of what is essential, and convey a poetical conception of the scene or leading object. In execution they are unequal, some being too evidently painted hurriedly to be sold at insufficient prices. But the best are of rare excellence. Crome died at Norwich in 1821. At the International Exhibition of 1862 two of his pictures were shown, and the greater part of those who saw them learnt for the first time how great an artist we possessed in one who was supposed to be only a provincial celebrity. One of these pictures, 'Mousehold Heath,' was secured for the National Gallery, and is one of the most attractive representations of a broad open heath scene we possess, and rivalled by few for its truth, exquisite atmospheric effect, and beauty of treatment. The other, a close woodland scene, was equally true and equally effective. Several of his pictures have since come into the London market, but the greater part of them are probably still in Norfolk.

CROMPTON, SAMUEL, inventor of the spinning-mule, was born at Firwood, near Bolton-le-Moors, December 3, 1753. After the death of his father, the family removed to Hall-in-the-Wood, about a mile from Bolton, where cotton-spinning, in a domestic way, was carried on as a means of support. Young Crompton went on with his spinning and his schooling at the same time. About 1774 he began a series of attempts to improve the spinning-machine, making experiments and constructing models in the intervals of work, and far into the night; and eking out his scanty means by occasionally playing as a violinist in the Bolton Theatre at eighteen-pence a night. The state of cotton-spinning at that time was such as to make some new contrivance very desirable. Until 1738 all cotton was spun in single threads by hand. In that year Louis Paul patented a method of spinning by passing previously-prepared slivers between pairs of rollers—sound in principle, but failing in detail. Highs, in 1767, obtained the aid of Kay, a clockmaker, in constructing spinning-rollers, somewhat on the method of Paul; in the same year Hargreaves modified the one-handed wheel in such a way as to spin sixteen threads at one time, "by a turn of one hand and a draw of the other;" and in the same year Arkwright commenced the experiments which led to his important water-twist or throtile-yarn spinning. Ten years later, Arkwright's machine supplied hard yarn for warp, while that of Hargreaves supplied soft yarn for weft; but no machine

existed for spinning fine yarn for muslin and other delicate goods. Crompton filled up this gap by the inventions which he perfected between 1774 and 1779. He introduced two pairs of rollers, one rotating faster than the other; but the great feature of the machine was his spindle-carriage. This, with the spindles upon it, could, by the movement of the hand and knee, recede just at the moment when the rollers gave out the elongated thread; the thread being in a soft state, so as to allow of a considerable stretching before it had to encounter the stress of winding on the spindle. His first successful machine had about thirty spindles, and the difference of velocities between the two pairs of rollers was such as to give a stretch of one in three or four. The machine was first called the Hall-i'-the-Wood Wheel, then the Muslin Wheel, but it is now known as the Mule, a cross between, or a combination of, the spindle and the roller. Crompton having married, he and his young wife began to work the machine in 1780. Weavers willingly bought his beautiful yarn; but he was much annoyed by rival spinners, who tried to obtain a sight of his wonderful machine, that they might imitate it. He could not keep his secret; he could not afford to obtain a patent; and, in his poverty, he sold the secret of his machine to certain manufacturers before the year was out for a subscribed remuneration, which barely reached 60*l*. Crompton removed to another house near Bolton, about 1784, where he farmed a small patch of land, and spun beautiful yarn by a mule in which he was frequently making improvements. By the year 1786 one of the mules at Bolton had 108 spindles, and the machine was coming rapidly into use throughout the district. In 1791 he removed to Bolton, where he and his family worked upon two mules, and where he also made many improvements in the machines for preparing cotton for the mule process. In 1801, with 500*l*. subscribed by a friend, he set up a small factory, in which one of the mules had as many as 360 spindles. Generally in difficulties, and always harassed by the prying curiosity and envious malice of rival spinners, he applied about 1807 to the Royal Society and the Society of Arts for some recognition of his services, but without success. In 1811 he caused statistics to be obtained, showing the extent to which mule-spinning had been adopted, to the enrichment of those who had made no invention in the matter. It was found that there were 4,000,000 mule spindles in the United Kingdom, in 360 mills; that two-thirds of all the steam-power used in the cotton manufacture was employed in mule-spinning; that 7000 persons were engaged in spinning with the mule; and that 150,000 were weaving with mule-spun yarn. In 1812 he obtained a grant of 5000*l*. from parliament. There is evidence to show a probability that the grant would have been 20,000*l*. but for the untimely death of Mr. Spencer Percival. Crompton, in his later years, combined cotton-bleaching and muslin-weaving at works which he established at Over Darwin in 1813; but, with all his ingenuity as an inventor, he was not fitted to cope with the rivalries and commercial difficulties of his position. Some of his friends tried without success to obtain another parliamentary grant for him in 1826. He died June 26th, 1827. He was of a gentle, retiring, pious disposition; his taste for music was considerable, and he composed several hymn tunes.

(*Life of Samuel Crompton*, by Gilbert J. French, 8vo, London, second edition, 1860.)

CRONSTEDT, AXEL FRIEDRICH DE, was born in 1722 in Sudermania (Södermanland). His name is attached to the discovery of one of the elementary bodies in chemistry, namely, nickel. The commonest ore of this metal is called "Kupfer-nickel," or "false copper," and this is a compound of arsenic and nickel found abundantly in the mines of Saxony and Germany, and elsewhere. Cronstedt's researches on kupfernickel between 1751 and 1754 led to the discovery of nickel. Science is also indebted to Cronstedt for his 'Essay towards a System of Mineralogy,' published in Swedish in 1758, which had the most marked influence on the science. He rejected the trivial distinctions between earths and stones, vitrescent and nonvitrescent bodies, &c., and classed the earths as calcareous, siliceous, argillaceous, and so on. So also calcareous earth is pure (calcspar), or united with acid of vitriol (gypsum), or with muriatic acid, and so on, which is in fact the general principle of classification of minerals that has been continued to our own day. This essay was translated into several languages. The author also contributed a number of papers to the *Memoirs of the Academy of Stockholm*. He died the 19th of August, 1765.

CROSSE, ANDREW [E. C. vol. vi. col. 989].

CROUSAZ, JEAN PIERRE DE, a Swiss philosopher and divine, was born on the 13th of April, 1663, at Lausanne, and

was educated at Geneva, after which he spent some time at Leyden and Paris. On his return home in 1684, he was called to the pastorate of his native city, in the college of which he became in 1699 professor of Greek and philosophy, and in 1706 professor of divinity. In 1724 he was elected to the chair of mathematics and philosophy in the University of Groningen; and was appointed two years afterwards to superintend the education of Prince Frederick of Hesse-Cassel. He returned in 1737 to the professorship of philosophy at Lausanne, and died on the 22nd of March, 1748. He left a great number of works in science, theology, and philosophy, but not many of them are reckoned to-day as of much more than historical interest. They are nearly all in French, and include 'Logique, ou Systême de Reflexions qui peuvent contribuer à la Netteté et à l'Étendue de nos Connoissances,' 2 vols. 8vo, Amsterdam, 1712, which was several times reprinted, and of which an English translation was published as 'A New Treatise of the Art of Thinking, or a complete System of Reflexions concerning the Conduct and Improvement of the Mind,' 2 vols. 8vo, London, 1724; 'Traité du Beau,' &c., 2 vols. 12mo, Amsterdam, 1715, 2nd edition, 1724; 'Reflexions sur l'Utilité des Mathématiques et sur la Manière de les Étudier,' &c., 12mo, Amsterdam, 1715; 'Géométrie des Lignes et des Surfaces rectilignes et circulaires,' 2 vols. 8vo, Amsterdam, 1718; 'Examen du Traité de la Liberté de Penser,' Brussels, 1715, and 8vo, Amsterdam, 1718, a work directed against Anthony Collins; 'Traité de l'Éducation des Enfants,' 2 vols. 12mo, the Hague, 1722, of which an English translation by G. J. Tacheron was published as 'New Maxims concerning the Education of Youth,' &c., 2 parts, 8vo, London, 1740; 'De Physicæ Utilitate Dissertatio Philosophica,' 8vo, Groningen, 1725; 'De Mente humana, Substantia a Corpore distincta et immortal. Dissertatio philosophico-theologica,' 12mo, Groningen, 1726, which developed into a later work, entitled, 'De l'Esprit humain: Substance différente du Corps, active, libre, immortelle,' 4to, Basel, 1741, which is conceived in opposition to the opinion of Leibnitz, Wolf, Bilfinger, and others on the doctrine of pre-established harmony, on the ground that such a doctrine destroyed the liberty of man, and made God the author of moral evil; a work against the scepticism of Bayle, entitled 'Examen du Pyrrhonisme ancien et moderne,' folio, the Hague, 1733; 'Examen de l'Essay de Monsieur Pope sur l'Homme,' 12mo, Lausanne, 1737, of which English translations, the former by Mrs. Elizabeth Carter, appeared, entitled respectively 'An Examination,' &c., 12mo, London, 1739, and 'A Commentary,' &c., 12mo, London, 1740. The 'Examen,' and a further attack by M. Crousaz on the English poet, in a 'Commentaire sur la Traduction en Vers de M. l'Abbé Du Resnel, de l'Essai de M. Pope sur l'Homme,' 12mo, Geneva, 1738, was followed by a defence, entitled 'A View of the Necessitarian or best Scheme: freed from the objections of M. Crousaz in his Examination of Pope's Essay on Man,' 8vo, London, 1739, and by Bishop Warburton's 'Vindication of Mr. Pope's Essay on Man from the Misrepresentations of Mr. de Crousaz,' 12mo, London, 1740.

CROWLEY, CROLE, or CROLEUS, ROBERT, a poet and divine of the 16th century, was born in Gloucestershire, or, according to Fuller ('Worthies of England'), in Northamptonshire, about the year 1517. He was entered a student of the University of Oxford about 1534, and was soon after made demy of Magdalen College, of which society he became, under the name of Robert Crole, a probationary fellow in 1542, having taken his B.A. degree as Robert Crowley on the 19th of January, 1540. Wood conjectures that he left the university, probably without proceeding to his Master's degree, "when King Henry VIII. began to settle a mongrel religion in the nation." At the beginning of the reign of Edward VI. Crowley was settled as a printer and bookseller in Ely-rents, Holborn, exercising his gift of preaching in London and elsewhere as leisure and opportunity served. He was admitted to deacon's orders on the 29th of September, 1551, by Nicholas Ridley, then Bishop of London, in whose register Strype tells us he is "styled stationer of the parish of St. Andrew, Holborn." When Queen Mary came to the throne Crowley fled to the Continent, and fixed himself at Frankfurt, where he remained until after the accession of Elizabeth in November, 1558. Returning now to England, he resumed the exercise of his profession, in which he received substantial preferment. He was collated on the 24th of March, 1559, to the Archdeaconry of Hereford, which, however, he resigned in 1567; on the 9th of July, 1560, he was collated to the stall of Pratum Majus in the Cathedral Church of Hereford; and on the 1st of September, 1563, to the prebend of Mora, or More extra London, in St. Paul's Cathedral, of which for some

reason at present unknown he was deprived in September, 1565. In or before the year 1566 he was presented to the vicarage of St. Giles, Cripplegate; and on the 5th of May, 1576, received from the Bishop of London, to whom the presentation had lapsed, the vicarage of St. Lawrence, Jewry, which he held for about two years, and resigned in 1578. He died on the 18th of June, 1588, and was buried in the chancel of the church of St. Giles.

Crowley's zeal and activity were uncompromisingly directed against the Church of Rome, and nearly all his works give more or less evidence of his animosity. They comprise—'The Confutation of Thirteen Articles, whereunto Nicholas Shaxton, late Byshop of Salisbury, subscribed and caused to be set forth in Print the Yere of Lord M.D.XLVI., when he recanted in Smith-fielde at London, at the Burning of Mestres Anne Askue,' 8vo, London, 1548; 'The Confutation of the mishapen Aunswer to the misnamed wicked Ballade, called the Abuse of ye blessed Sacrament of the Aultare, wherein thou haste (gentele Reader) the ryghte Understandynge of al the Places of Scripture that Miles Hoggard (wyth his learned Counsaill) hath wrested to make for the Transubstanciacion of the Bread and Wyne,' 8vo, London, 1548; 'An Information and Petition agaynst the Oppressours of the Poor Commons of thys Realme,' 8vo, London, which was rendered by John Heron in Latin, with the title of 'Explicatio Petitoria (ad Parliamentum) adversus expilatores egeue plebecule hujus Regni,' 8vo, 1548; 'The Psalter of David newly translated into Englyshe metre in such sort that it maye the more decently, and wyth more delyte of the mynde, be reade and songe of al men,' &c., 4to, London, 1549, which was printed by the author, and sold by him at Ely-rents; 'A New Yere's Gyfte, wherein is taught the Knowledge of ourself and the Fear of God,' &c., 16mo, London, 1549; 'The Voyce of the laste Trumpet, blown by the Seventh Angel (as is mentioned in the Eleventh of the Apocalips), callynge al the Estates of Men to the ryght Path of theyr Vocation,' &c., 16mo, London, 1549, a metrical work, which contains twelve lessons addressed severally to beggars, servants, yeomen, lewd priests, scholars, learned men, physicians, lawyers, merchants, gentlemen, magistrates, and women; 'The Way to Wealth, wherein is plainly taught a most present Remedy for Sedicion,' 8vo, London, 1550; 'One-and-Thirty Epigrams, wherein are briefly touched so many Abuses that may and ought to be put away,' folio, London, 1550, which, although twice or thrice reprinted, are now unknown, with the exception of fifteen preserved by Strype in his 'Ecclesiastical Memorials,' abounding in local information, and exhibiting a curious picture of the manners and customs of the time; 'The Fable of Philargyria [or Avarice], the great Gigant of Great Britain: what Houses were builded and Lands appointed for his Provisions, and how al the same is wasted to contente his greedy Gut wythall, and yet he rageth for Hunger,' 8vo and 4to, 1551; a kind of metrical sermon, entitled 'Pleasure and Payne, Heaven and Hell: remember these foure, and all shall be well,' 8vo, London, 1551; 'An Apologie or Defence of those Englishe Writers and Preachers, which Cerberus, the three-headed Dog of Hell, chargeth with false Doctrine, under the name of Predestination,' 4to, London, 1566; 'A briefe Discourse against the outward Apparrell and ministring Garmentes of the Popishe Church,' 16mo, 1566 and 1579; 'Dialogue between Lent and Liberty, wherein is declared that Lent is a meer Invention of Man,' 8vo, London, a treatise remarkable for the boldness and novelty of its personification of Lent. Crowley published many other works of a polemical nature, and a sermon or two preached on remarkable occasions. A few other works have been too hastily referred to him, amongst which are 'The School of Virtue and Book of Good Nature,' the authorship of which is with more probability given to Francis Seager; and the 'Supper of the Lord after the true Meaning of the VI. of John,' &c., 8vo, London, 1533, which was most likely written by Tyndale, and attributed incorrectly to Crowley, because the latter had furnished a preface to the edition of 1551. Amongst the circumstances which tend, however, to his most abiding credit will be remembered the fact that Crowley printed and published, with a preface which shows that he brought forth the volume in the interests of controversy rather than of archæology, the first edition of the 'Visions of Pierce Plowman,' 4to, London, 1st and 2nd editions, 1550; new edition, 4to, 1561, and frequently reprinted and re-edited.

CRUDEN, ALEXANDER [E. C. vol. vi. col. 990].

CRUM, WALTER, was born at Glasgow in 1796, and died 5th May, 1867. He was educated in his native city, and attended the chemical course of Dr. Thomas Thomson. He is best known for his successful efforts to place the arts of dyeing and calico

printing on a scientific basis. He showed that a large class of colouring matters are fixed in cotton by the passage of their constituents whilst in the soluble state into the cavity of the fibre, and their subsequent precipitation therein as a solid pigment, as in the case of dyeing with acetate of lead and chromate of potash. Crum also pointed out an isomeric variety of alumina, which is incapable of combining with colouring matter; also a new oxide of copper analogous in composition to peroxide of iron. As early as 1823 his paper on Indigo and on certain substances produced from it by the action of sulphuric acid procured him much credit. He was the first to give the true formula for gun cotton.

Crum was elected a fellow of the Royal Society in 1844. During many years, as president of Anderson's University, he exerted himself to promote the education and general welfare of the people, and to bring scientific knowledge within reach of the artisan.

CRUSENSTOLPE, MAGNUS JAKOB [E. C. vol. ii. col. 449]. This favourite Swedish writer and politician died on the 18th of January, 1865.

* CRUVEILHIER, JEAN, a French physician, was born at Limoges, Feb. 9, 1791, and was educated for the medical profession at Paris. In 1816 he wrote a thesis, entitled 'Essai sur l'Anatomie pathologique' on receiving his degree of doctor in medicine. After stopping for various periods at Limoges, Paris, and Montpellier, engaged partly in teaching, and partly in pursuing his medical practice, he ultimately settled in Paris in 1825, where he succeeded Bérard as professor of anatomy in the university. Here he devoted himself enthusiastically to his favourite study, reviving the old anatomical society, and publishing his professional course of lectures. He was also engaged as physician to several of the medical hospitals. In 1835 he was appointed to the new chair of pathological anatomy founded by M. Dupuytren. On Aug. 14, 1863, he was promoted a commander of the Legion of Honour. His principal works are important memoirs in the 'Bulletins' of the Academy of Medicine; 'Anatomie pathologique du corps humain,' 2 vols. folio, 1829—1842, which is a magnificent work, illustrated by upwards of 200 plates; 'Anatomie du Système Nerveux de l'homme,' folio, 1845; 'Traité d'Anatomie descriptive,' 1851, 4th edition, which commenced in 1863, but is not finished; and 'Traité d'Anatomie pathologique générale,' 5 vols. 8vo, 1849—1864.

* CUBITT, JOSEPH, civil engineer, son of Sir William Cubitt, was born at Horning, in Norfolk, in November, 1811. After studying engineering under his father, he commenced on his own account, taking up railway engineering as the chief object of his attention. The Ashford and Margate Extension of the South-Eastern Railway was planned and carried out by him. The Rhymney Railway in Monmouthshire, and the Great Northern, among those of magnitude, were constructed under his plans and directions; as were likewise the chief works on the London, Chatham, and Dover Railway, including the line from Beckenham to Farringdon-street, and the line from Herne-hill to Victoria, each involving the construction of a bridge over the Thames. Mr. Cubitt constructed the piers at Porth Cawl Harbour and at Weymouth, and lengthened that at Yarmouth. His latest work of importance has been the new Blackfriars Bridge, opened by Queen Victoria in November, 1869. This structure is noteworthy for the difficulties which had to be surmounted in its construction. In clearing away the old bridge (which had been condemned in 1864), the stumps of the decayed foundations of the piers had to be removed before a single stone of the new structure could be placed. The work was done by divers, who dragged them up piecemeal, and who were a whole year thus employed. So loose and soft was the bed of the river near the Middlesex shore, that the caisson for the first pier had to be sunk to a depth of no less than 52 feet below the bed of the river. The arches of the bridge, five in number, are formed each of nine parallel ribs of wrought and rivetted iron, braced together with latticed girders. The junctions of these iron arches on the piers are concealed by immense columns of polished red granite, the largest ever used in bridge building. Mr. Cubitt also constructed the remarkable temporary double timber bridge, having a footway over the carriage-way, used from 1864 to 1869, during the construction of the permanent bridge.

CUBITT, SIR WILLIAM [E. C. vol. ii. col. 454]. This distinguished engineer died on the 13th of October, 1861. He was elected fellow of the Royal Society in 1830.

CULPEPPER, NICHOLAS, born in London in 1616, called himself student in physic and astrology. He practised both arts,

and wrote a great many books on medicine, once greatly in request, but all of them long since forgotten, save that known as 'Culpepper's Herbal,' which was until recently familiar in many a household. The real title of this book was 'The English Physician,' 4to, London, 1653, 1656, 1683, and 1684, &c.; editions in 8vo being published in 1661, 1695, 1698, and more or less imperfect reprints being frequently issued till within the last few years. The book gained its popular title from its being an account of the medicinal qualities of plants—these, according to the author, being determined by the planets under which they blossom or are gathered. Culpepper died in Spitalfields, January 10, 1654.

CUMING, HUGH, a distinguished travelling conchologist, was born, Feb. 14, 1791, at West Alvington, Devonshire. As a child he was passionately fond of flowers and shells; and this led to his being noticed and encouraged by Colonel Montague, the well-known author of 'Testacea Britannica.' He was apprenticed to a sail-maker, and in 1819 he settled at Valparaiso, pursuing business on his own account. While here he indulged his passion for collecting shells, which was stimulated by the encouragements of several scientific English naval officers. In 1826 he relinquished business, built a yacht expressly adapted for collecting, and explored the South Pacific Ocean for more than a year. He returned to Valparaiso, and, after due preparation, undertook an exploring expedition along the western coast of America; and in the prosecution of it he received special privileges and letters of introduction to all the principal authorities, from the Government of Chili. Two years were spent in thoroughly examining the whole shore line from the island of Chiloe in 44° S. lat. to the Gulf of Conchagua in 13° N. lat. Having accumulated an immense collection of shells, he returned to England, and from 1831 until now it has been a storehouse for describers of new species. The value of the collection was much enhanced by his having preserved the soft parts and the particulars relating to the capture of most of the species. In 1835 he made an exploring expedition to the Philippine Islands, his proceedings being facilitated by his knowledge of the Spanish language, and letters of recommendation from the authorities at Madrid. He examined both the sea-shores and a large portion of the interior of most of the islands; and wherever he went he lodged with the priest of the locality, who aided him in every possible way, sometimes by the use of equipages, and sometimes by organising parties of school-children to scour the district for snails and plants. Many of his rarest and finest specimens were obtained by the aid of school-children. In this way he spent four years, and returned home with large collections of plants, the dried specimens of which alone numbered 130,000, birds, reptiles, insects, and quadrupeds. These were distributed to various museums. His principal collection, viz., that of mollusks, he reserved to himself. His collection was now exceedingly large, and he spent most of the rest of his life in arranging it, exchanging duplicates for those which he did not possess, adding to it from time to time by purchases, and arranging with conchologists for the description of new species. His death occurred at his residence in Gower-street, Aug. 10, 1865; and his collection was left to the British Museum, where it is now open to public inspection. His writings were few, and not of much importance.

CUMMING, JAMES, was born 24th October, 1777. He became a scholar of Trinity College, Cambridge, in 1800, and fellow in 1803, having graduated as B.A. in 1801, obtaining honours in mathematics as tenth wrangler, after which he proceeded to M.A. While an undergraduate, he devoted much time to the study of natural philosophy, and afterwards assisted Wollaston, the physical professor in the university, in his lectures and experiments. In 1816, on the death of Smithson Tennant, he succeeded to the chair of chemistry, and in 1819 was presented to the rectory of North Runcton, near Lynn, formerly held by the Astronomer Royal, Maskelyne. He retained both preferments up to the time of his death, frequently residing in Cambridge, and lecturing every year until 1860, when his course was interrupted by illness. He died, 10th November, 1861, at the age of 84. He was F.R.S., and an early promoter of the Cambridge Philosophical Society, of which he was once president. He contributed some papers to the 'Transactions' of this society on his favourite sciences, heat and electricity, his most remarkable paper, published in 1823, being on a new branch of science (started by Professor Seebeck, of Berlin, the year before), in which it was shown that electricity is developed by the unequal heating of all kinds of conductors. In 1827 he published a manual of electro-dynamics. He was among

the first to appreciate the value of Ørsted's famous experiment, and so early as 1820 pointed it out as the basis of the electric telegraph. His professorship not being provided with apparatus, he showed his skill in manipulation by supplying many of his illustrations from his own workshop.

CUMMING, REV. JOSEPH G., geologist, was born Feb. 15, 1812, at Matlock, Derbyshire, was educated at Oakham Grammar School, and at Cambridge, and, having attained high honours, was ordained in 1835. After serving as curate to his uncle, the Rev. James Cumming, rector of North Runcton, Norfolk, for a few years, he became, in 1841, vice-principal of King William's College, Isle of Man, and resided in that island for fifteen years. He was then engaged in teaching at Lichfield and Birmingham up to 1862, when he was presented to the rectory of Mellis Suffolk, which he exchanged for the vicarage of St. John's, Bethnal-green, in 1867. He died, Sept. 21, 1868. He was a fellow of the Geological Society, for whose 'Journal' he wrote several papers, mostly relating to the Isle of Man. He is best known for his work, entitled 'Isle of Man: its History, Physical, Ecclesiastical, Civil, and Legendary,' 8vo, 1848.

CUNÆUS, PETRUS, in the vernacular, VAN DER CUN, a learned lawyer and antiquary, and son of a merchant of Flushing, in Zealand, was born there in the year 1586. After receiving careful instruction at Middleburg and Haarlem, he was sent at 14 years of age to Leyden, where he studied Greek and Hebrew under his relative, Ambrosius Regemorter, with whom in 1603 he paid a visit to England. Returning to Leyden without Regemorter, who remained in London as Pastor of the Reformed Dutch Church, Cunæus applied himself to theology and jurisprudence, in addition to his studies in the Belles-Lettres, and attracted the attention of the curators of the University by the ability of a course of lectures which he delivered on Horace. Wishing to increase the depth and the range of his learning, he repaired to the University of Franeker, in Friesland, where the celebrated Johan Druys, or Drusus, Professor of Hebrew, instructed him in that language, as well as in Chaldee and Syriac, and in Rabbinical learning and Jewish antiquities generally. In the beginning of the year 1612, Cunæus was appointed by the curators of the University of Leyden to be Professor Extraordinary of the Latin language, and not long after was further commissioned to give instructions in political economy. In 1613 he was enrolled as one of the ordinary professors, and two years after, took his degree of Doctor in the Faculty of Law; when he received permission to spend some time at the Hague, for the purpose of becoming acquainted with the practice of the courts of justice. Upon his return to Leyden he was appointed, in 1615, to the Professorship of Jurisprudence, the duties of which he performed till his death, on the 2nd of December, 1638. He was interred in the Church of St. Peter, at Leyden. Towards the end of his career, the States of Holland often consulted him on delicate questions of commercial and maritime law; and he held for some time, in succession to Jacobus Eyndius (Jacob von den Eynde) the office of Historiographer to the State of Zealand. His works include 'Notæ et Animadversiones in Nonni Panopolitæ Dyonysiaca,' 8vo, Leyden, 1610; 'Juliani Imperatoris Cæsares, sive Satyræ in Principes Romanos,' 16mo, Leyden, 1612, with which was incorporated 'Sardi Venales, Satyra Memippea in hujus Sæculi homines plerosque in esse eruditos,' 16mo, Leyden, 1612, in which the author ridicules the savans who play upon the ignorance and credulity of the people, and which was several times reprinted in Dutch, as 'Gekken te hoop,' 12mo, Amsterdam, Rotterdam, &c., and in French, with the title of 'La Réforme dans la République des Lettres.' His most important work is his 'De Republica Hebræorum, Libri III.,' 8vo, Leyden, 1617, which became a text-book in the University of Leyden, and was several times reprinted, amongst others, with various annotations by Johan Nicolai, in 4to, Leyden, 1703. An English translation, by Clement Barksdale, appeared as 'Petrus Cunæus of the Commonwealth of the Hebrews,' 12mo, London, 1653; a Dutch translation, by Willem Goeree, was entitled 'De Republyk der Hebræen, of gemeenebest der Jooden, in drie Boeken door Petrus Cunæus, in 't Latijn beschreven, en nu uit 't Latijn vertaald en met printverbeeldingen en nodige inlaasngen verrijkt,' 4 parts, 12mo, Leyden, 1682—1702; and a French version bore the title of 'République des Hébreux,' 8vo, Amsterdam, 1705. The 'Hebrew Republic' does not present the sequence and completeness of a history, but rather exhibits the epochs of the principal revolutions in the Jewish commonwealth, with detached commentaries on the more important of its laws and ceremonies. Another of the works of Cunæus may be mentioned, 'Exercitationum Oratoriarum In-

auguratio,' 4to, Leyden, 1621; and a further one, of posthumous publication, in which several of his already published works were collected, with the title of 'Orationes Varii Argumenti, &c., editæ cura M. Z. Boxhornii,' 8vo, Leyden, 1640, 8vo, Wittenburg, 1643, 8vo, Leipzig, 1693, and 8vo, Leipzig, 1735. Peter Burman, Professor of Rhetoric at Leyden, collected and edited for the first time various letters which had been written or received by Cunæus, with the title of 'Petri Cunæi, Eloquentiæ et Juris Romani quondam Academia Batava Professoris, et doctorum Virorum ad Eundem Epistolæ,' 8vo, Leyden, 1725.

CUNNINGHAM, PETER [E. C. vol. ii. col. 462]. From the time of his retirement from the Audit Office in 1860, Mr. Cunningham was incapacitated by the state of his health from any continuous literary labour. He resided at St. Albans, where he died, on the 18th of May, 1869, aged 53.

CURETON, WILLIAM, an eminent Orientalist, was born in 1808, at Westbury, in Shropshire, and, after receiving his earlier education at the Free Grammar School of Newport, in that county, proceeded with a Careswell Exhibition to Christ Church, Oxford, which he entered in 1826. He took the degrees of B.A. in 1830, M.A. in 1833, and B.D. and D.D. by accumulation in 1858, at which time he was already an honorary D.D. of the University of Halle. He was made deacon in 1831, and admitted to priest's orders in 1832. Dr. Gaisford, Dean of Christ Church, appointed him chaplain of his college, and in 1834 recommended him to the office of sub-librarian of the Bodleian, the duties of which he fulfilled until his appointment, in 1837, to succeed Sir Frederick Madden as assistant-keeper of the MSS. in the British Museum. Here his knowledge of Arabic, to which he had devoted himself from the time of his first graduation in 1830, found exercise in arranging, cataloguing, and minutely describing in Latin the Arabic books and manuscripts. He was an active promoter, if not the founder, of the Society for the Publication of Oriental Texts, for which he edited, "from the collation of several MSS.," Muhammad al Sharastani's 'Book of Religious and Philosophical Sects,' 2 parts, 8vo, London, 1842—1846, and En-Nesefi's 'Pillar of the Creed of the Sunnites,' 8vo, London, 1843; having previously brought out in the same year Rabbi Tanchum's Commentary on the Book of Lamentations, 'Tanchumi Hierosolymitani Commentarius Arabicus in Lamentationes, e Codice unico Bodleiano,' &c., 8vo, London, 1843. The first fruits, however, of Dr. Cureton's Oriental studies were an Arabic tract, which he appears to have printed just before he left the Bodleian Library at Oxford, and to the text of which Dr. Wright, under whose care the work was finally published, after the editor's death, says that he evidently intended to add an English translation and notes. This little work is part of a larger one by Abū Naṣr Yahyā ibn Ḥarrir, a Jacobite Christian of Tekrit, and is called the 'Thirty-first Chapter of the Book entitled The Lamp that guides to Salvation,' 8vo, London, 1865.

Dr. Cureton's attention was considerably diverted from his Arabic studies by the arrival, in 1841, and again in 1843, of a collection of Syriac MSS., which had been obtained through the agency of Dr. Tattam, from the Monastery of St. Mary Deipara, in the Desert of Nitria or Scete, not far from Cairo; to the study, arrangement, cataloguing, and description of which he proceeded with enthusiastic ardour. The first result of his researches in this new field was the publication of 'The Ancient Syriac Version of the Epistles of St. Ignatius to St. Polycarp, the Ephesians, and the Romans; together with extracts from his Epistles collected from the Writings of Severus of Antioch, Timotheus of Alexandria, and others. Edited, with an English Translation and Notes; also the Greek Text of these three Epistles, corrected according to the authority of the Syriac Version,' 8vo, London, 1845; in reviewing which work in December of that year, the 'Quarterly Review' gave an account of the way in which the manuscripts were procured, and a rough sketch of their contents. The Epistles ascribed to Ignatius had already given rise to more controversy than any other documents connected with the Primitive Church, and the publication of Dr. Cureton's work opened it afresh. He argued that the Epistles presented by him exhibited more accurately than any formerly published what Ignatius had actually written, affirming that we have here the genuine Epistles of St. Ignatius in their original form; that the previously known recensions of these three Epistles are much altered and interpolated; and that all others ascribed to that Father are supposititious. Whilst some accepted the views of Cureton, as the Chevalier Bunsen and Dr. F. C. Baur, of Tübingen, others very strenuously opposed them, as Dr. Wordsworth, in the 'English Review,' July, 1845, Dr. Hilgenfeld, Dr. Denzinger, and Dr. Hefele, in his

third edition of the 'Apostolic Fathers.' Cureton himself took the field against Wordsworth in his 'Vindiciæ Ignatianæ; or, the Genuine Writings of St. Ignatius, as exhibited in the ancient Syriac Version, vindicated from the charge of Heresy,' 8vo, London, 1846, which Dr. Wright characterises as a calm but crushing refutation of his opponent's allegation that the Syriac version was "a miserable epitome by an Eutychian heretic." The next publication affecting this question was Cureton's 'Corpus Ignatianum: a complete Collection of the Ignatian Epistles, genuine, interpolated, and spurious; together with numerous extracts from them, as quoted by Ecclesiastical Writers down to the Tenth Century, in Syriac, Greek, and Latin; an English Translation of the Syriac Text, copious Notes, and Introduction,' 8vo, London, 1849, in which the editor expresses his belief in the prevalence of the views he had put forth. But the controversy was not yet settled, and champions on one side and the other have since appeared. Cureton, however, remained steadfast to the position he had assumed in the 'Corpus Ignatianum,' and intended, but for his premature death, to have once again stepped forward to sum up and conclude the controversy. Whilst this was at its height, he edited the text of a portion of the Syriac version of the long-lost 'Festal Letters of St. Athanasius,' 8vo, London, 1848, of which a German translation appeared in 1852, and an English one, 8vo, Oxford and London, 1854, by Dr. Henry Burgess, formed one of the volumes of the 'Library of Fathers of the Holy Catholic Church.' Other labours of Dr. Cureton in the field of Syriac literature were the editing—for the Trustees of the British Museum—of 'Fragments of the Iliad of Homer; from a Syriac Palimpsest,' 4to, London, 1851; 'The Third Part of the Ecclesiastical History of John, Bishop of Ephesus,' 4to, Oxford, 1853, of which the Rev. R. Payne Smith published a translation in 1860, and a German translation of which appeared in 1862; 'Spicilegium Syriacum: containing remains of Bardesan, Meliton, Ambrose, and Mara Bar Serapion. Now first edited, with an English Translation and Notes,' &c., 8vo, London, 1855; 'Remains of a very Ancient Recension of the Four Gospels in Syriac, hitherto unknown in Europe. Discovered, edited, and translated,' &c., 4to, London, 1858; the 'History of the Martyrs in Palestine,' 4to, London, 1861, by Eusebius of Cæsarea, which was the last of Dr. Cureton's works that he lived to finish.

Resuming the thread of his personal and professional career, it may be recorded that Cureton was in 1840 appointed one of the select preachers of his University; became in 1847 Chaplain in Ordinary to the Queen; and was appointed by the Crown, in December, 1849, to the Rectory of St. Margaret's, Westminster, to which was attached a canonry in the Abbey. Soon after this promotion he resigned his Assistant-Keepership in the British Museum. On the 29th of May, 1863, he received a severe shock from a railway accident, whilst on his return with his family from Eastbourne, from the effects of which he never recovered. He died at his native place of Westbury, on the 17th of June, 1864, leaving the Orientalists of Europe to deplore a loss which seemed irreparable. The honours which his scholarly reputation attracted, both in this country and abroad, were numerous. He was elected a Fellow of the Royal Society in 1838; in 1848, Deputy-Chairman, and in 1863 Chairman of the Committee of the Oriental Translation Fund; in 1855, a Corresponding Member, and in 1860 a Foreign Associate of the Institute of France; in 1859 was appointed a Trustee of the British Museum on the part of the Crown; and received the Membership of the French Asiatic Society, the Honorary Membership of the Historico-Theological Society of Leipzig, and the Corresponding Membership of the German Oriental Society, besides other distinctions. His contributions to popular theology are 'Three Sermons preached at the Chapel Royal, St. James,' 8vo, London and Oxford, 1848; a Sermon preached at the request of the Prince Consort before the Corporation of Trinity House, and printed for private circulation, with the title of 'The Doctrine of the Trinity not Speculative but Practical,' 4to, London, 1858; and a discourse delivered in Westminster Abbey on Sunday evening, April 10, 1859, and published in 'Westminster Abbey Sermons,' with the title of 'God's Promises and Man's Promises contrasted.' Amongst the plans which Dr. Cureton left unfulfilled was the publication of a work which was edited after his death, and entitled 'Ancient Syriac Documents relative to the earliest Establishment of Christianity in Edessa and the neighbouring Countries, from the Year of our Lord's Ascension to the beginning of the Fourth Century; discovered, edited, translated, and annotated by the late W. Cureton, &c., with a Preface by W. Wright, Ph.D., LL.D., Assistant in the

Department of Manuscripts, British Museum, 4to, London and Edinburgh, 1864. Dr. Wright has since carried out another unaccomplished design of Dr. Cureton, by his publication of the 'Homilies of Fārhad, or Aphraates, the Persian Sage,' 4to, London, 1869.

CURLL, EDMUND, was born in the West of England, in the latter part of the 17th century. He appears to have commenced business by keeping a bookseller's stall in Covent Garden. In 1708 he was established as a publisher at Middle Temple Gate; thence he removed to "the Dial and Bible, against St. Dunstan's Church, in Fleet-street;" about 1719—20 to Paternoster Row; in 1723 returned westward, and, though he several times shifted his abode, continued thenceforward in or about the Strand or Covent Garden. He has obtained an unenviable place in the literary history of the 18th century as the publisher of obscene books and the opponent of Pope, who has branded "dauntless Curll," "the miscreant," in some of the coarsest and most offensive lines in the Dunciad. Curll was rapacious, unprincipled, and unscrupulous, and many of his books deserved all the reprobation they received; but all his books were not of a disreputable character. He was the publisher of 'Bishop Bull's Vindication of the Church of England,' 'The Devout Companion,' South's 'Remains,' Aubrey's 'Antiquities of Surrey,' Ashmole's 'Berkshire,' and 'Order of the Garter,' Parker's 'History of his Own Time,' Whitelocke's 'Memorials,' Erdeswicke's 'Survey of Staffordshire,' and other theological, historical, and antiquarian works, as well as Young's 'Last Day,' and Philips' Poems. His quarrel with Pope commenced in 1715, on his publishing the 'Court Poems' (a main cause, also, of Pope's Quarrel with Lady Mary Wortley Montague). Curll met Pope and Lintott at the Swan Tavern, Fleet-street, to discuss the publication. They did not quarrel then, but Curll afterwards charged the poet with having put "an emetic potion" into his wine, and Pope shortly after published 'A Full and True Account of a horrid and barbarous revenge by Poison, on the body of Mr. Edmund Curll, bookseller, with a faithful copy of his last Will and Testament. By an Eye Witness.' This, which is more bestial than even the verses in the Dunciad, was reprinted in Pope and Swift's Miscellanies, and the poet returns to the story both in the text and notes of the Dunciad. The same year, 1716, Curll having offended the Westminster Scholars by printing, without permission, "with false Latin in't," the Oration delivered by the Captain of the King's Scholars on the death of Robert South, was enticed within the school precincts, tossed in a blanket, and beaten: the story, of course, being quickly spread abroad in prose and verse. About this time (May, 1716) Curll was summoned before the House of Lords for breach of privilege in publishing 'An Account of the Trial of the Earl of Winton,' received, on his knees, a reprimand from the Lord Chancellor, and was discharged on payment of the fees. A few years later he was again called before the House of Lords, this time for publishing the will of a peer: wills and testaments of persons recently deceased being a class of goods in which the Dauntless carried on a considerable trade. In November, 1725, Curll was tried before the Court of King's Bench for publishing obscene and immoral books, namely, a translation from the Latin, 'De Usu Flagrorum in re Venereâ,' and, 'Venus in the Cloister, or the Nun in her Smock,' from the French. He was found guilty, and, it is generally added, was sentenced to be set in the pillory, and lose his ears. But this is an error. Curll moved an arrest of judgment, on the ground that the offence was not a libel, and, if punishable at all, was an offence *contra bonos mores*, and only punishable in a spiritual court. The Court ordered the point to be argued, and took time to consider its judgment. Curll, meanwhile, was remanded to the King's Bench Prison, where he was kept in close confinement for five months. There he formed an acquaintance with a fellow prisoner, John Ker, of Kersland, and undertook to publish his 'Memoirs and Secret Negotiations at the Courts of Great Britain, Vienna, Hanover, &c.' Proceedings were at once instituted against Ker and his publisher for a misdemeanour in printing a scandalous and seditious libel. Ker died before the trial, but Curll was found guilty, and he was then (February 12th, 1728,) called up for judgment on the two convictions, the judges having decided against him on the first. He was sentenced, on the indictments for the obscene books, to pay a fine of 25 marks for each, and to enter into recognizances for his good behaviour: and for publishing Ker's Memoirs, to pay a fine of 25 marks, to stand in the pillory for the space of an hour, and to enter into his own recognizance for his good behaviour for another year. He accordingly stood in the pillory on February

28th, but telling the mob that it was for vindicating the memory of Queen Anne, he not only escaped pelting, but at the end of the hour was carried off in triumph to a neighbouring tavern. Nothing is said in the sentence about his ears, and of course they were not cropped, yet Amory, who boasts of his intimate friendship, says, like most who have spoken of him, "he lost his ears for the 'Nun in her Smock,' and another thing." Curll had, in 1727, published Pope's Letters to his friend Cromwell, having bought them of Mrs. Thomas, and this was one of the grounds of Pope's anger. In 1735 he announced an edition of 'Mr. Pope's Literary Correspondence for Thirty Years, from 1704 to 1734.' How he obtained the letters has never been fully explained, though it is now generally believed that Pope caused them to be conveyed to him ready printed. Be that as it may, the poet expressed great indignation, and, as Curll had in his advertisement mentioned the name of certain peers, managed to have attention called to it in the House of Lords as a breach of privilege. The printed sheets were seized, and Curll summoned to the bar, but no such "abuse of Lord Burlington," as was asserted, being found in them, he was dismissed, and the books returned to him. Pope's purpose was served in general attention being directed to the Letters, and he brought out his own edition. But Curll was not disposed to forego his advantage, and he continued to publish Pope's Letters, incorporating in his those first issued in Pope's edition, till, with the help of a great deal of utterly irrelevant matter, his series reached in all six volumes. This filled the measure of Pope's wrath, and Curll's place in the Dunciad was the consequence. Into the details of the strife it is not necessary to go farther, and we advise the reader who is not concerned in the subject to avoid touching the pollution. Curll died in 1747, "as great a penitent," according to Amory, "as ever expired." An interesting account of Curll will be found in Mr. Charles Knight's 'Shadows of the Old Booksellers,' and a great deal of information, some of it original, concerning him is collected in 'Notes and Queries,' S. 2, vols. ii.—x. For the story of the Letters, consult 'Carruther's Life of Pope,' and the 'Athenæum' for 1854; some additional information may be looked for in Elwin's forthcoming edition of Pope's Works.

CURRAN, JOHN PHILPOT [E. C. vol. vi. col. 991].

CURTIS, JOHN, entomologist, was born at Norwich, Dec. 3, 1791. He attended a school at Norwich, where he showed an interest in insects, and became acquainted with Sir James E. Smith and the father of Sir W. J. Hooker. In his 16th year he was articled to a solicitor, but he had not been long engaged in legal matters before he made the acquaintance of Mr. Simon Wilkin, a young man of wealth, who, on attaining his majority, invited Curtis to live with him at his residence, Coney Hall, near Norwich. An entomological society was got up, and several eminent men, such as the Rev. W. Kirby, John Lindley, and others joined its ranks. He formed a resolution to describe and delineate all the genera of insects, and with that view he learned how to etch and engrave, dissected all the specimens he could obtain, and made copies of the published figures of such as were beyond his reach. In 1819 he went to London, and was introduced to Sir Joseph Banks, Dr. Leach, and others, having tastes congenial with his own. In 1825 he made an entomological tour through Scotland, and in 1829 explored a portion of France. In 1843, 1850, and 1851, he made tours in Italy. His death occurred Oct. 6, 1862. His literary works were very extensive. Thus, in addition to numerous scientific papers, he wrote some entomological works of unusual scope. In 1824 he commenced his great work on British entomology, and he issued it in monthly parts until its completion in December, 1839. The work forms 16 volumes, illustrated with 700 plates of admirable figures. From 1841 to 1847 he was the entomological editor of the 'Gardener's Magazine.' Shortly before his death he lost his sight, owing, it is supposed, to having overstrained his eyes, and received for a short period a Government annuity of 150l. He was a member of numerous societies, English and foreign.

* CURTIUS, ERNST, a German antiquary and philologist, was born on the 2nd of September, 1814, at Lübeck, where his father held the office of syndic. He received his earlier education at the Catharine Gymnasium of his native city, after which he prosecuted his classical studies successively at the universities of Bonn, Göttingen, and Berlin. In 1837 he accompanied Professor Brandis to Athens for the purpose of examining the monuments and remains of classical antiquity in Greece. Whilst residing in that country he produced, jointly with his friend Emanuel Geibel, a small work, entitled *Classical Studies*, 'Classischen Studien,' 12mo, Bonn, 1840; and in the same year made an excursion into Peloponnesus in company with Professor Karl

Ottfried Müller. After the death of the latter at Athens, Curtius returned leisurely to Germany, spending some time by the way in Italy, and arriving at Halle in December, 1841, with the manuscript of his 'De Portubus Athenarum Commentatio,' 8vo, Halle, 1842. He now settled as a teacher at Berlin, and in 1844 was appointed professor extraordinary in the university there; and about the same time published his 'Anecdota Delphica,' 4to, Berlin, 1843; 'Inscriptiones Atticæ nuper repertæ duodecim,' 8vo, Berlin, 1843; and 'Die Akropolis von Athen,' 8vo, Berlin, 1844, which on the 10th of February of that year had been delivered as a discourse before the Berlin Scientific Society. In the following October he was appointed tutor to Friedrich Wilhelm, the present Crown Prince of Prussia, whom, in 1849, he accompanied to the university. He returned to Berlin in the spring of 1850, and devoted himself afresh to his academic duties, until in 1856 he removed to Göttingen as professor of classical philology and archæology, and joint director of classical seminaries. Curtius became in 1853 a member of the Academy of Science at Berlin, and of the Scientific Society of Göttingen in 1856. His two principal works are an historico-geographical description of the Peloponnesus, entitled 'Peloponnesos. Eine historisch-geographische Beschreibung der Halbinsel,' 2 vols., 8vo, Gotha, 1851—2; and a history of Greece, 'Griechische Geschichte,' 8vo, Berlin, vol. i., 1857—vol. ii. to the end of the Peloponnesian War, 1861—English translation by A. W. Ward, M.A., 2 vols., 8vo, London, 1868—69. The remaining works of Professor Curtius include one on Greek art, 'Die Kunst der Hellenen,' 8vo, Berlin, 1853; the Ionians before the Ionian Emigration, 'Die Ionier vor der ionischen Wanderung,' 8vo, Berlin, 1855; a treatise upon ancient Greek wells, &c., and their inscriptions, 'Abhandlung über griechische Quell- und Brunnenschriften,' 4to, Göttingen, 1859; Attic studies, 'Attische Studien,' 4to, Göttingen, 1862, &c.; besides contributions to

various classical or antiquarian periodicals, amongst which should be specially named 'Gerrhard's Archæologische Zeitung.'

CZARTORYSKI [E. C. vol. ii. col. 473]. PRINCE ADAM GEORGE CZARTORYSKI died at Montfermeil, near Paris, on the 15th of July, 1861, aged 91. His brother, PRINCE CONSTANTINE ADAM CZARTORYSKI, died at Vienna, on the 23rd of April, 1860, in his 87th year.

CZERNY, CARL, pianist and musical composer, was born at Vienna, February 21st, 1791. He was early taught music by his father, a professor of the pianoforte, but studied composition from the works of Kirnberger and Albrechtsberger. In 1804, at the early age of 13, he began to teach the pianoforte; and was actively engaged in teaching during the remainder of his life. Among his pupils were Liszt, Döhler, and Madame Oury. In 1820 he published his first works, variations and rondos; and during the next 36 years he produced the vast number of 850 compositions for the pianoforte, besides masses, requiems, motetts, concertos, symphonies, &c., and 400 pieces were left by him in manuscript. He died on the 15th of July, 1857. As in other cases of the kind, he did not give himself time to develop the higher characteristics of music. Besides a translation of Reicha's treatise on harmony, a treatise on composition, and a 'Method' for the pianoforte, he wrote 'Umriss der ganzen Musikgeschichte, dargestellt in einem Verzeichniss der bedeutenderen Tonkünstler aller Zeiten, chronologisch geordnet,' 4to, Mainz, 1851, &c.

CZUCZOR, GERGELY, or GREGORY [E. C. vol. ii. col. 474]. This distinguished Hungarian poet and philologist died at Pesth of cholera, on the 9th of September, 1866. He is understood to have nearly completed his great dictionary of the Hungarian language, 'A Magyar Nyelv Szótára,' but the last part we have seen (8vo, Pesth, 1867) only comes down to the end of the letter O.

D

DAHL, JOHANN CHRISTIAN [E. C. vol. ii. col. 447], died at Dresden on the 14th of October, 1857.

* DAHL, VLADIMIR IVANOVICH, a Russian philologist, novelist, and antiquary, was born at St. Petersburg in 1802, and after receiving the education of a naval cadet in his native city, joined the Black Sea fleet in 1819, and for several years took part in the operations in which it was engaged. He performed military service in the army which made the Polish campaign of 1831; and accompanied an expedition directed against Khiva, in Turkestan, in which he distinguished himself for his courage and address, and on which he animadverted in a volume of Observations, &c., published in German as 'Bemerkungen zu Zimmermann's Entwurf des Kriegstheaters Russlands gegen Khiwa,' Orenburg, 1840. As a variety in his career, Dahl went through a course of medical instruction in the University of Dorpat, and practised in the military hospital of St. Petersburg; and also accepted an appointment as a chinovnik, or official in the civil service. Finally his devotion to literary pursuits became exclusive; and he produced a number of stories and romances which have been much commended for the cleverness of their plots, their vivacity, force, and naturalness of style, and singular purity of diction. They were published chiefly under the pseudonym of Kasak Lugansky, or the Cossack Lugansky, and comprise a story entitled 'Chmoei,' or Drunkenness; 'Son u Jaw,' or the Dream and the Awakening; 'Wakeh sidorof tshaikin njebulwalo s bülom,' or What has never been, and what has been; 'Skazka o Mishda, o Stschastii, o Prawda,' or a Tale of Misery, Good Fortune, and of Truth; 'Dwarnik,' or the Servant; 'Dentschschik,' or the Officer's Valet; the Cossack of the Ural, which was published in German as 'Der Kasak vom Ural,' in the second volume of Robert Lippert's 'Nordisches Novellenbuch,' 3 vols. 8vo, Leipzig, 1846—47; and Sailors' Pastimes, 'Matrosskie Dosugi,' 8vo, 1853.

Dahl traversed nearly all the provinces of the Russian Empire for the purpose of making himself acquainted, immediately and at first hand, with the folk-lore of the Russian people. To the exercise of his industry, and his almost intuitive perception of what was distinct and characteristic, are due the

very valuable contributions he has made to the ethnography of the most remote and unknown districts of Russia. He has collected, and reduced to writing, but up to the present time without publication, several thousands of popular legends, *Skazki*, which, being perpetuated by oral tradition, throw light upon the habits, the ideas, the dialectic peculiarities, and the antiquities generally of the various Russian provinces; and has published a large collection containing about 30,000 Proverbs of the Russian Nation, with the title of 'Poslovitsui Russkago Naroda.' A collective edition of Dahl's works appeared in 8 vols. St. Petersburg, 1860—61. His most valuable and important achievement is his Explanatory Dictionary of the living Great-Russian Language, 'Tolkovy Slovar jivago Veliko Russkago yazyuika,' the publication of which, in four huge volumes, was completed in 1868. In this immense work, which, it should be stated, is designed only for Russians or for those who have a knowledge of their language, Dahl has explained the great number of Russian words which do not occur in books; and has also inserted in it, for the sake of their idiomatic and philological value, the 'Proverbs' which he had already published in a separate form.

DAHLGREN, JOHN A., Rear-Admiral in the United States service, was born in Pennsylvania in 1810. Having entered the navy as a midshipman in 1828, he worked his way up slowly in rank, becoming a lieutenant in 1837, and a commander in 1855. He saw little service afloat after 1847, except a cruise in the Plymouth sloop of war, to make certain gunnery experiments, and for a short time in the Civil War. His chief employment was at the Navy Yard, Washington, in the departments of ordnance and hydrography, superintending the construction of new guns. Dahlgren advocated the substitution of shell guns for the solid shot guns previously in use. His 8-inch shell gun did not differ much in length, range, or weight from the old 32-pounder, while it was much more powerful in action. Many of the researches which led to this change are treated in an American blue-book, 'Reports of Experiments on the Strength and other properties of Metals for Cannon, with a Description of the Machines for Testing Guns, of the Classification common in Service. By Officers of the Ordnance Department.'

ment,' 1856. Dahlgren also introduced an improved armament for boats: light bronze 24-pounder and 12-pounder howitzers, adapted alike for ordinary shells, shrapnel shells, and canister shot. He contrived light iron field carriages for similar guns, to be used as field howitzers. What is known as a Dahlgren gun, in the American service, is distinguished by having relatively less metal in front of the trunnions, and more behind, than ordinary guns: a proportion suggested by the long series of experiments which he had conducted. His services in the Civil War, 1861—65, won for him the rank of captain and of rear-admiral. He published many professional works, some separately, but mostly in government blue-books, viz., 'Report of the 32-pounders of 32 cwt.,' 1850; 'System of Boat Armament in the United States Navy,' 1852, second edition, 1856, of which a French translation appeared in 1855; 'Ordnance Memoranda: Naval Percussion Locks and Primers,' 1852; 'Shells and Shell Guns,' 1856. Admiral Dahlgren died at Washington, of heart disease, July 13th, 1870.

DALE, REV. THOMAS, Dean of Rochester, was born at Pentonville, London, Aug. 22, 1797; was educated at Christ's Hospital, and at Corpus Christi College, Cambridge; and having graduated B.A., was ordained, and took priest's orders in 1823. Whilst at college he published 'The Widow of Nain, and other Poems,' which passed through several editions, and made him widely known in religious circles. The 'Outlaw of Taurus,' and other poems which followed were hardly so popular. After some years of successful practice as private tutor, publishing a 'Translation of the Plays of Sophocles into English Verse,' and serving as curate, lecturer, and assistant preacher at St. Michael's, Cornhill, St. Bride's, and other city churches, he was, in 1830, elected to the incumbency of St. Matthew's Chapel, Denmark Hill, and there attained great distinction as a preacher. In theology he belonged to the 'Evangelical' section of the church; but was free from sectarian narrowness. His teaching met with wide acceptance, and in 1835 he was presented by Sir Robert Peel to the vicarage of St. Bride's, Fleet Street, which he held till his nomination in 1847 to that of St. Pancras. During this time his celebrity as a preacher and a writer had been extending, and on the foundation of the London University (now University College), Mr. Dale was elected Professor of the English Language and Literature. He also taught there a class for the study of theology and the Greek Testament, and his Introductory Lectures to both courses were published. He discontinued his connection with the London University in 1830, but in 1836 accepted the professorship of the English language and literature at King's College, which he held till 1840. As vicar of St. Pancras, Mr. Dale, whilst assiduous in parochial work and maintaining his position as an effective and popular preacher, distinguished himself by his efforts for church extension and for the breaking up of the huge parish into several district parishes, in both of which objects he was remarkably successful. Mr. Dale was in 1843 made prebend of St. Paul's, and a few months later canon residentiary. Advancing age led Mr. Dale to desire to exchange St. Pancras for some smaller living, and in 1860 he accepted that of Thefield, Hertfordshire. In the spring of 1870 he was appointed Dean of Rochester, but died within a month of his installation, on the 14th of May, 1870. Besides the works already named, Mr. Dale published a large number of sermons preached on public occasions, pastoral addresses, and various works of a devotional character. He also published a 'Domestic Liturgy,' a 'Companion for the Altar,' and a 'Young Pastor's Guide,' and wrote a Biographical and Critical Introduction to an edition of Cowper's Poetical Works.

DALHOUSIE, JAMES ANDREW BROWN, tenth Earl and first Marquis of [E. C. vol. ii. col. 481], died on the 19th of December, 1860, and was succeeded in the earldom by his cousin, the Right Hon. Fox Maule, Lord Panmure, Secretary of War in Lord Palmerston's Ministry.

DALIBARD, THOMAS FRANÇOIS, was born at Crannes in 1703, and died at Paris in 1779. His studies were directed by Buffon, and he was the first to introduce into France the principles of Linnæus. He published papers on botany and physics which are now forgotten; but his name is associated with the famous experiment, devised by Franklin, for determining the identity between lightning and electricity. Franklin's claim to what was long known as "the Philadelphia experiment" has been disputed, as usual, by the French, and M. Arago, in his *Éloge* of Volta, has assigned the credit of having established the identity in question to the Abbé Nollet and to Dalibard. It is true that in 1748 Nollet pointed out a number of resemblances between lightning and electricity, but Dr. Wall-

referred to the resemblances in 1708, and Grey with more particularity in 1735. Nollet suggested no means for testing the identity, but Franklin in 1749 did, and minutely described two methods of conducting the experiment, and sent his instructions to Europe in order that others, who had better local opportunities than he possessed, might try one of them. Dalibard admits that he followed Franklin's printed directions in erecting his apparatus at Marly-la-Ville, and placed it under the care of an old soldier named Coiffier. The first storm occurred while Dalibard was at Paris. Coiffier presented a piece of metal to the rod and drew a number of sparks. He then ran for the curé, who repeated the experiment, and wrote an account of it to Dalibard. This was on the 10th of May, 1752. In writing an account of it, Dalibard says:—"En suivant la route que M. Franklin nous a tracée, j'ai obtenu une satisfaction complète." Franklin's celebrated kite experiment was performed in June, 1752.

DALLAS, GEORGE MIFFLIN, an American lawyer, statesman, and diplomatist, was born at Philadelphia, July 10th, 1792. His father had been much engaged in the political organisation of the republic. Young Dallas, after graduating at Princeton College in 1810, studied the law under his father, and was admitted to the bar in 1813. When Mr. Gallatin went, in that year, as ambassador to St. Petersburg, Mr. Dallas accompanied him as private secretary, and took a journey to London to aid in the negotiations which brought about a treaty of peace between England and the United States in 1814. After serving for about a year in the Treasury department, he established himself as a lawyer, became solicitor to the United States bank, and deputy attorney-general for Philadelphia County. In 1828 he was elected mayor of Philadelphia city; in 1829 United States district attorney; in 1831 a senator of the United States; and in 1833 attorney-general of Pennsylvania. From 1837 to 1839 he was ambassador from the United States to Russia. Returning to America, he declined the proffered post of United States attorney-general, preferring to resume his professional avocations. During the presidency of Mr. Polk, 1844 to 1848, Mr. Dallas was vice-president, and took an active part in the discussions relating to the annexation of Texas. The adoption of a free-trade policy, by imposing customs duties for revenue only, and not for protection, was settled by the casting vote of Dallas as president of the senate. Once again he returned to private practice, after his term of vice-presidency had expired. In 1856 he succeeded Mr. Buchanan as ambassador to England, and during his five years' occupancy of this post he was engaged in many negotiations and discussions with the government concerning boundary disputes. In 1861 he was succeeded by Mr. C. F. Adams. In the Civil War which broke out in that year he was not an active participator, but gave his sympathies to the Federal or Union party. Mr. Dallas died in January, 1865. His character has been better painted by himself than it could be by any other person, in 'A Series of Letters from London, written during the years 1856—60, by George Mifflin Dallas, then Minister of the United States at the British Court. Edited by his daughter Julia,' Phil. 1869. The letters were written chiefly to Mr. Marcy and Mr. Cass, in succession secretaries of state, or foreign secretaries, of the American government. They speak very unreservedly of the individualities, manners, homes, and society of the distinguished persons whom he as a diplomatist met in England; and, even supposing it right to pen such letters to the members of his government, it is hardly excusable to publish them while so many of the persons named are still living. Mr. Dallas's letters display considerable self-complacency, with an unbounded faith in the grand destiny of the American Republic.

DALLERY, THOMAS CHARLES AUGUSTE, organ builder and mechanician, was born at Amiens, Sept. 4th, 1754. His father, Charles Dallery, an organ-builder in that town, had gained fame by his organs at St. Nicolas aux Bois, the Abbey of Clairmarais, and the Abbey of Anchin; the last of the three (with five keyboards and sixty-four stops) was afterwards transferred to St. Peter's, Douai. The son, after showing his ingenuity in mechanism by constructing a time-piece when twelve years old, learned his father's trade. During his career Dallery introduced many improvements in the construction of musical instruments. Until that time the semi-tones on the harp had been produced by means of pedal mechanism which frayed the strings and injured the quality of the tone; he introduced an arrangement far superior, but not now adopted, simply because Erard has since eclipsed all his predecessors in this line. Dallery invented an instrument called the Clavecin Organisé. At one time he turned his attention to steam navigation and screw propulsion, constructing models to embody his ideas, and trying

them at Bercy on the Seine in 1803. He took out a patent, but meeting with no encouragement from the government, and having exhausted his means, he abandoned this project in disgust. Dallery died on the 1st of June, 1835. Nine years after his death the Académie des Sciences issued a report awarding priority of invention to Dallery in regard to steam navigation and screw propulsion; but the correctness of the report is admitted neither in England nor in America, except in reference to the rival claims of Frenchmen one against another.

The family of the Dallerys have been organ-builders for a hundred and forty years, represented in succession by Charles, Pierre, Thomas Charles Auguste (the subject of this memoir), Pierre François, and Louis Paul.

DALMASIO, LIPPO, an early Bolognese painter, was a pupil of Vitale, and acquired such repute as a painter of Madonnas that, according to Malvasia, a family was not considered to be wealthy in Bologna which did not possess one of his paintings. His pictures have much sweetness and grace, but little power. Out of Bologna they are seldom met with. The National Gallery possesses a good signed example, No. 752, 'Madonna and Child, in a circular glory; angels hovering above, a flowery meadow below.' The dates of his birth and death are unknown; he painted between the years 1376 and 1410.

DAMER, THE HON. ANN SEYMOUR, famous in her day as an amateur sculptor, was the daughter of Marshal Conway, and was born in 1748. She married, in 1767, the Hon. John Damer, brother of the Earl of Dorchester, who became conspicuous among the dissipated young men of fashion, wasted his fortune, and finally shot himself in a tavern in 1776. Mrs. Damer sought diversion in art. Attaching herself strongly to sculpture, she took lessons of Ceracchi, who used to call her the Muse of Sculpture, and afterwards of Bacon, and excited the unbounded admiration of Horace Walpole. Her works are only those of an amateur, and of all the arts sculpture is that in which an amateur is least likely to excel. But they are far above the average of their class, and exhibit considerable sculptural feeling. A bust of Nelson by her is in the Guildhall, London; and the head of the Thames, on the Bridge, Henley-on-Thames, so greatly praised by Walpole, is from her chisel. Walpole, the friend of her father, retained through life his regard for her; her name is of frequent occurrence in his Correspondence, and at his death he bequeathed to her the use for life of Strawberry Hill. She died on the 28th of May, 1828. A statue of her, by Ceracchi, is in the British Museum, where also is the diamond snuff-box (containing his miniature) presented to her in 1815 by the Emperor Napoleon.

* DANA, JAMES DWIGHT, an American geologist and naturalist, was born February 12, 1813, at Utica, New York, and educated at Yale College, Newhaven. On leaving the college he was appointed a professor of mathematics, and as such accompanied a scientific expedition to the Mediterranean. In 1838 he accompanied Wilkes in his voyage round the world, as geologist and naturalist. He married a daughter of his master, B. Silliman, and has since been intimately connected with the Sillimans in many of their literary undertakings. In conjunction first with the elder Silliman, and afterwards with the younger, he has long been one of the editors of the 'American Journal of Science and Arts.' His works have a high character, and are remarkable, some for their numerous broad generalisations, and others for their copiousness of detail. In connection with Wilkes's expedition he wrote reports on geology, zoophytes, and crustacea. In 1837 he published a 'System of Mineralogy,' which has passed through five editions—the last issued in 1868—and has become a standard work of reference. In 1862 appeared his 'Manual of Geology,' of which a second edition was published in 1866. It is expressly adapted for American students. In addition to these and a few other separate works, he has written nearly 150 papers for various scientific journals. He is at present the Silliman professor of geology and mineralogy in Yale College.

DANBY, FRANCIS, A.R.A. [E. C. vol. ii. col. 492.] Mr. Danby continued to paint his poetic landscapes, and to send them to the Academy Exhibitions; but he obtained no higher academic distinction. For several years he had resided at Exmouth, Devonshire, and he died there on the 10th of February, 1861. In the National Gallery, British School, is a small picture by him, No. 437, 'The Fisherman's Home, Sunrise'; the Sheepshanks Collection, South Kensington, possesses a more important specimen, 'Calypso's Island,' painted in 1821.

DANGEAU, LOUIS COURCILLON, ABBÉ DE, younger, brother of the Marquis de Dangeau, the subject of the following

article, was born in Paris in 1643; was designated for the church; in due time ordained, and received many benefices; travelled, and made himself master of several modern languages; was nominated *lecteur du roi*, and mingled much with the gay world; was converted by Bossuet to a course of life more becoming a richly-beneficed ecclesiastic; was elected a member of the Institute, and wrote many books on geography, history, heraldry, grammar, and theology, and died at Paris on the 1st of January, 1723. His 'Dialogues sur l'Immortalité de l'Âme,' 12mo, Paris, 1684, was esteemed his masterpiece, but he most prided himself on his conjugations of the French verbs. The name of the Abbé Dangeau is of frequent occurrence in the literature of the time; but, though he figured largely then, he has dwindled to utter insignificance now.

DANGEAU, PHILIPPE DE COURCILLON, MARQUIS DE, was born on the 21st of September, 1638. He served in Flanders as a captain of cavalry under Turenne, in 1658, and after the Peace of the Pyrenees entered the Spanish service. Returning presently to France, he obtained the command of the King's Regiment, and made with it the campaign of Flanders in 1667, leaving it to act as aide-de-camp to Louis XIV. He was elected, in 1668, to be a member of the Académie Française, a distinction which he owed to his patronage of men of letters; and he was also chosen an honorary member of the Académie des Sciences. In the years 1673 and 1674 he was employed on various diplomatic negotiations, having already been concerned in bringing about the marriage between the Duke of York, afterwards King James II., and the Princess of Modena. He filled a series of offices at the Court of Louis XIV., where he was a favourite, and became at length grand master of the royal and military orders of Notre Dame du Mont Carmel, and of Saint Lazare of Jerusalem. He died at Paris on the 9th of September, 1720.

The Marquis de Dangeau was famous as a linguist, and as a writer of *vers de société*; but the work by which he is chiefly remembered at present is a chronicle, known as the 'Journal de Dangeau,' of the events which occurred day by day at the Court of Louis XIV., and in the royal family, from the year 1684 to 1720. It is valuable for the faithfulness of its portraits and its details, which Voltaire affected to consider so frivolous that he characterised the diary as that, not of the Marquis de Dangeau, but of an imbecile old valet de chambre—a sentence probably delivered by way of retaliation for a passage in it which had transpired, in which the author sneered at "les imprudences et les essais satiriques du petit Arouet." The 'Journal de Dangeau' lay for many years in manuscript, until it was partially edited by Madame de Genlis, with the title of 'Mémoires du Marquis de Dangeau, écrits par lui-même, contenant beaucoup de particularités et d'anecdotes sur Louis XIV., sa Cour, &c.; avec des Notes, et un Abrégé de l'Histoire de la Régence'; 3 vols. 8vo, Paris and London, 1817; 4 vols. 8vo, Paris, 1817; and 2 vols. 8vo, London, 1825. It was for the first time published in its entirety, and in a form which incorporated the annotations of the Duc de Saint Simon, as the 'Journal du Marquis de Dangeau, publié en entier pour la première fois par M.M. Soulié, Dussieux, de Chennevières, Mantz, de Montaiglon; avec les additions inédites du Duc de Saint Simon, publiées par M. Feuillet de Conches,' 19 vols. 8vo, Paris, 1864—60.

DANTAN, JEAN PIERRE [E. C. vol. ii. col. 500], died in September, 1869.

DANTE, ALIGHIERI [E. C. vol. ii. col. 501]. Since the publication of the memoir of Dante, numerous editions and translations of his works, or parts of them, have been published, and festivals have been celebrated in his honour on occasion of his sixth centenary in 1866. Of the Italian editions of the 'Divina Commedia,' the most important, from a critical and bibliographical point of view, is a reprint, *verbatim et literatim*, of the first four editions, of Foligno, folio, 1472; of Jesi, 4to, 1472; of Mantua, folio, 1472; and of Naples, folio, 1475—6. The reprint is a large and elaborate volume, published at the expense of Lord Vernon, well known as an "ardente Dantofilo," and a member of the Accademia della Crusca, to his colleagues in which society he dedicates the work. Sir Antonio, then Mr., Panizzi, who was practically the editor of the volume, supplied a preface of great critical and bibliographical interest. The title of Lord Vernon's edition was 'Prime Quattro Edizioni della Divina Commedia, letteralmente ristampate, per cura di G. G. Warren, Lord Vernon,' 4to, London, 1858. Another critical issue, from a German editor, J. H. C. Witte, was entitled 'La Divina Commedia. Ricorretta sopra quattro dei più autorevoli testi a penna da Carlo Witte,' 4to, Berlin, 1892, whose text was fol-

lowed by the 'Divina Commedia,' &c., which occupied the 41st, 42nd, and 43rd volumes of Daelli's 'Biblioteca Rara,' 8vo, Milan, 1864. Amongst the translations of the 'Divina Commedia' recently issued in various languages, may be mentioned J. A. de Mongis' French version, 'La Divine Comédie, &c.; Enfer, Purgatoire, Paradis; traduite en vers français,' 8vo, Paris, 1857; the English one of Mrs. Ramsay, 'Dante's Divina Commedia. Translated into English in the Metre and triple Rhyme of the Original. With Notes,' 3 vols. 8vo, London, 1862—63; the German one of L. G. Blanc, 'Die göttliche Komödie des Dante Alighieri; Uebersetzt und erläutert,' &c., 8vo, Halle, 1864; the Rev. John Dayman's 'Divine Comedy of Dante Alighieri,' 8vo, London, 1865, a translation in Terza Rima, with which the Italian text was also given, and of which the 'Inferno' had been separately published in 1843; and 'The Divine Comedy of Dante Alighieri, Translated by Henry Wadsworth Longfellow,' 3 vols. 4to, Boston, U.S., 1867, and 3 vols. 8vo, London, 1867. Several versions of the 'Inferno' have also appeared, and amongst others, that of William Michael Rossetti, in blank verse, 8vo, London, 1865, of which the translator says that his aim "may be summed up in one word—literality"; and a few separate ones of the 'Purgatorio,' none of which call for special remark. Translations of the 'Vita Nuova' have also been freely issued; and biographies and memoirs appertaining to the family and personal history of Dante, as well as studies, lectures, and essays upon his genius, language, times, and politics, have appeared in most of the leading languages of Europe. The whole subject of Dantesque bibliography, between the years 1845 and 1865, is treated all but exhaustively in a work of which the full title may advantageously be given: 'Della Letteratura Dantesca degli ultimi venti Anni, dal 1845 a tutto il 1865, pubblicata per Cura del D. C. F. Carpellini. In Continuazione della Bibliografia Dantesca del Sig. Visconte Colomb de Batines. Contenente i Cataloghi delle Edizioni della Divina Commedia e delle Opere Minori.—Delle Traduzioni delle Opere di Dante nelle Lingue d'Europa.—Delle Vite di Dante.—Degli Studi Storici, Filosofici, Polemici, &c., sopra Dante.—E gl' Indici Generali dei Cataloghi,' 8vo, Turin and Florence, 1866. The latest publication in the way of the bibliography of Dante, is a very useful little volume by Signor Alberto Mario, entitled 'Dante e i Codici Danteschi,' Mantua, 1870.

In the year 1860 a commission was formed at Florence with reference to a project for the celebration there of a grand festival in honour of the sixth centenary of the birth of Dante, but its various proposals had small results. To it succeeded a municipal commission; and at a meeting of the Florentine Council in November, 1863, it was unanimously resolved that in May, 1865, the centenary of Dante Alighieri should be solemnly celebrated at Florence. A 'Giornale del Centenario di Dante Alighieri' was started to record the proceedings of the committee until the final consummation of the festival. As the time for its celebration approached, Florence became the centre to which Italian life determined. The excitement grew intense; and whatever was said, or done, or sold, had a reference to Dante. The king arrived on the 12th of May, 1865, and next day at noon inaugurated the *Mostra Dantesca* in the Prætorian Palace, on which occasion he was presented with a magnificent sword of wrought iron, bearing the inscription, "Dante al primo Re d'Italia." On the following day, May 14th, when 100,000 visitors were present in Florence, the inauguration of the national monument to Dante took place in the Piazza of Santa Croce, which was richly adorned with festoons of laurel and flowers interwoven in trophies, with pictorial decorations of 38 subjects from the life of Dante, and with epigraphs relating to them. The festival was intended to be a Pan-Italic one; and on its great day the 69 provinces of the kingdom for the first time met as a unity. A vast cortège, representing all classes of society, civil and military, marched from the Piazza of Santo Spirito to the Piazza of Santa Croce, where the king arrived at 11 o'clock, A.M., in a general's uniform. After an address by the Gonfaloniere, to which the king shortly replied, the majestic figure of Dante was unveiled amid a grand flourish from the orchestra, and shouts of "Onorate l'altissimo Poeta." The statue produced so vivid and profound an emotion, that his Majesty, by a spontaneous act, created the sculptor, Enrico Pazzi of Ravenna, a cavalier. Padre Giuliani addressed the king in an animated strain; and after the latter had made a suitable reply, the vast concourse began to disperse amidst the crash of vocal and instrumental music, to join in more desultory recreations. In the evening the whole city was brilliantly illuminated. The 15th of May was remarkable, amongst amusements of less

cultivated interest, for the opening of the Dante Exhibition in the palace of the Podesta, in which were displayed the portraits of the poet and his friends and heroes, and the Codici, to the number of 180; including 29 fragments of the 'Divina Commedia.' Of these Codici, Florence alone had contributed 108 from her libraries. The Exhibition was also furnished with a very complete collection of printed editions of Dante's great work, as well as with 30 editions of translations, either of the entire poem, or of part of it. Four of these were in Latin; one was in the Milanese dialect; fourteen in French; seven in English, including Longfellow's American translation; three in German, and one in Spanish. On the 17th of May, a grand banquet was given to the strangers who visited Florence on the occasion, at which Count Terenzio Mamiani presided; and on the morning of the 18th, the Gonfaloniere, with a commission of the Priori, presented to the King a commemorative medal of gold, modelled by the sculptor Pazzi, and engraved by Raffaele Sanesi, which bore a head of Dante, and on the reverse, within a laurel wreath, the inscription, "Al Divino Poeta l'Italia, nel Maggio MDCCCLXV. Municipio Fiorentino."

The city of Ravenna celebrated the centenary in June following, in a way which in one particular was more significant than that of Florence. Besides the illuminations, processions, &c., common to both, which extended in Ravenna from June 24th to June 26th inclusive, the citizens and visitors beheld with piety and awe the recently discovered remains of Dante exposed to public view. They had been removed from their sepulchre in the 17th century, and concealed in order to prevent their being burnt as those of a heretic. The place in which they were deposited was forgotten, and their opportune discovery occurred in a somewhat singular manner. On the 27th of May, 1865, some excavations were being made near the poet's tomb preparatory to the festival, when the workmen broke into an old wall behind the chapel of the Braccioforte, and there found a wooden box with inscriptions both outside and in, to the effect that the bones within it were those of Dante, placed there by Fra Antonio Santi in 1677. The original sarcophagus was opened and found empty, and ample evidence of their genuineness being adduced by a Commission appointed by the Italian Government to verify the fact of the discovery the remains, after being exhibited, as just mentioned, within a richly-ornamented glass enclosure, were, on the 26th of June, with great solemnity of circumstance, restored to their original resting-place. Dr. Barlow, who was for several years a promoter of the Dante centenary, has written, under the name of "A Representative," a narrative of 'The Sixth Centenary Festivals of Dante Alighieri in Florence and at Ravenna,' 8vo, London, Edinburgh, Florence, and Turin, 1866. Other memorials of the same event are a work entitled 'Per il Sesto Centenario di Dante (MDCCCLXV). Ricordo al Popolo,' 18mo, Florence, 1865; and a Collection of Essays illustrative of Dante, by various Italian Writers, published on the occasion of his Sixth Centenary, under the editorship of G. Ghirizzani, with the title of 'Dante e il suo Secolo,' 2 vols. 4to, Florence, 1865—66.

DARBY, ABRAHAM, one of the improvers of the iron manufacture, was born in the latter part of the 17th century; he was the son of a farmer, near Dudley. Removing to Bristol in 1700, he set up in business as a malt-kiln manufacturer, in partnership with three other persons, who were (like himself) Quakers. They added brass-founding, and iron-founding to their other trade. Down to that time, hollow-ware (cast-iron vessels, &c.) had been cast in England in clay moulds; but in 1708 Darby took out a patent for a method of casting in sand moulds, with a result so superior as to lead to a very extensive manufacture. Darby, quitting the other partners in 1709, established a large iron-work for himself at Coalbrook Dale. He was among the first to adopt coked coal instead of wood charcoal for his furnaces. He died at Madeley in 1717. His son and grandson, both named Abraham Darby, greatly extended the works at Coalbrook Dale; and the latter constructed the first iron bridge in England (giving name to the present manufacturing village of Ironbridge), over the Severn at Coalbrook Dale, in 1779.

D'ARC, JEAN. [ARC, JOAN OF, E. C. vol. i. col. 286.]

D'ARCHIAC, ÉTIENNE JULES ADOLPHE DESMIER DE ST. SIMON, VICOMTE, geologist, was born at Reims, Sept. 24, 1802. He was educated at the military school of St. Cyr, joined the army in 1821, but quitted it when the revolution of 1830 broke out. In 1835 his first geological memoir appeared, entitled 'Sur une partie des terrains tertiaires inférieurs du département de l'Aisne,' in 'Bull. Soc. Geol.' VI. pp. 240—247.

It was the forerunner of others on the tertiary and cretaceous beds of France, Belgium, and England. One of them, 'Observations sur le groupe moyen de la formation crétacée,' in 'Mém. Soc. Géol. Fr.' III. pp. 281—312 (1838), did much to raise his reputation, and is considered a model of its kind as to the way in which the subject ought to be treated. The conclusions he arrived at were important, and the most noteworthy was that which asserted that the greater the number of stages into which a formation is divisible, the more distinct are the faunas of the different stages, and *vice versa*. Another paper of a similar character is that written by him and M. de Verneuil, 'On the Fossils of the Older Deposits in the Rhenish Provinces,' in 'Trans. Geol. Soc.' VI. pp. 303—410 (1842); in which they arrived, independently, at conclusions similar to those which Prof. Phillips had previously obtained. The most important, stated shortly, was that species of restricted vertical range occupied a limited horizontal area; while those which occur in many and widely-separated localities have great stratigraphical ranges. Numerous other articles have proceeded from his pen, mostly on tertiary and secondary strata and their fossil contents. He also wrote several separate works. The most important is the 'Histoire des progrès de la Géologie de 1834 à 1845,' of which the first volume appeared in 1853, and the 8th, or last published, in 1860. The intention of the author was to treat of all the geological strata, beginning with the newest; and he has worked his way back as far as the Triassic formation. This work manifests extraordinary diligence. It is drawn up with great skill, and contains much original thought. He also wrote a large portion of the 'Description des Animaux fossiles du Groupe Nummulitique de l'Inde, précédée d'un résumé géologique et d'une Monographie des Nummulites, par le Vicomte d'Archiac et Jules Haimé,' 4to, Paris, 1853. In 1861 he succeeded Alcide d'Orbigny as professor of geology in the Museum of Natural History, Paris, and the substance of his lectures was published in 'Cours de Paléontologie stratigraphique,' 2 vols. 8vo, 1862—1864; and 'Géologie et Paléontologie,' 8vo, 1866. In 1868 he published 'Paléontologie de la France,' 8vo, being a report to the Government on the progress of paleontological science. Towards the end of 1868 he suddenly left his home, wrote farewells to all his friends, and has not been heard of since.

DARCY, PATRICK, was born at Galway, 27th Sept., 1725. He studied mathematics at Paris, and in 1746 served in the French army, and became aid-de-camp to Count Fitzjames, commander of some French troops sent to support Charles Edward. He fell into the hands of the English, and narrowly escaped being shot for bearing arms against his country. In 1749 he became an Academician, and distinguished himself by his writings on the celebrated principle of the conservation of areas, in which he shared the honour with Euler and D. Bernoulli, and which led to the principle of the immobility of the plane of maximum areas by La Place. Darcy also wrote some good papers on artillery, on the force of gunpowder, &c. In 1757 he resumed arms, and was present at the battle of Rosbach. When peace was established, in 1763, he returned to his scientific labours, and wrote on the theory of the moon, on the duration of the sensations, &c. He died at Paris, 18 Oct., 1779.

DARGAN, WILLIAM [E. C. vol. ii. col. 508]. Mr. Dargan's splendid services in the construction of roads, railways, and canals, in the erection of the Irish Exhibition buildings, and generally in the cause of Irish improvement, were, as was noticed in the above memoir, recognised by the Queen with the offer of knighthood. His countrymen, when he declined that honour, wishing that there should be some permanent memorial of national gratitude, subscribed for a bronze statue of him, which was erected in front of the National Gallery in Dublin. William Dargan's was now the most honoured and the most popular name in the Irish capital, and he was supposed to be among the very wealthiest of her citizens. The reverse was terrible. First a fall from his horse in the beginning of 1866 shattered his frame, then came the commercial disasters, and the over-sanguine man, with his hands full of all sorts of large, and some extremely speculative undertakings, was unable to meet his engagements and was declared bankrupt, and, broken in health and spirits, sank into the grave, February 7, 1867. A subscription was entered into for his widow, but the amount raised was insignificant, and a small pension has been granted to her from the Civil List.

* DARWIN, CHARLES ROBERT [E. C. vol. ii. col. 511], was educated successively at Shrewsbury, Edinburgh, and Cambridge, at which last place he took his degree of M.A. in 1831. Since 1856 his investigations have been laborious and important. They have related to a subject which had long occupied his mind,

and which he has to a certain extent made his own—viz., the natural causes of the divergence amongst organisms, and of the kind of affinity which appears to prevail amongst them. In 1859 his 'Origin of Species by means of Natural Selection' was published, in which he gives an outline of his views. His theory, stated very briefly, is that organisms multiply at a greater rate than their means of subsistence; that offspring resemble their parents in general points, but vary in minor particulars; that these variations are of different value as regards the welfare of the being; that as all cannot live some must die; that those die which are least adapted to the conditions which surround them; that in this way those characters or variations are selected which are most for the benefit of the species; and that these variations are increased in proportion as the medial conditions vary. Its publication was somewhat hastened in consequence of the same views having been arrived at independently by another eminent naturalist—Mr. A. R. Wallace. The book called forth much opposition, but in course of time a gradually increasing proportion of the scientific world has acceded to the principles enunciated in it, and now his supporters are very numerous. His subsequent works have had for their object the supplying the data upon which he founded his conclusions. They are:—'On the various contrivances by which British and Foreign Orchids are Fertilized,' 8vo, London, 1862; 'The variation of Animals and Plants under Domestication,' 8vo, 2 vols. 1868; and now we have announced 'Descent of Man, and on Selection in relation to Sex,' as his next contribution to the subject of species and their variations. The great features of these works are the charm of their style, the clearness of their language, and the remarkable powers of observation which they display. These features also mark his papers, more especially those of later date on *Primula*, on *Linum*, on climbing plants, and several others. These botanical papers embody accounts of some of the most important discoveries recently made in physiological botany. Thus in his work on orchids he attempts to show that self-fertilization is quite exceptional amongst plants, and that, generally speaking, there are special contrivances to insure crossing; and, to mention another instance out of many which might be cited, in his papers on climbing plants, he threw an entirely new light upon the subject, and elucidated the true structure and functions of the organs employed in climbing.

* DASENT, GEORGE WEBBE, who is favourably known as an accomplished student and translator of old Norse literature, was born in 1818, and educated successively at King's College, London, and Magdalen Hall, Oxford. He graduated as B.A. in 1840; and some years afterwards was admitted to the degree of D.C.L. He became a student of the Middle Temple, and was called to the bar in 1852. He is understood to have been for some years concerned in the management of the 'Times'; and after having been employed as an examiner in English and foreign modern languages for appointments in the Civil Service, was in January, 1870, nominated a Commissioner.

The first literary result of the peculiar direction of Dr. Dasent's studies was the publication of the 'Prose, or Younger Edda, commonly ascribed to Snorri Sturluson. Translated from the Old Norse,' &c., 8vo, Stockholm and London, 1842. His other works include a polyglott rendering and a literary history of the legend of the apostasy and conversion of Theophilus, as circulated, chiefly in the languages of the northern nations, after the original Greek of Eutychianus, in a volume entitled 'Theophilus in Icelandic, Low German, and other Languages, from MSS. in the Royal Library, Stockholm,' 8vo, London, MDCCCXLV.; 'Norsemen in Iceland,' which appeared as one of the 'Oxford Essays, contributed by Members of the University,' 8vo, London, 1858; 'Popular Tales from the Norse: with an Introductory Essay on the Origin and Diffusion of Popular Tales,' 8vo, Edinburgh, 1859; second edition, with thirteen additional Tales, 8vo, Edinburgh, 1859, a series of translations from the 'Norske Folkeeventyr,' collected by Aasbjørnsten and Moe, of which a children's edition was published as 'A Selection from the Norse Tales, for the use of Children,' 8vo, Edinburgh, 1862; 'The Story of Burnt Njal; or, Life in Iceland at the End of the Tenth Century. From the Icelandic of Njals Saga,' 2 vols. 8vo, Edinburgh, 1861; and 'The Story of Gisle the Outlaw. From the Icelandic. With illustrations by C. E. St. John Mildmay,' 4to, Edinburgh, 1866.

DAUBENY, CHARLES GILES BRIDLE [E. C. vol. ii. col. 515]. The memoir in the E. C. published during Dr. Daubeny's life contains a short account of his scientific work.

He was born February 11, 1795, at Stratton, in Gloucestershire, and was the third son of the Rev. James Daubeny. He was entered at Winchester School in 1808, and was elected to a demyship at Magdalen College, Oxford, in 1810. In 1814, at the age of 19, he took the degree of B.A. in the second class. In 1815 he gained the Chancellor's prize for the Latin essay. Between 1815 and 1818 he studied medicine in London and Edinburgh. In the latter place the lectures of Professor Jameson on geology and mineralogy strengthened the desire to cultivate natural science, which had already been awakened by the teaching of Dr. Kidd at Oxford. The intellectual fight between the Plutonists and Neptunists was then raging at Edinburgh, and Daubeny took a lively interest in it. After quitting Edinburgh he proceeded in 1819 on a leisurely tour through France, collecting evidence as to the chemical and geological history of the globe, while his 'Letters on the Volcanoes of Auvergne,' which appeared in 'Jameson's Edinburgh Journal,' 1820—21, contained the earliest notices published in England of that remarkable volcanic region. He subsequently visited various parts of Europe for the purpose of studying volcanic phenomena preparatory to the publication of his work on volcanoes, which appeared in 1826. Although Dr. Daubeny very properly resented the suggestion when put forward in an offensive form by Dr. John Davy that the leading idea of his theory of volcanoes was derived from a cast-off theory by Sir Humphry Davy, it is nevertheless true. Sir Humphry's notion was that vast stores of the metallic bases of the earths and alkalies exist in subterranean regions, to which water must sometimes penetrate, and whenever this happened, gaseous matter would be liberated, the metals would combine with the oxygen of the water with sufficient heat evolved to fuse the surrounding rocks; but when, during an eruption of Vesuvius, Sir Humphry failed to detect the presence of hydrogen, he gave up the idea.

In 1822 Dr. Daubeny succeeded Dr. Kidd as Aldrichian professor of chemistry, and took up his abode in the gloomy apartments below the Ashmolean Museum, in which most of the scientific teaching of Oxford had been carried on from the time of Robert Plot, and was still carried on by gas-light up to 1855.

In 1834 Daubeny became professor of botany, and went to reside in the "Physic Garden," as it had been called from the time of its foundation in the reign of Charles I. With liberal aid from the university, and with the doctor's generous management, the Garden was entirely re-arranged and extended. In this pleasant retreat he passed a third of a century studying various points connected with vegetable chemistry. In the long vacations he visited some part of the continent in company with a scientific or literary friend, or some young Oxonian of promise. During the last few winters of his life he resided at Torquay. He died on December 13, 1867, in his 73rd year. His remains were laid in a vault adjoining the walls of Magdalen College Chapel, in compliance with his own expressed wish.

In addition to separate volumes, Dr. Daubeny published 72 papers on scientific subjects, as appears by the Royal Society's Catalogue. In collecting his papers into two volumes of 'Miscellanies on Scientific and Literary Subjects,' published in 1867, his own modest, but, we think, correct, estimate of his large amount of work was, that "however slight their intrinsic value, considered as contributions to the stock of human knowledge, may be, they will serve at least to show, by their number and variety, what might be accomplished by persons gifted with greater energy and more profound attainments through the aid of foundations in which an exemption from domestic cares, and a liberal provision for all the reasonable wants of a celibate life, afford such facilities for the indulgence of either literary or scientific tastes."

* DAUBIGNY, CHARLES FRANÇOIS, a celebrated French landscape painter, was born at Paris on the 15th of February, 1817. A pupil of Delaroche, and completing his studies in Italy, he acquired a largeness and elevation of style often missed by the mere student of nature. At the same time, whilst his landscapes can never be called untrue, it does happen that they sometimes savour too much of the painting-room. Yet with all his artistic breadth of style he never ventures amidst the grander scenes of nature. There is always something of the homely and the artificial in his views. You are in the country, but you feel that Paris is not far off. He has painted village scenes and views in parks and woodlands, and in the open champagne country, but he is happiest in river scenery, such as a 'Vue des Bords de la Seine' (in the Museum of Nantes), 'Les Bords de l'Oise,' 'L'Etang de Gyllen,' the property of the Emperor, and the

like. M. Daubigny received a medal of the second class (*paysage*) in 1848, of the first in 1853, and again in 1857, and in 1859 the cross of the Legion of Honour. Besides his paintings M. Daubigny has made numerous designs for journals and illustrated books. He is also skilful with the etching needle: among other things, he has produced 'Le Buisson,' and 'Le Coup de Soleil,' after Ruysdael, and several clever original etchings.

* DAUBREE, GABRIEL, AUGUSTE, a French geologist, was born June 25th, 1814, at Metz. He was educated at the École Polytechnique, Paris, and then joined the Corps des Mines. In 1839 he was elected Professor of Mineralogy and Geology, at the Academy of Strasbourg, and appointed a local mining engineer. In 1855, he was promoted Chief Engineer of Mines; in 1861, he succeeded Cordier as Professor of Geology in the Museum of Natural History, Paris; in 1862, he was also appointed Professor of Mineralogy in the School of Mines; and in 1867, Inspector-General of Mines. He is a Member of the Academy of Science, a Commander of the Legion of Honour, and has received many other honours. His scientific papers are numerous, and relate to the mode of occurrence of the ore of tin and other metals in veins, of gold in the Rhine Valley, of arsenic in wells and seawater, and elsewhere; of iron ores in lakes and mountains, &c. He has succeeded in artificially producing many minerals, such as quartz, several silicates, &c., and has contributed largely to our knowledge of the synthesis and metamorphism of rocks. Amongst his principal separate works, we may cite the following:—a 'Carte Géologique du Bas Rhin,' with an explanation, 1852; 'Recherches Expérimentales sur les phénomènes qui ont pu produire le métamorphisme,' 1857—1860; 'La Chaleur intérieure du Globe, son origine, ses effets,' 1860, 1866; 'Expériences synthétiques relatives aux météorites,' 1866 and 1868; 'Rapport sur le progrès de la géologie expérimentale,' 8vo.

DAUSSY, PIERRE, was born at Paris, 8th October, 1792. In 1806 he joined the Corps of Hydrographical Engineers, and after some years became Engineer-in-Chief, and conservator of the charts and plans of the Minister of Marine. He became Commander of the Legion of Honour in 1852, and died in September, 1860. His nautical charts are much esteemed. In union with Mathieu and Largeteau he prepared the 'Report on the Determination of the Arc of the Meridian between the parallels of Dunkirk and Formentara.' He also assisted in the preparation of good Tide Tables, based upon observation and sound theory. During many years in this country, and probably also in other countries, tide-tables were based on certain secret processes, and formed a sort of private property, which was not to be infringed. Lubbock in England, and Dausy in France, worked at the subject with good effect, and broke up a very old tide-table monopoly, by establishing correct formulæ for the inequalities of the tides, leaving the magnitudes to be determined by observation.

DAVID, PIERRE JEAN, known from his birth-place as DAVID D'ANGERS, one of the most famous of modern French sculptors, was born on the 12th of March, 1789. The son of a carver of architectural ornaments, he learnt from his father the use of the chisel, and attended a course on design at the Central School of Angers. His father would have preferred a less uncertain calling, but the youth being bent on becoming an artist, a friendly teacher, who prognosticated his future success, furnished funds for the journey, and young David started for Paris, 1808. There he found employment, at 20 sous a day, in carving the ornaments of the Arch of the Carrousel and at the Louvre. Thus securing a maintenance, he made time for study. His namesake, David the painter, took an interest in him, admitted him to his atelier, taught him to draw with accuracy, and did his best to impress on him the principles of classic art, whilst the sculptor Rolland initiated him in the processes of the sculptor. A willing learner, David made such progress that at the concours d'essai of the Academy, 1809, he was awarded a medal. His native town testified its interest in its young citizen by voting him a subvention of 600 francs; thus aided and stimulated, he carried off in 1810 the prize for the study of a head, and the second prize for sculpture; and in the following year, by his bas-relief of the Death of Epaminondas, the grand prize for sculpture, which entitled him to study at Rome. He returned to Paris in 1816, a finished sculptor; his head of Ulysses (which he refused to sell, having designed it for the Museum of Angers), 'Young Shepherd,' and a 'Nereid carrying the helmet of Achilles,' meeting with general admiration. Before returning to Paris he had visited the chief Italian museums, and he now proceeded to England, in order to examine the sculpture of the Parthenon, then newly purchased by the nation from the Earl of Elgin. He met with a cold reception from Flaxman, and returned to

Paris somewhat disgusted with English art and artists. His first great public work was the statue of Condé, now in the principal court of Versailles. It was a great success, and his position was assured. In 1825 he received the Cross of the Legion of Honour, and in 1826 he was elected a member of the Institute, and professor in the *École des Beaux-Arts*. Henceforth his life was that of one of the leading artists of France, the years marked chiefly by the commencement or completion of one of his great works (he began his chef-d'œuvre, the sculptures of the Pantheon, in 1831), or a foreign tour in pursuit of health or information. In one of his visits to Germany he executed a colossal bust of Goethe for the Library at Weimar; in another, he modelled Rauch, Tieck, and Schelling. Revolutionary movements, however, stirred to its depths the heart of this thorough Frenchman. In 1830 he fought at the barricades; in 1848 he again came to the front. He was returned by the department of Maine-et-Loire, and took his place among the national legislators, but was for the most part a silent voter. However, he gave substantive form to his idea in a colossal model of the Republic, and, altogether, his republicanism was of so marked a kind that he was among the number exiled after the coup d'état of Dec. 2, 1851. He went to Athens, whilst there modelled some pieces, returned when permitted, but broken in health, to Paris, and there died, on the 5th of January, 1856.

David D'Angers was a man of genius, of indomitable energy, and of amazing industry. The number of his works is surprising. Besides such monumental figures and groups as Marshal Suchet, General Foy, Gobert, Saint-Cyr, and others at Père Lachaise; the grand mausoleum of Botzaris, at Missolonghi, and that of Fénelon at Cambrai, he executed a very large number of statues of his most distinguished countrymen, including Cuvier, for the Jardin des Plantes; Racine, for La Ferté-Milon; Corneille, for Rouen; Bernardin de Saint Pierre, for Havre; Güttenberg, for Strasbourg; and, beyond France, Jefferson, for New York. His busts take a still wider range, and several of them are of colossal size. Many of these were not commissions, but executed at his own cost, as a mark of honour for the persons. We have mentioned his sculptures at the Pantheon; he executed others on a grand scale for the Triumphal Arch, Marseille; the Hôtel-de-Ville, Paris; the Custom House, Rouen, &c.; and he modelled with his own hands many hundreds of medallions, many of which were on a large scale. Works produced in such numbers could not all be of great artistic value; some, probably, are of very little. But David D'Angers was a true artist, and if he produced too much and too rapidly, it was rather from the energy and impatience of his temperament than from greed. In all he did there was nobility of purpose, originality, power, and feeling. He left all his models, and such of his works as remained in his possession at his death, to the Museum of Angers, where they are collected in a saloon which bears his name.

* DAVIDSON, SAMUEL, a distinguished theologian, philologist, and biblical critic, was born in 1808 at Ballymena, in the county of Antrim, Ireland. He received his education at the College at Belfast, which he entered in 1825, and where he made himself remarkable for his attainments in philology, philosophy, and divinity; and in due course received ordination from the Presbytery. In 1835 he was appointed to the chair of Biblical Literature in the Belfast Royal Academical Institution, from which he delivered to the theological students that came under his tuition a course of lectures which he published with the title of 'Lectures on Biblical Criticism; exhibiting a Systematic View of that Science,' 8vo, Edinburgh, 1839; a new edition of which, entirely re-written, and "recast both in substance and form," appeared with the modified title of a 'Treatise,' &c., 2 vols. Edinburgh, 1852, with a dedication to Bishop Thirlwall; and as a supplement to which he published an elaborate work wherein he laid down and exemplified the fundamental principles constituting the theory of interpretation, entitled 'Sacred Hermeneutics developed and applied; including a History of Bible Interpretation from the Earliest of the Fathers to the Reformation,' 8vo, Edinburgh, 1843. He had by this time changed his views on ecclesiastical polity, and resigned his connection with Belfast College; and was acting as Professor of Biblical Literature and Ecclesiastical History in the newly-founded Lancashire Independent College at Manchester. In 1838 the Senatus of Marischal College and University, Aberdeen, had conferred upon him the degree of LL.D.; and in 1848, on the recommendation of Professors Hupfeld and Tholuck, he received the honorary title of D.D. from the University of Halle. He fulfilled the duties of his professorship at Manchester for fourteen years, esteemed by the students, and re-

garded by all who knew him as a pious, amiable, and high-minded man, and an industrious and conscientious tutor. He was in fact the pride of his college and his denomination, and was known and admired in all countries in which biblical learning was cultivated. He delivered the 'Congregational Lecture' (thirteenth series) for 1847; and the same was published for the funds of the "Congregational Library," with the title of 'The Ecclesiastical Polity of the New Testament unfolded, and its Points of Coincidence or Disagreement with prevailing Systems indicated,' 8vo, London, 1848; second (new and uniform) edition, 8vo, London, 1854, which, after an estimate of all possible and historical systems of church organisation, concluded with a "review and defence" of Congregationalism. At the time of the delivery of the 'Lecture'—a title which hardly does justice to a work of nearly 500 pages—Dr. Davidson was prosecuting the translation, for 'Clark's Foreign Theological Library,' of the first two volumes of the fourth edition of Dr. J. C. L. Gieseler's 'Lehrbuch der Kirchengeschichte,' or 'Compendium of Ecclesiastical History,' 8vo, Edinburgh, 1846 and 1848, of which the remaining two volumes, published in 1853, were the work of the Rev. J. W. Hull. Dr. Davidson proceeded to issue an important work, which "enters with considerable fulness into objections that have been urged in modern times against the New Testament Books, and especially against the Gospels," with the title of 'An Introduction to the New Testament; containing an Examination of the most important Questions relating to the Authority, Interpretation, and Integrity of the Canonical Books, with reference to the latest Inquiries,' 3 vols. 8vo, London, 1848, 1849, and 1851; and about the same time edited, with Introduction and Notes, Professor Moses Stuart's 'Critical History and Defence of the Old Testament Canon,' 8vo, London, 1849. Up to the year 1856, Dr. Davidson's theological position was unassailed: his works, notwithstanding the free tone of criticism which pervaded them, had never been impeached. In compliance with a request from the proprietors of the Rev. T. H. Horne's 'Introduction to the Critical Study and Knowledge of the Holy Scriptures,' he undertook to produce a volume which should be substituted, in the tenth edition of that work, for the second volume of the preceding editions, on 'The Text of the Old Testament considered: with a Treatise on Sacred Interpretation, and a brief Introduction to the Old Testament Books and the Apocrypha,' 8vo, London, 1856; second edition, revised and improved, and issued as a substantive work, 8vo, London, 1859. In the front of this work the name of Dr. Davidson appears as sole author, whilst the volume, as part of a whole, was ostensibly under the joint editorship of Mr. Horne, Dr. Davidson, and Dr. S. P. Tregelles, who were severally and collectively understood to have the privilege, and to accept the duty, of examining the statements and opinions which each claimed to contribute to the aggregate production. If each had used this privilege, or discharged this duty, before publication, it was said, there would have been no such repudiation afterwards as took place when Dr. Tregelles protested for himself and Mr. Horne, in a letter to the 'Record,' dated October 29th, 1856, against the theories and sentiments with regard to Scripture which were advanced by their co-editor. Hereupon the denunciations of Dr. Davidson began; and he was vaguely characterised as a "German Rationalist," and as "a man who virtually denied the inspiration of the Scripture." On the 24th of November, 1856, the committee of the college appointed a sub-committee to examine into the truth of the allegations which had been made against his orthodoxy; the report of which, brought up and read by Dr. Halley, concluded by recommending concession and conciliation. Dr. Davidson now prepared a pamphlet of 'Facts, Statements, and Explanations,' 8vo, London, 1857; after which, in spite of its recognised spirit of moderation, and the guarantees it gave of general "soundness" of doctrine, the author's opponents became more hostile than ever. Finally, on the 10th of June, 1857, the Committee, having passed a vote of want of confidence in their Professor of Biblical Literature, the latter sent in his resignation, which was accepted at a meeting of the Committee held at Liverpool on the 29th of the same month. Various and valuable expressions of sympathy and regret from students, ministers, and laymen followed him upon his resignation. The Rev. John Kelly, of Liverpool, who was one of his most persistent opponents, published 'An Examination of Facts, &c., of the Rev. Dr. S. Davidson,' 8vo, London and Liverpool, 1857; and the Rev. Thomas Nicholas, Professor of Biblical Literature and Mental and Moral Science in the Presbyterian College, Carmarthen, in a spirit of candour and appreciation, which, by contrast, made him appear an advocate of the accused,

reviewed the question in 'Dr. Davidson's Removal from the Professorship of Biblical Literature in the Lancashire Independent College, Manchester, on account of alleged Error in Doctrine. A Statement of Facts, with Documents; together with Remarks and Criticisms.' 8vo, London, 1860. Dr. Davidson was appointed examiner in the department of Biblical History and Philology in the University of London in 1862; and in the same year produced his 'Introduction to the Old Testament, Critical, Historical, and Theological; containing a Discussion of the most important Questions belonging to the Several Books,' 3 vols. 8vo, London, 1862-63, in which, unfettered by the obligations of co-editorship, he expresses with greater maturity and development, the views which were less clearly advocated in the volume he contributed to Horne's 'Introduction.' Indeed in his researches and his results he appears to recognise no such thing as finality; wherever truth seems to unveil, there he is prepared to worship; to follow wherever truth seems to conduct. Thus, after constantly revolving in his mind the topics embraced in his 'Introduction to the New Testament,' 1848-51, he determined to give to the world the results of twenty years' additional study, in the shape of 'An Introduction to the Study of the New Testament, Critical, Exegetical, and Theological,' 2 vols. 8vo, London, 1868. The following sentences from the Preface sufficiently express the author's latest views upon the question on which all his theory of criticism is founded—that, namely, of the scientific limitation of the inspiration of the writers of the Bible. "True critics," he says, "regret to see that religion is often confounded with a system of theological dogmas. If the two things were clearly distinguished as they ought to be, a cessation of that bitterness which theologians often show to one another might be reasonably expected. Not that a religion can exist apart from *some* theology. Still the amount of theology needed to constitute a religion may be indefinitely small. If men could see that the Spirit of God neither dwelt exclusively in apostles nor rendered them infallible, however highly gifted they may have been, the sacred records would be less distorted, and different values would be assigned to the several parts of the volume according to their nature. When these records are held to be absolutely correct in all matters, whether historical or speculative, scientific or doctrinal, they acquire a supernatural and fictitious pre-eminence similar to that which is conferred on the Pope by the theory of papal infallibility: they are called God's word throughout, which they never claim to be, and thus free inquiry into their credibility is at once checked or suppressed. God's word is in the Scriptures: all Scripture is not the word of God. The writers were inspired in various degrees, and are therefore not all equally trustworthy guides to belief and conduct. In the Bible may be found all things necessary for our salvation: it is an unwarrantable inference that it contains nothing but what is thus needed for all. The Scriptures contain the highest truth; but this fact is undisturbed by the possibility that they may contain some things which are not truth."

Two other productions of Dr. Davidson may be mentioned, of no great bulk, but of great learning and significance—'The Hebrew Text of the Old Testament, revised from critical sources, being an attempt to present a purer and more correct Text than the received one of Van Der Hooght; by the aid of the best existing materials: with the principal various Readings found in MSS., Ancient Versions, Jewish Books and Writers, Parallels, Quotations, &c., &c.' 8vo, London, 1855, an attempt at aiding to do for the Old Testament something like what Griesbach and others did for the New; and a 'Preface written for the English Edition of Fürst's Hebrew and Chaldean Lexicon to the Old Testament,' first published in that work in 1845, and separately issued in 8vo, London, 1867.

* DAVIDSON, THOMAS, a well-known authority on *Brachiopoda*, was born at Edinburgh, May 17, 1817. When only six years of age, he was sent to the Continent with French and Italian tutors, with whom he visited France, Switzerland, and Italy. His education was almost entirely received at Paris, where he followed the lectures of Cordier, Constant Prevost, Elie de Beaumont, Valenciennes, Blainville, Geoffroy de St. Hilaire, Duméril, Brongniart, and other eminent teachers; and was a pupil of the distinguished French painter, Paul Delaroche. But it was the study of the first edition of Sir C. Lyell's 'Principles of Geology' that gave him a predilection for geology and palæontology. In or about 1835 he matriculated at the University of Edinburgh, and became intimate with Professors Jameson and E. Forbes. In the following year he returned to the Continent, most parts of which he explored on foot, and with

hammer in hand. About this time he formed the acquaintanceship of Baron von Buch, who urged him to take up the study of the *Brachiopoda*. He acted upon the suggestion, and since then has worked at it with a single-minded purpose and unflagging zeal. In 1849, Professors E. Forbes and Morris requested him to prepare a 'Monograph of the British Fossil Brachiopoda,' for the Palæontographical Society. The first part appeared in 1850, and the last in 1870. The whole forms three large 4to volumes, illustrated with 170 plates, all of which were drawn by himself. In addition to this, he has written upwards of fifty papers, mostly relating to *Brachiopoda*, but a few to geology. In 1865 the Wollaston Medal was awarded him by the Geological Society, and Sir Roderick Murchison presented him with a Silurian medal, for his contributions to the history of Silurian life. He is Vice-President of the Palæontographical Society, and a Fellow of the Royal Society, as also of many other learned bodies.

DAVIES, or DAVYS, SIR JOHN, a poet, lawyer, and statesman, was born at Chisgrove, in the parish of Tybury, Wiltshire, about the year 1570. His father, a wealthy tanner, who is otherwise spoken of as "late of Gray's-inn," had probably spent some time in the study or the practice of the law. Davies was admitted a commoner of Queen's College, Oxford, in Michaelmas term, 1585. After taking a degree in arts, he became a student of the Middle Temple, and was called to the bar in July, 1595. In 1596 he published 'Orchestra; or, a Poem expressing the Antiquity and Excellence of Dancing, in a Dialogue between Penelope and one of her Wooers,' which was republished in 1622 along with an edition of 'Nosce Teipsum,' &c. To the 'Orchestra' was prefixed a dedicatory sonnet by the author, "to his very friend, Master Richard Martin." The next instance of this "very friendship" is rather peculiar; for Davies being, according to Wood, "a high-spirited young man, did, upon some little provocation or punctilio, bastinado Richard Martin (afterwards Recorder of London) in the common hall of the Middle Temple while he was at dinner. For which act being forthwith (February, 1797-8) expelled, he retired for a time in private, lived in Oxon in the condition of a sojourner, and followed his studies, although he wore a cloak. However, among his serious thoughts, making reflections upon his own condition, which sometimes was an affliction to him, he composed that excellent, philosophical, and divine poem," which he entitled 'Nosce Teipsum: this Oracle expounded in two Elegies—(1) Of Human Knowledge, (2) Of the Soul of Man, and the Immortality thereof,' 4to, London, 1599, with a dedication—dated, probably by some typographical blunder, July 11th, 1592—to Queen Elizabeth, to whom in the same volume he addressed 26 'Hymns of Astræa, in Acrostic Verse,' celebrating the virtues and the glories of "Elizabetha Regina." This poem was reprinted in 4to, London, 1602; in 8vo, 1609; and again in 8vo, 1622, when it appeared in the same volume with the 'Orchestra.' Nahum Tate wrote a judicious preface to an edition of the second part of 'Nosce Teipsum,' which he brought out as 'The Original Nature and Immortality of the Soul: a Poem, with an Introduction concerning Human Knowledge,' 8vo, London, 1697; 2nd edition, 8vo, London, 1714; 3rd, 12mo, London, 1715. The poem on the Immortality of the Soul is conceived in great religiousness of spirit, and is admirable for the easy flow of its language, the clearness of its argument, and the ingenuity, aptness, and grace of its similes and illustrations.

Through the favour of Thomas, Lord Ellesmere, Lord Keeper of the Great Seal, Davies was restored to his chambers in the Temple, in Trinity term, 1601, and became a counsellor and a member of the Parliament held the same year at Westminster. Upon the accession of King James I., he was taken into especial favour by that sovereign, by whom he was made successively his solicitor-general and attorney-general in Ireland. Davies was knighted at Whitehall, February 11, 1607; and in 1612 was appointed one of his Majesty's serjeants-at-law for England, and in that capacity frequently acted as justice of assize in divers circuits. Through the gradations of honour and employment, he came at length to be nominated to the office of lord chief justice, and his robes were already ordered for his settlement or installation therein, when, before they were completed, he died suddenly of apoplexy, on the 7th of December, 1626.

Sir John Davies wrote, besides several minor works, some of which were left in manuscript at the time of his death, an important treatise upon Ireland, which he entitled 'A Discovery of the true Causes why Ireland was never entirely subdued, nor brought under Obedience of the Crown of England, until the beginning of His Majesty's happy Reign,' 4to, London, 1613; 4to, London, 1613; and with the modified title of 'Historical

Relations,' &c., 8vo, Dublin, 1664; 3rd edition, 1666. The 'Discovery' was reprinted as an Appendix to Sir James Ware's 'Antiquities and History of Ireland,' folio, London, 1705; and was lately republished in the first volume, 8vo, 1860, of a collection of Tracts and Treatises illustrative of the political state of Ireland. Sir John Davies's contributions to the literature of his profession may be represented by his 'Le Primer Reports des Cases et Matters en Ley; resoluces et adjudges in les Courts del Roy en Ireland,' folio, Dublin, 1615; folio, London, 1628 and 1674, of which English translations were published, and which supplied a large proportion of the matter of Sir John Pettus' volume, entitled 'England's Independency upon the Papal Power,' &c., 4to, London, 1674. Several of the smaller, chiefly political, productions of Sir John Davies were published after his death. His 'Poetical Works' were collected into a small volume in 12mo, London, 1775; and his 'Historical Tracts' in 8vo, London, 1786.

*DAVIS, JEFFERSON, a distinguished American statesman, and President of the Confederate States in the Civil War of 1861—65, was born in Todd County, Kentucky, June 3, 1808. His father, a planter, removed with his family to Woodville, Mississippi, where young Davis received his early education. Having finished his civil studies at Transylvania College, Kentucky, he entered the United States Military College at West Point in 1824. In 1828 he graduated, and became brevet second lieutenant. In 1831—32 he served as staff officer on the north-west frontier, in the Black Hawk war against the Indians. In 1833, as first lieutenant of dragoons, he was employed against the Comanches and Pawnee Indians. Resigning his military commission in 1835, he settled down as a cotton-planter in the State of Mississippi. About the year 1843 he began to take a prominent part in politics, siding with the Democrats, Southerners, or Slave States party; and he assisted in bringing about the election of Mr. Polk for the Presidency in 1844. When in Congress, as one of the members for Mississippi, he entered eagerly into the debates concerning Oregon, Mexico, the tariff, the militia, &c. In 1846 the 1st Regiment of Mississippi Volunteers having elected him as their colonel, he resigned his seat, headed the regiment, and distinguished himself during the Mexican war by his gallantry at Monterey and Buena Vista. In 1847 President Polk offered him the post of brigadier-general of volunteers. This he declined, on the ground that all volunteer commands ought to be vested in the States, each for itself: a commencement of Mr. Davis's advocacy of State Rights, which in later years became the great principle of his public life. Entering the Senate, he was chosen president of the military committee in 1850; but this office he resigned in the following year, in order that he might compete for the presidency of the State of Mississippi, in which aim, however, he failed. He was secretary of war at Washington from 1853 to 1857, under President Pierce; and then simply a senator until 1860. The election of Abraham Lincoln as President of the United States, in the autumn of the last-named year, gave a definite direction to Mr. Davis's energy of character. The Democrats or Southerners, defeated at the election, resolved to erect the Slave States into a distinct republic, claiming that, by the original constitution of the United States, each State had virtually the right of secession. This claim was not only not admitted, it was resisted to the uttermost by the Northerners; and hence the Civil War. South Carolina seceded from the Union in November, 1860, and at various dates the example was followed by Florida, Alabama, Georgia, Louisiana, Texas, North Carolina, Virginia, Tennessee, Arkansas, half of Kentucky, and half of Missouri. On the 4th of February, 1861, delegates met at Montgomery, Alabama, to constitute the "Confederate States of America;" and in the following May the capital of the new republic was established at Richmond, Virginia, with Mr. Davis as President. The biography of Mr. Davis for the ensuing four years would be virtually a history of the Civil War. Negotiations for a compromise having failed, military and naval operations speedily commenced. The capture of Fort Sumter and the United States Arsenal at Harper's Ferry by the Confederates, together with their success at the battle of Bull's Run, rendered a long and fierce war inevitable. Throughout 1861 the political power and military skill of Mr. Davis enabled him to deal with the numerous difficulties under which the new Confederacy laboured. In 1862 he supplied, by great exertions, the men, ammunition, and stores necessary for the operations conducted by Generals Lee and "Stonewall" Jackson against Generals Scott, McClellan, Banks, Pope, Burnside, and Rosecranz. In 1863 the actual fighting was mostly in favour of the Confederates; but their President

BIOG. DIV.—SUP.

was terribly driven for supplies, being cut off from all communications with other countries by sea. By the month of March, 1864, the Federals had 1,000,000 men in arms, against 250,000 Confederates; and Generals Grant and Sherman threw great energy into their operations. Weakened by incessant fighting, the Confederates were forced to yield in April, 1865; and the war ended. President Lincoln was assassinated in the same month; and the Federals, accusing Mr. Davis of complicity in the crime, offered 100,000 dollars for his capture; he was arrested on the 15th of May, and placed in custody at Fort Monroe, Washington. For nearly two years he lingered in prison, until his health was seriously broken. Opinion in America was greatly divided as to the proper mode of dealing with his case. He was acquitted by the public sentiment of complicity in the murder of Lincoln; but a charge of high treason continued to hang over him. In May, 1867, he was released on bail for six months. A desire gradually spread in the United States to permit him to resume his place as a private citizen; and the prosecution was allowed to die out. Mr. Davis has since taken to commercial pursuits, his own property in the (former) Slave States having been utterly shattered by the events of the war. Apart from differences of opinion as to the line of conduct he followed, his skill, determination, and energy are generally admitted.

DAVY, JOHN, M.D. [E. C. vol. ii. col. 525], was born at Penzance, 24th May, 1790, and died at Ambleside, 24th January, 1868. He was the youngest of five children, of whom Sir Humphry Davy, born twelve years before him, was the eldest. At the age of eighteen he entered the laboratory of the Royal Institution, at a period (1808) when his brother was at the height of his fame as a lecturer and a discoverer. The two or three years, during which John acted as assistant to his brother, were considered by him as the happiest and best employed of his life. After this he studied medicine in Edinburgh, where he graduated in 1814, in which year he became a Fellow of the Royal Society. From 1815 nearly to the end of his life he held various appointments in the army medical department in different parts of the world. During this long period he contributed to the various Transactions and Journals a large number of papers on chemical and biological subjects. The number in the Royal Society's index is 158. He also wrote the history of his brother's life, edited his works, and became the champion of his fame, not only when his memory had been, or appeared to have been, attacked, but also when some of the great chemist's contemporaries and successors extended his discoveries, and made others to which he had no claim. Dr. Davy thus became a partizan of a somewhat unreasoning and unwarrantable kind, and excited the suspicion of men whose good opinion he ought rather to have courted. He could only see one great chemical philosopher in the world, and that was Sir Humphry Davy. He would seem to have acted under the idea that the edifice of chemical science had been reconstructed and completed by his brother, and that any one who presumed to alter the details or add to the building only disfigured it.

In addition to his numerous papers, many of which have been collected into three volumes, entitled 'Researches, Anatomical and Physiological,' two of which were published in 1839, and the third in 1863, Dr. Davy published, partly from personal observations, separate works entitled 'An Account of the Interior of Ceylon,' 4to, 1821; 'Notes on the Ionian Islands and Malta, with some Account of Constantinople,' 2 vols. 8vo, 1842; 'The West Indies, before and since Emancipation,' 1854; 'On the Diseases of the Army, with Contributions to Pathology,' 1862; 'Lectures on the Study of Chemistry,' chiefly with reference to the agriculture of Barbadoes. He also edited his brother's 'Agricultural Chemistry,' and Dr. Blair's volume on 'The Yellow Fever Epidemic of British Guiana.' He shared his brother's taste for angling, and published two colloquial works on that subject, chiefly with reference to the biological bearings of the sport.

Dr. Davy adopted a regular and methodical course of literary and scientific work to the last. His powers as an original observer were not of a high order, and accordingly his works are seldom quoted by better men in his own ample fields of research.

DAWES, REV. WILLIAM RUTTER, an astronomer distinguished for his acuteness as an observer, was born at Christ's Hospital, where his father was mathematical master, March 10th, 1799. He studied partly at the Charter-house, partly under the Rev. Thomas Scott, author of the Commentary on the Bible. Although his father intended him for the church, his own incli-

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nation led him to the study of medicine, which he pursued at St. Bartholomew's Hospital, under Abernethy and Lawrence. He settled as a medical practitioner at Haddenham, near Thame; but removed in 1826 to Liverpool. Attracted by the influence of Dr. Raffles, an eminent Independent minister, Mr. Dawes quitted alike churchmanship and the medical profession, and became the minister of an Independent chapel at Ormskirk. It was soon after this that he commenced the forty years' observations which raised him to a high rank as an astronomer. He began with a very small telescope; then procured a 5-feet refractor by Dolland; and, aided by wonderful keenness of vision, made so many and such accurate observations and tabulations of small stars, as secured his admission into the Royal Astronomical Society. In 1839 he resigned his ministerial functions, and from that year till 1844 took charge of Mr. Bishop's observatory in the Regent's Park. He then removed to Cranbrook, in Kent, where he erected an observatory which was described in the 16th volume of the *Astronomical Society's 'Memoirs.'* In 1846 he obtained a splendid 8½-feet equatorial, made by Merz, of Munich, and made with it an immense number of observations remarkable for their accuracy. In 1850 he removed his observatory to Watlington, near Maidstone; and in 1857 to Hopefield, Haddenham. His researches were further aided by an 8-inch (aperture) refractor, by Cooke, of York, and another of 8½-inch, by Alvan Clark. In November, 1850, Mr. Dawes and Mr. Bond, the one in England and the other in America, independently discovered the inner dusky ring of Saturn. In 1851 Mr. Dawes went to Sweden to observe the solar eclipse; and his accurate account of the red protuberances or rose-coloured flames helped to pave the way for the recent discovery of the sun's chromosphere. He invented a solar eyepiece, which has enabled astronomers to discover an interior envelope of the sun's body, not before known. His acuteness of sight enabled him to detect minute features in the so-called "willow-leaves" or "rice-grains" on the solar surface, not observable by others except with much more powerful instruments. Mr. Dawes, whose valuable star observations are printed in the *Memoirs of the Royal Astronomical Society*, died on the 15th of February, 1868.

* **DEAK, FERENCZ**, a statesman of Hungary, and the champion of her nationality, is stated to have been born alternatively on the 13th or the 17th of October, 1803, at Kehida or at Söjtör, which are two out of three estates which formed the patrimony of his family in the comitat, or county, of Szalad. He studied jurisprudence at the College of Raab (Győr, or Nagy-Győr); and was admitted to practise as an advocate, but found himself diverted from his profession by the interest he took in the political fortunes of his native country. He identified himself at the outset with the Liberal party, whose object it was to compel from the court of Vienna the re-assembly of the Hungarian Diet, which had not been convened since the year 1811. His eloquence and position gave him great influence in the provincial parliaments in the county of Szalad, of which he was elected a representative at the general Diet convened at Presburg in September, 1825, and dissolved on the 18th of August, 1827. In the Diet which sat from 1832 to 1836, the happy combination of Deak's diversified gifts raised him to the rank of leader of the opposition; and in the Diet which assembled in 1839 he sustained this position with such effect as to procure, amongst other concessions, the release of Kossuth, who had been arrested in 1837. He saw himself, indeed, in the recognised attitude of a mediator between the crown and the nation; between whom, in 1840, he actually brought about a temporary and formal reconciliation. He was not a member of the Diet which met in 1843, owing to his refusal to secure his return by bribery; and several of his friends accused him of sacrificing the interests of his party to the ambition of being regarded as a man of exceptional electoral honesty. Yet Zsedenyi, his principal adversary in the Diet, did not hesitate to declare that by his absence the Assembly had lost the services of the purest political character of Hungary, and the want of his presence was felt to be a national calamity. Meanwhile he retired to his estate of Kehida; from which, whilst he declared himself the advocate of reform, not of revolution, he continued to advise and direct the Liberal party, as well as to provide against the contingencies of their opposition to the court of Vienna. In 1846 he sought recovery from the prostration of a serious illness by a visit to the baths of his own and of other countries, extending his tour until it had embraced Switzerland, Italy, France, and England. He returned home, however, in too feeble a condition to accept the candidature pressed on him in the elections of 1847; and

emerged from his privacy only to accept, March 17th, 1848, the portfolio of Justice in that first Hungarian administration which Count Louis Batthyányi was commissioned to construct, and which he formed on principles comprehensive enough to include Szechenyi as Finance Minister, and Kossuth as Minister of Public Works. Deak was devoting himself to reforms in the administration of justice, and to the bringing about of a good understanding with Austria, when the accession of Kossuth to the premiership, in September, 1848, destroyed all his hopes of accommodation, and compelled him to resign office in the beginning of October, whilst he retained his seat as representative in the Diet. War was now inevitable; the Austrian troops, under the command of Prince Windischgrätz, marched into Hungary, and arrived, victorious in the encounters of the 28th and 29th of December, before the walls of Buda. The Diet now sent a deputation, of which Deak was a member, in order to negotiate a peace; but Prince Windischgrätz refused to receive it, on the ground that he could not treat with rebels. A continuation of the war was the only alternative, the fortunes of which changed so signally that the Hungarians were able to declare their independence, with Kossuth for President; and were only subdued after Russia had despatched a force of 100,000 men to aid the Austrians, who, so assisted, found themselves in October, 1849, absolute masters of the kingdom of Hungary. Neither in the successes nor the disasters, which he alike, if not equally, deplored, did Deak take part, except that he suffered for his attitude of mediation by a short imprisonment at Pesth. When Austria wished to re-constitute Hungary, she sought to come to an arrangement with Deak, who, having sold his estate of Kehida, was now resident in Pesth, and who was generally regarded as the representative of all Hungary. He refused, however, to be a party to any settlement which did not recognise the Hungarian constitution, apart from which, he told Von Schmerling, the Austrian Minister, he had no political power, or even existence.

Deak continued to maintain his privacy until, by the Imperial concessions of 1860 and 1861, he found it possible to return to political life, when he was elected on the 11th of March, 1861, representative for the city of Pesth. He became now the leader of the moderate party in the Diet, which he headed, in accordance with the principles of legality and right, against absolutism on the one hand, and anarchy on the other. Determined to uphold the rights of his country, and equally determined to leave nothing untried in order to bring about an understanding, Deak clung to his programme of "Hungarian independence and dynastic union with Austria." But the time for its realisation was not yet come; and after a five months' agitation on one side and the other of claims which could not be adjusted, the Emperor, on the 21st of August, 1861, dissolved the Diet, which separated with a protest against the illegality of the measure. But time and the course of events were on the side of Deak, who, after Austria had hardened herself against several checks and reverses, found in the battle of Königgrätz, in 1866, his final and efficient co-adjutor. The humbled Emperor accepted the terms of the Magyar patriot; restored to Hungary her constitution, and in turn received her crown at Pesth on the 8th of June, 1867. From the splendours and festivities of the coronation, Deak, with his characteristic simplicity of taste and habit, kept aloof, modestly withdrawing from a sight of what was in fact his own achievement. Refusing to take office in the Hungarian cabinet, and generally inaccessible to ambition, he received from the Emperor-King the portrait of the latter with the inscription "Francis Joseph to Francis Deak." His loyalty to the regime which he initiated has been since manifested in more than one circumstance of delicacy and difficulty. He has been described as a man who has nothing in him of the dashing, sanguine, ostentatious liveliness and impetuosity of the Magyar type; a man of moderate wants, of retiring habits; for years the tenant of a plainly-furnished upper room in the Queen of England Hotel at Pesth, sitting day after day in the corner of his sofa, the end of a cigar in his mouth, "nursing his right leg on his left knee," accessible to all, an unwearied listener, chary of words, courteous but grave, even to gloominess, with a settled look of care about him almost painful to behold; a passionless, utterly disinterested man, with clear views, sound reasoning, occasional fluency and even brilliancy of talk; ready to give in on trifles, a rock on matters of principle, with something of Cavour's head and Garibaldi's heart—an idol to his countrymen, who have given him Aristides' title, "The Just." His favourite summer retreat is a country-house at Szent-Laszlo, near Söjtör, where he devotes much of his

leisure to carving in wood, an art which he practises with a gratifying amount of success.

* DEBAIN, ALEXANDER FRANÇOIS, French musical instrument maker and mechanic, was born at Paris in 1809. After serving an apprenticeship to the trade of cabinet-making, he studied the mechanism of various kinds of musical instruments, and obtained employment under Sax, Mercier, and other makers, especially in repairing church organs in country districts. In 1834 he established a manufactory of organs and pianofortes at Paris, which gradually rose into note. The great attention which he paid to the construction and action of free-vibrators—i.e., slips of metal oscillating or vibrating in cavities just large enough to freely admit them—enabled Debain to make improvements in many kinds of musical instruments, and to invent certain new varieties. One was the *concertina*, which he improved in many ways; another was the *harmonium*, which almost completely superseded the seraphine previously in use; a third was the *harmonichord*, a kind of mechanical pianoforte; a fourth the *antiphonel*; a fifth the *stenographone*, by which a player on a keyed instrument can print or mark down the notes which his fingers play. Many, if not most, of the instruments constructed by him produce their tones by the vibration of metallic tongues or springs; and he devised a mode of varying greatly the *timbre*, or quality of tone, irrespective alike of differences in pitch and in loudness. In 1850, M. Debain constructed a voting machine for the National Assembly, invented, or at least suggested, by M. de Liancourt. It had a remarkable mode of ensuring that the white ballots (to denote 'pour,' or 'aye,') should not be able to enter the receptacle intended for the blue ballots ('contre,' or 'no'), and *vice versé*; while rigorous precautions were taken, in the form of tell-tale apparatus, to prevent any tampering with the machine. The Assembly voted M. Debain 30,000 francs for its construction.

DECAMPS, GABRIEL ALEXANDRE, an eminent French landscape painter, was born at Paris on the 3rd of March, 1803. After some preparatory instruction from M. Bouhot, he entered the atelier of M. Abel de Pujol, but, dissatisfied with his manner of teaching, left it after a season in disgust, and was thenceforth his own master. Some small landscapes in oil found a purchaser in Baron D'Ivry, who proved a generous and useful patron. M. Decamps appeared for the first time as an exhibitor at the Salon in 1827, with a 'Sujet Turc.' The picture pleased, but he had not yet been to the East, and he was encouraged to make a voyage to Turkey, which had a decisive influence on his artistic career. In 1831 he contributed 'La Patrouille Turque' and 'L'Opital des Galeus,' and year after year continued to send a 'Village Turc,' 'la Défaite des Cimbres,' 'le Bazar Turc,' 'l'École Turque,' 'la Cavalerie Asiatique traversant un gué,' and similar subjects, till he became the recognised painter of the East. These pictures were treated in a manner quite new in French art, singularly picturesque in arrangement, very cleverly and carefully composed, painted with a full, rough, patchy *impasto*, but brilliant in colour, and presenting the most striking effects of light. The impression they produced was very great. Painters, indeed, notwithstanding their undeniable technical merits, were anything but unanimous in their praise; but with the journalists and the public they at once became popular, and they found ready purchasers. M. Decamps followed up his successes by a large number of similar pieces, but among them were some of a more ambitious character, such as 'Joseph vendu par ses Frères,' 'Moïse sauvé des eaux,' 'la Pêche miraculeuse,' &c.; but in these, as in his ordinary genre pictures, the persons introduced were made subordinate and accessory to the landscape. Decamps was also skilful in painting animals, and produced a variety of such pictures as 'Ane et Chiens savants,' 'Chiens, Poules et Canards,' 'Chevaux de Halage,' and the like, but he was especially fond of painting monkeys engaged in some human occupation, or evincing some human passion, as 'les Singes boulangers,' 'les Singes Charcutiers,' 'le Singe au Miroir,' or 'le Singe Savant;' and when the jury of the Academy offended him by their rejection or ill-placing of some pictures he retorted on them by 'les Singes Experts,' in which his practised skill in caricature (displayed of old in 'Le Caricature' journal) enabled him to point his shaft with unerring effect. M. Decamps' success raised a host of imitators, and at length, disgusted with the prominence into which they brought the faults of his style, he sought to fall back upon the more classic mode of Poussin, and failing, declared he would abandon painting altogether. Accordingly he retired, in 1852, to a small property he possessed, and for awhile occupied himself with the cultivation of his fields. Tiring of this he returned to his pencil, taking

up his residence at Fontainebleau, where he died, August 21, 1860, from the effects of a fall from his horse. M. Decamps' paintings continue to realise very large prices when brought into the auction-room, and he is the acknowledged head of a school; but it is gradually becoming recognised, even by his countrymen, that he was at the best a mere mannerist, and that his success was owing rather to the novelty of his subjects and style than to the inherent merits of his works. When, at the Great Exhibition of 1855, some 40 of his pictures were brought together, their monotony and trickiness were painfully conspicuous; the jury, however, awarded him one of the ten medals of honour.

* DECANDOLLE, ALPHONSE LOUIS PIERRE PYRAMUS, the son of the celebrated Augustin P. Decandolle, was born at Paris, October 27, 1806. He was educated at Geneva. After studying the law, and taking the degree of Doctor in 1829, he gave his attention to botany. He succeeded his father as Professor of Botany in the University of Geneva, and also had the care of the Botanic Garden of that city. His principal works are 'Monographie des Campanulées,' 4to, Paris, 1830; 'Introduction à l'Étude de la Botanique, ou Traité élémentaire de cette Science,' 2 tomes 8vo, 1835; 'Hypsométrie des environs du Genève,' 4to, Geneva, 1839; 'Notice sur B. Delessert,' 8vo, 1847, Geneva; 'Géographie botanique raisonnée,' 8vo, 2 vols. Paris, 1855; 'Notice sur la Vie et les Ouvrages de M. de Martius,' 8vo, Geneva, 1856; 'Mémoires et Souvenirs de A. P. Decandolle,' 8vo, 1862. He has also continued the 'Prodromus systematis naturalis regni vegetabilis,' etc., which was begun by his father, as editor and part author. This great work occupied the elder Decandolle during the last 15 or 20 years of his life, and so anxious was he about its completion, that he inserted a clause in his will enjoining his son to undertake the task. Alphonse had already shown his ability by his monograph on the Campanulaceæ, &c.; and although, at the time of his father's death in 1841, he was busily engaged collecting materials for his work on geographical botany, he threw aside this for a time, and prepared for the continuation of the larger systematic work. He secured the services of the most eminent botanists, and the work was pushed steadily forward up to the 13th volume, which appeared partly in 1849 and partly in 1852. From this time delays and difficulties occurred, and progress was slow. The work is now, however, very nearly completed, a portion of the sixteenth volume having been published in 1869. It has had great influence in leading to the adoption of the "natural method" of classification in systematic works, as opposed to the Linnæan system, which formerly prevailed. Alphonse Decandolle has also written upwards of 50 papers for scientific journals. He is a member of the Institute and many other learned bodies, and has been elected into the Legion of Honour. His son,

* CASIMIR DECANDOLLE also promises to be an eminent botanist. He has written a monograph on the *Juglandææ* for the

DECAZES, ÉLIE, DUC, a French statesman, descended from an ancient noble Gascon family, was born at St. Martin de Laye, department of Gironde, September 28th, 1780. In 1790 he entered l'École Militaire, Vendôme; then studied law at Libourne, near the place of his birth, and was admitted to the bar. Removing to Paris, he obtained employment under the Minister of Justice; soon after which a marriage into an influential family opened a path to rapid advancement. In 1805 he was appointed Judge of the Tribunal of the Seine; in 1806, counsellor of the Cour Impériale. He next went to Holland as counsel to King Louis Bonaparte; and in 1811 became counsel and secretary to Madame Letitia, the Emperor's mother. As he declared for the Bourbons in 1814, he lost his offices, and was exiled during the Hundred Days; but after the battle of Waterloo he received from Louis XVIII. the appointment of Préfet of Police at Paris, and afterwards Minister of General Police, in which offices he displayed ability and energy. In 1816 he was made a peer, with the title of Count. In 1818 he succeeded the Duc de Richelieu as Minister of the Interior. Although of aristocratic family and leanings, he sought to curb the intolerance of the nobles of the Restoration, by advocating many reasonable measures respecting freedom of election, of debate, and of the press. In 1820 he became Minister of State, or Prime Minister; but almost immediately afterwards the Duc de Berri was assassinated, and Decazes was accused by the aristocratic party of complicity in the crime. The King, although the charge against Decazes was never substantiated, was obliged to dismiss him, but at the same time raised him to the rank of Duke, and appointed him ambassador to the Court of St. James's; he had already received a similar title (Duke of Glücksberg) from the

King of Denmark, on the occasion of his marriage, 1818, with Mlle. de St. Aulaire, grand-daughter of the last reigning Prince of Nassau-Saarbrück. Returning to Paris in 1821, he resumed his place in the Chamber of Peers, but without office, supporting measures of a temperate kind, in the hope of reconciling extreme parties. He accepted the Revolution of 1830, without directly participating in it. In 1834 he was appointed grand référendaire of the Chamber of Peers, the only office which he appears to have held during the reign of Louis Philippe. Retiring from political life after the *coup d'état* in 1851, he devoted his attention mainly to schemes for the encouragement of agriculture, industry, and the arts generally. He was the founder of one of the principal metallurgic establishments in France, the iron-works at Decazeville, by which he converted a scantily-occupied district into a busy town and commune. He died on the 24th of October, 1860. During his political career he refused to belong to either of the two leading parties in the Legislature, preferring to hold the balance between them; as a consequence, he was in favour with neither. His political conduct has been severely criticised, but it is admitted on all hands that whilst a minister, as afterwards in private life, he was ever one of the most earnest and enlightened promoters of agriculture and the industrial arts in France.

DECKEN, BARON CHARLES CLAUS VON DER, an African traveller, was born at Kotzen, Brandenburg, in 1833. He early showed a desire for travelling by his study of history and geography, and his aptitude for drawing maps. In 1850 he entered the Hanoverian army as lieutenant; and in 1858 he made his first visit to Africa, but it was a short one only, owing to an attack of fever. In 1860 he withdrew from the army, and devoted himself to African exploration. He made two efforts to penetrate into the interior from Zanzibar, but was unsuccessful, owing to want of porters and a mutiny among his followers. In 1861 he succeeded in reaching the white-capped mountains of Kilimandjaro, accompanied by a young English geologist, Richard Thornton. In 1862 he again visited Kilimandjaro, and ascended to a height of 14,000 feet above the sea. On this occasion he was accompanied by Dr. Kersten, and both assured themselves that the summit of the mountain was covered with snow, a fact which had been stated by Krapf and Rebmann, but had been much disputed about. In 1863 he returned to Europe, received the gold medal of the Royal Geographical Society of London, and other honours, and again returned to Africa for purposes of exploration. This time he had two steamers constructed, specially adapted for easy carriage and for river navigation, organised a select party of Germans, and, on reaching Africa he ascended the river Juba. One steamer was lost on the bar, and, when about 350 miles up the stream, the other was brought to a stand by rapids. The steamer was left in charge of the main party, while the Baron and Dr. Link returned to Berdera for assistance. This was on September 28th, 1866. At Berdera he was attacked by the natives, and his small party was compelled to take to the open country. On October 1, Dr. Link and one boy returned to the camp at the rapids, while the Baron, with three attendants, again went to Berdera. According to Abdio, his guide, he was killed by the people of Berdera early in October, and his body thrown into the Juba. An account of the countries visited by the Baron, and of the animals inhabiting them, has been published, under the title of 'Reisen in Ost Afrika in der Jahre 1859—65.' The work is intended to be in four volumes, the first and third were published in 1869, the fourth in 1870, but the second has not appeared yet. The general results are, or will be given in vols. i. and ii., which are by Dr. O. Kersten; the other two contain descriptions of the animals collected, and are by Peters, Cabanis, Hilgendorf, E. von Martens, Semper, Finsch, and Hartlaub. The fourth volume is a thick one, and entirely devoted to the birds.

* DEFRÉMERY, CHARLES, a French philologist and orientalist, was born on the 8th of December, 1822, at Cambrai, and became a student at the Collège de France, where he devoted himself to a diligent cultivation of the Arabic and Persian languages. His first publication, 'Histoire des Sultans du Kharizm, par Mirkhond, texte persan, accompagnée de Notes historiques, géographiques, et philologiques,' 8vo, Paris, 1842, procured his admission to the membership of the Société Asiatique of Paris, in 1843. From that time M. Defrémery has contributed editions and translations of many works of great value for the light they throw upon the history, geography, and literature of the Oriental nations on this side of the Indus. He has for many years been one of the associate editors of the 'Journal Asiatique,' in which several of his works have appeared

before receiving a substantive form of publication. For the 'Collection d'Auteurs Orientaux,' now in course of publication by the Société Asiatique, of which the 'Journal' is the organ, he edited, jointly with Dr. B. R. Sanguinetti, the 'Voyages d'Ibn Batoutah, texte arabe et Traduction,' &c., 4 vols, 8vo, Paris, published severally in 1853, 1854, 1855, and 1858, to which an 'Index Alphabétique pour Ibn Batoutah,' was added in 1859. The other more remarkable of the works of M. Defrémery are his 'Histoire des Seldjoukides et des Ismaéliens, ou Assassins de l'Iran, extraite du Tariki Guzideh ou Histoire choisie d'Hamd-Allah Mustaufi, traduite du persan et accompagnée de Notes historiques et géographiques,' 8vo, Paris, 1849; a subject which he further illustrated in his 'Nouvelles Recherches sur les Ismaéliens ou Bathiniens de Syrie, plus connus sous le nom d'Assassins, et principalement sur leurs Rapports avec les États chrétiens d'Orient,' 1854; 'Fragments de Géographies et d'Histoires arabes et persanes inédites, relatifs aux anciens Peuples du Caucase et de la Russie méridionale, traduits et accompagnés de Notes critiques,' 8vo, Paris, 1849; and a translation of Sâdi's 'Gulistan, ou le Parterre des Roses, traduit du persan sur les meilleurs Textes, et accompagné de Notes,' 12mo, Paris, 1858. His contributions to various journals and periodicals have been published with the title of 'Mémoires d'Histoire Orientale, suivis de Mélange de Critique, de Philologie, et de Géographie,' 2 parts, 8vo, Paris, 1854—62.

* DEGER, ERNST, an eminent German painter, was born April 15, 1809, at Bockenem, in Hanover. He studied under Von Schadow at Berlin, and afterwards at Düsseldorf, and imbibed to the full the views of that master. He first made himself known by 'The Madonna and Child,' painted in 1837, for the St. Andreaskirche, Düsseldorf, and he afterwards painted numerous pictures for the Jesuits' and other churches of that city, several of which came to be widely known by their reproduction in lithography. But his great work was the decoration of the church of St. Apollinaris, at Remagen, on the Rhine, which was erected at the cost of the Graf von Fürstenberg-Stammheim, and intended by him to illustrate the condition of revived German ecclesiastical art in the middle of the 19th century. To make studies and prepare the cartoons for the pictures, which were to be in fresco, Deger and his colleagues made a special visit to Rome. The pictures illustrate the life of the Virgin and the history of Jesus. The direction of the painting was entrusted to Deger, and it was completed in 1851. The successful issue of the undertaking led to Deger's being commissioned by King Frederick William IV. of Prussia to paint in fresco the chapel of his castle at Stolzenfels. This comprises a series of twelve pictures, which are intended to symbolize 'The Redemption of Mankind from the Curse of Sin.' Deger has painted many easel pictures, but all, or nearly all, of a religious character. He ranks as the chief living painter of the Düsseldorf school of sacred art. His works are distinguished by that mystical sentiment—compound of religion, philosophy, and symbolism—which is distinctive of the school, and, to one who regards them principally as works of art have, with all their undoubted excellence, a feeble, faded, second-hand aspect. Herr Deger was nominated professor by the King of Prussia, and he is an honorary member of the academies of Berlin and Munich.

DEGÉRANDO, JOSEPH MARIE, BARON, a French statesman, philanthropist, and philosopher, was born on the 29th of February, 1772, at Lyon, and was educated at the Collège de l'Oratoire of his native city. At first he cherished an inclination for an ecclesiastical career, but was diverted from his purpose by the events and excesses of the Revolution. He assisted in the defence of Lyon against the troops of the Convention in 1793, and was on that account obliged to take refuge, first in Savoy, and afterwards at Naples. An amnesty allowed him to return to France after an absence of two years, and he enlisted in the army as a trooper in a regiment of cavalry. Amidst the distractions of military service he produced a treatise which obtained the prize of the Institute in 1799, and which, under an amplified form, was published with the title of 'Des Signes et de l'Art de penser, considérés dans leurs Rapports mutuels,' 4 vols, 8vo, Paris, An. viii. (1800). He won a like honour from the Academy of Berlin with his essay 'De la Génération des Connaissances humaines,' 8vo, Berlin, 1802, which commenced with a critical review of the various theories upon the subject current both in ancient and modern times, and which grew by a process of natural development and expansion into the elaborate work, of a kind till then unknown in France, entitled 'Histoire comparée des systèmes de Philosophie, considérés relativement aux Principes des Connaissances humaines,' 3 vols, 8vo, Paris, An. xii.

(1804), second edition, revised, corrected and augmented, 4 vols. 8vo, Paris, 1822–23, which was completed by the posthumous publication of four additional volumes, forming a second series, and devoted to a history of modern philosophy, 'Histoire de la Philosophie moderne, à partir de la Renaissance des Lettres jusqu'à la fin du XVIII.^e Siècle,' 8vo, Paris, 1847–48. The 'Histoire' procured for its author the patronage of Lucien Bonaparte, and admission to the membership of the Académie des Inscriptions et Belles-Lettres, in 1804. About the same time he was promoted to the office of secretary-general to the Ministry of the Interior, and in 1806 to the Mastership of Requests. For brilliant administrative services rendered in Italy between 1808 and 1811, he was made in the latter year a Councillor of State, a baron, with a yearly allowance of 25,000 francs, and an officer of the Legion of Honour, being afterwards raised to the rank of commander in 1820 by Louis XVIII. When, on the advice of Degérando, a chair of public and administrative justice was instituted in March, 1819, he was elected to be its first occupant; but in 1821, owing to the expression of sentiments obnoxious to the Government, he was suspended for seven years from his professorship. The accession of Louis Philippe brought to M. Degérando favour and appreciation; and on the 3rd of October, 1837, he was called to the House of Peers, of which he became an active member. Throughout his career M. Degérando was interested, officially or indirectly, in nearly every benevolent corporation in Paris, to the literary and other advocacy of which he largely contributed. He was one of the founders of the Société de la Morale Chrétienne; a member of the Société pour l'Instruction élémentaire, and of the Société des Méthodes; and the founder of the Société d'Encouragement pour l'Industrie nationale. Not very long before his death, which took place at Paris on the 10th of November, 1842, he visited Germany and Switzerland, for the purpose of discovering what portion of the systems pursued in their hospitals and charitable establishments could be profitably adopted by those of France.

Besides the works already mentioned, Baron Degérando published—anonously, in the first edition—a treatise, which was crowned in 1820 by the Académie de Lyon, and in 1821 by the Académie Française, and to which was decreed the Montyon prize, entitled 'Le Visiteur du Pauvre,' 8vo, Paris, 1820, fourth edition, 1837; English translation, 12mo, London and Manchester, 1833; another treatise, to which the Académie Française decreed the Montyon prize in 1825, entitled 'Du Perfectionnement moral; ou, de l'Education de Soi-même,' 2 vols. 8vo, Paris, 1824; third edition, 1833; English translation, entitled 'Self-Education,' &c., third edition, 8vo, Boston and Cambridge, U.S., 1860, the object of which was to enforce the fact that the life of man is one great and constant process of education, of which the two great instruments are the love of virtue and the power of self-government; 'De l'Education des Sourds-Muets de Naisance,' 2 vols. 8vo, Paris, 1827; 'Institutes du Droit administratif Français; ou, Eléments du Code administratif réunis et mis en ordre,' &c., 4 vols. 8vo, Paris, 1829–30; fourth edition, 1845; and 'De la Bienfaisance publique,' 4 vols. 8vo, Paris, 1839, which gives, *inter alia*, a loose and incomplete history of the charitable institutions of the Middle Ages. M. Degérando was likewise a contributor to various serial and periodical works—to the 'Archives littéraires de l'Europe,' the 'Revue Encyclopédique,' 'Encyclopédie des Gens du Monde,' 'Biographie Universelle,' 'Journal Asiatique,' 'Dictionnaire Technologique,' and the 'Journal Grammatical et Philosophique de la Langue Française.'

DELACROIX, FERDINAND VICTOR EUGÈNE [E. C. vol. ii. col. 538]. This very eminent painter, the head of an important school of French art, died on the 13th of August, 1863, aged 64.

* DELAFOSSE, GABRIEL, mineralogist, was born about 1795, and educated at the Ecole Normale. He is the professor of mineralogy at the Museum of Natural History, Paris, and a member of numerous societies. His principal works are 'Nouveau Cours de Minéralogie, contenant la description de toutes les espèces minérales avec leurs applications directes aux Arts,' 8vo, 3 vols, 1858–1862, forming one of the series entitled 'Nouvelles Suites à Buffon,' and several elementary works, such as 'Notions élémentaires d'Histoire Naturelle,' 2nd ed., 3 vols, 1856; 'Précis élémentaire d'Histoire Naturelle,' 12mo, 1st ed., 1831; 2nd ed., 1862; and several others. He has also written a few scientific papers in the 'Comptes Rendus,' on the relation between the structure of crystals and their physical properties. Amongst other things he discovered that the hemihedral facets on quartz and other minerals are connected with, and indicative

of, the direction in which the colours alter in the rotatory polarised light passing through their crystals.

DELANDINE, ANTOINE FRANÇOIS, was born at Lyon, March 6, 1756. The son of an advocate, he was educated for the bar, and was received as advocate at the Parlement de Dijon in 1775, and at that of Paris in 1777, but abandoned law for literature. Among his early works 'L'Enfer des Peuples Anciens,' 1784, attracted notice by its erudition, and 'L'Histoire des Assemblées Nationales de France,' 8vo, 1789, by its subject; the latter securing his election the same year to the States-General. The following year he was appointed librarian to the Academy, Lyon, but his monarchical principles brought him into danger in 1793, and he took refuge at Neronde, in Forez. He was, however, arrested and confined in the prison of the Recluses at Lyon till the death of Robespierre. Under the Directory he was appointed professor of legislation at the Ecole Central du Rhône, and on the suppression of that institution he was restored to his librarianship, which post he retained till his death, May 6, 1820. Delandine published a great number of books, but the most useful, perhaps, was the edition (13 vols, 8vo, 1804) of Dom Chaudon's 'Nouveau Dictionnaire Historique,' his share in which is noticed under CHAUDON [E. C. S. col. 371]. Other works of value are—'Bibliothèque historique et raisonnée des historiens de Lyon et des ouvrages manuscrits et imprimés qui ont quelque rapport à l'histoire ecclésiastique et civile de cette ville et des trois provinces,' 8vo, 1787; 'Catalogue de la Bibliothèque de Lyon, avec des observations littéraires et bibliographiques,' 3 vols, 8vo, 1812; and 'Mémoires bibliographiques et littéraires,' 8vo, 1816.

DELANY, MARY, born May 14, 1700, at Coulton, in Wiltshire. The daughter of Colonel Bernard Granville, a member of the Lansdowne family, she received a careful education, and at the age of 17 was married to Alexander Pendarves, a wealthy Cornish gentleman, but advanced in years, and an habitual drunkard. He died in a fit in 1724, when it was found that he had neglected to sign his will, and the young widow was consequently left in somewhat straitened circumstances. She came to London, and moved much in society; and occasionally visited Dublin, where she was on very intimate terms with Dean Swift, and his clerical circle. In 1743 she married Swift's friend, the Rev. Dr. Delany. The Doctor was a good and able man, held some preferments in the church, and had written books and discourses that were praised by Swift and read by the public, but Mrs. Pendarves' friends were shocked that a Granville should mingle with plebeian blood. However, after the marriage they procured him the deanery of Down, that the lady might have a respectable position. The dean died in 1768, and Mrs. Delany returned to England. She resided for a good part of her time with the Duchess of Portland, on whose death, George III., who was a frequent visitor at Bulstrode, conferred on Mrs. Delany a house at Windsor and a pension of 300*l.* a year. She was a great favourite with the king and his family, and frequently visited by them, and kept up even in her old age a wide epistolary correspondence. She died on the 15th of April, 1788. Mrs. Delany was a clever, accomplished, and amiable woman; her only title, however, to biographical record is 'The Autobiography and Correspondence of Mary Granville, Mrs. Delany: with Interesting Reminiscences of King George the Third and Queen Charlotte. Edited by the Rt. Hon. Lady Llanover,' 6 vols. 8vo, London, 1861. Covering a period of nearly seventy years, the work is a mine of rare value to the student of the social life and manners of the 18th century; to the general reader it would have been of much greater interest if reduced to half its present bulk by judicious omission, and the excision of superfluous annotation.

* DE LA RIVE, AUGUSTE, was born at Geneva, 9th Oct., 1801. He was the son of a distinguished medical man and chemist, who died in 1834. He studied science with such success as to obtain the sanction of Arago and Ampère to a memoir published in the 'Annales de Chimie et de Physique' in 1822. He investigated the subject of heat in conjunction with Marcel, and was nominated to the chair of physics at the Academy of Geneva. After the political troubles of 1830 he visited England and other countries. On his return home he edited the 'Bibliothèque Universelle de Genève' from 1836 to 1841. He applied himself to the study of electricity, and in 1842 obtained the Montyon prize of 3000 francs for his galvanoplastic experiments. In 1830 he was elected a corresponding member of the Institute of France, and in 1864 one of the eight foreign associates of the Academy of Sciences. In 1846 he was elected one of the foreign members of the Royal Society of London. De la Rive's apparatus is known to students in electro-magnetism, as also his 'Traité d'Electricité

théorique appliquée,' in 3 vols. 8vo, Paris, 1854—58. He has also written notices of some of his scientific compatriots 1817—54. His eldest son, William, is the chief editor of the literary portion of the 'Bibliothèque Universelle.'

DELAROCHE, PAUL [E. C. vol. ii. col. 541]. The memoir of this great artist—one of the greatest historical painters France has produced—had been printed but a month or two when he laid down his pencil for ever. After a painful illness, he died on the morning of the 4th of November, 1856, at the age of 59.

* DE LA RUE, WARREN, was born in or about the year 1815. His father, Mr. Thomas De La Rue, a native of Guernsey (born in 1793, died 1866), after serving an apprenticeship to a printer and publisher, established himself in London. Mr. Warren De La Rue, and another son, assisted the father in developing a stationery manufactory in Bunhill Row, which has grown up to a stage of great magnitude and importance, especially in the departments of playing-cards, envelopes, and postage stamps. The combination of colour-printing and embossing, on fine cardboard and fine paper of different kinds, led to the introduction of many beautiful products, which in turn rendered necessary the adoption of large manufacturing arrangements. Mr. Warren De La Rue's knowledge of mechanism enabled him to devise the chief parts of the envelope-making machine, patented by him conjointly with Mr. Edwin Hill, and first publicly shown at the Hyde Park Exhibition of 1851. He acted as juror at the four great International Exhibitions of 1851, 1855, 1862, and 1867. Gradually withdrawing from commercial and manufacturing pursuits, Mr. De La Rue devoted his chief attention to science, in which both physical and chemical researches were comprised. As a Fellow of the Royal, Royal Astronomical, Chemical, and other learned societies, he has contributed above 50 papers to the Memoirs and Proceedings of those bodies. In his observatory at Cranford, near Hounslow, his fine telescope has enabled him to make numerous valuable astronomical observations, and he has indoctrinated many scientific observers in the use of their instruments before setting out on their labours, as M. Lesueur, now in charge of the great telescope at Melbourne, and Major Tennant for the great eclipse party. He has also set up a speculum grinding machine at Cranford, worked by a small steam-engine. Mr. De La Rue's principal scientific work has been in the application of photography to astronomy, especially in relation to solar and lunar phenomena. He was one of the observers who went to Spain in 1860 to make observations during the great solar eclipse of that year. His researches on the sun's spots, the corona, the rose-coloured flames, &c., have helped to pave the way for the grand discovery of the sun's chromosphere by M. Janssen and Mr. Norman Lockyer. The Kew Observatory, belonging to the British Association for the Advancement of Science, has been the scene of many of Mr. De La Rue's labours, relating chiefly to astronomy, meteorology, and the verification of scientific instruments. The French Academy of Sciences awarded the Lalande Prize to Mr. De La Rue, in 1866, for his researches in celestial photography, and in the report accompanying the award it was stated that of the 18 years he had been at Cranford, 15 years had been devoted particularly to celestial photography, chiefly by means of a splendid telescope of 13 inches aperture, made according to his own designs. In 1861 Mr. De La Rue published in the 'Monthly Journal of the Royal Astronomical Society' the first example of heliography, by means of which photographs of the sun's spots were reproduced at the ordinary press without the intervention of the draughtsman or engraver.

* DELAUNAY, CHARLES EUGÈNE, was born at Lusigny, Department of the Aube, April 9, 1816. He entered l'École Polytechnique in 1834, and quitted it with high honours in 1836. He received in succession the appointment to the offices of first-class engineer of mines, professor of mechanics at l'École Polytechnique, and a similar professorship to the Faculté des Sciences. He was elected a member of the Institute in 1855; and in 1862 titular member of the Bureau des Longitudes. Besides 36 papers in the 'Comptes Rendus,' and the 'Journal de l'École Polytechnique,' between 1838 and 1863, on various branches of astronomy, and especially on the Moon, M. Delaunay has published the following works:—(1) 'Cours Élémentaire de Mécanique, théorique et appliquée,' 12mo, Paris, 1851; (2) 'Cours Élémentaire d'Astronomie, concordant avec les articles du programme officiel pour l'enseignement de la Cosmographie dans les Lycées,' 12mo, Paris, 1854; (3) 'Sur une Méthode d'intégration, applicable au calcul des Perturbations des Planètes et de leurs Satellites,' 4to, Paris, 1855 (inserted in the Memoirs of the Academy); (4) 'Traité de Mécanique Rationnelle,' 12mo,

Paris, 1856; (5) 'Sur la Ralentissement du Mouvement de Rotation de la Terre,' 8vo, Paris, 1866. M. Delaunay is president of the Académie des Sciences, and in March, 1870, succeeded M. Leverrier as director of the Imperial Observatory. He was in February, 1870, awarded the gold medal of the Royal Astronomical Society, London, for his 'Théorie Analytique du Mouvement de la Lune,' as developed in a series of papers contained in the Mem. Acad. Sc. for 1860 and following years.

* DELEPIERRE, JOSEPH OCTAVE, LL.D., F.S.A., &c., a Belgian lawyer and man of letters, who has been for many years officially resident in London as Secretary of Legation and Consul-General for Belgium, was born at Bruges in 1804. He studied law at the University of Ghent; and for some time practised as an advocate at Brussels, until he was appointed attaché to the Belgian Embassy in London, and finally, in August, 1849, to the offices which he at present holds. He is a member of several learned societies both in this country and on the Continent, and has devoted himself with much ardour to the illustration of the antiquities, social, historical, scientific, artistic, literary, and topographical, of his native country, and especially of his native city of Bruges. Thus he has published the 'Histoire du Règne de Charles-le-Bon, précédée d'un Résumé de l'Histoire de Flandre, depuis les Temps les plus reculés,' 8vo, Brussels, 1830; 'Vie de Marie de Bourgogne,' folio, Brussels, 1841; 'La Belgique illustrée par les Sciences, les Arts, et les Lettres,' 8vo, Brussels, 1840; 'Les Traditions et Légendes de Flandre,' 8vo, Lille, 1834, translated by the editor into English, with the title of 'Old Flanders; or, Popular Traditions and Legends of Belgium,' 2 vols. 8vo, London, 1845; 'Précis des Annales de Bruges, depuis les Temps les plus reculés jusqu'au commencement du XVII^e Siècle,' &c., 8vo, Bruges, 1835; 'Précis analytique des Documents que renferme le Dépôt des Archives de la Flandre-Occidentale, à Bruges,' 8vo, Bruges, 1840; 'Galerie d'Artistes Brugesois; ou, Biographie concise des Peintres, Sculpteurs, et Graveurs célèbres de Bruges,' 8vo, Bruges, 1840; 'Beaucourt de Noortvelde's 'Troubles de la Flandre,' 8vo, Mons, 1845, edited for the Société des Bibliophiles de Mons, for which he had already translated the 'Vision de Tondalus; Récit mystique du douzième Siècle, mis en français pour la première fois,' 8vo, Mons, 1837, when he was acting as Archiviste de la Flandre-Occidentale; 'Biographie des Hommes remarquables de la Flandre-Occidentale,' 4 vols. 8vo, Bruges, 1843, 1844, 1847, and 1849, edited, jointly with three others, by M. Delepierre, for the Société d'Emulation pour l'Étude de l'Histoire et des Antiquités de la Flandre-Occidentale, of which he was the founder; and 'A Sketch of the History of Flemish Literature, and its celebrated Authors, from the twelfth Century down to the present Time. Compiled from Flemish sources,' 8vo, London, 1860. Amongst M. Delepierre's contributions to more general literature may be mentioned his group of Macaronic volumes, 'Macaroneana; ou, Mélanges de Littérature Macaronique des différents Peuples de l'Europe,' 8vo, Paris, 1852; 'De la Littérature Macaronique, et de quelques Raretés bibliographiques de ce Genre,' 8vo, London, 1856; and 'Nouveaux Mélanges de Littérature Macaronique,' 8vo, London, 1862; together with his 'Histoire littéraire des Fous,' 8vo, London, 1860; and 'Historical Difficulties and Contested Events,' 8vo, London, 1868. M. Delepierre is a Knight Commander of the Spanish Order of Charles III., and also (August, 1870) of the Portuguese Order of Christ.

* DELESSE, ACHILLE, geologist, was born at Metz in 1817. He is an engineer in chief of mines, professor of geology at the École Normale, Paris, vice-president of the Geological Society of Paris, a foreign member of the Geological Society of London, &c. His writings are numerous, and relate chiefly to the composition, mode of formation, and alteration of rocks and minerals. He has given a great deal of attention to the metamorphism of rocks, and his memoirs on this subject are extremely valuable. They are much scattered as regards place and date of publication, but the following will present a full account of his researches. The special metamorphism of rocks is given in 'Études sur le Métamorphisme' in 'Annales des Mines,' xii. pp. 89—288, 417—516, 705—772 (1857); xiii. pp. 321—416 (1858); the general metamorphism is treated in 'Études sur le Métamorphisme des Roches,' 1869; while the general considerations on the origin of rocks is in 'Sur l'Origine des Roches,' in 'Bull. Soc. Géol. Fr.,' xv. pp. 728—781 (1858), which was published in a separate form in 1865. His memoir entitled 'Recherches sur les pseudomorphoses,' 8vo, Paris, 1859, which originally appeared in the 'Annales des Mines' for that year, is an important contribution to our knowledge of the changes which minerals undergo. His papers entitled 'Recherches de l'Azote et des matières organiques

dans l'écorce terrestre' in 'Annales des Mines,' xviii. pp. 151—324 (1860); and 'Recherches sur l'eau dans l'intérieur de la terre,' in 'Bull. Soc. Géol. Fr.,' xix. pp. 64—89 (1861), may be also mentioned for the original views which they contain. His maps of Paris and its neighbourhood are remarkable specimens of their kind, more especially the 'Carte géologique et hydrologique de Paris,' 1861, in which he shows the distribution of the water in the rocks forming the Paris basin. His more recent maps showing the character of the ground on the sea bottom near the shores of France, in the English Channel, and in most of the seas of the Old World, contain an immense amount of information on the orographic contour and recent geology of Europe. His other productions are far too numerous to name here, but we may just mention his 'Matériaux de Construction de l'Exposition Universelle en 1855,' 8vo, Paris, 1856; and the 'Revue de Géologie' for 1861 and subsequent years, which he has drawn up in conjunction first with M. Laugel, and latterly with M. Lapparent. The latter work is an excellent resumé on the progress of geology for the period to which it relates.

* DELITZSCH, FRANZ, a German philologist and biblical commentator, was born at Leipzig, on the 23rd of February, 1813, and studied at the university of his native city, where he devoted himself especially to divinity and oriental learning. In 1846 he was appointed ordinary professor of theology at Rostock, a small university in the Grand Duchy of Mecklenburg-Schwerin, whence he removed in 1850 to occupy a like position at the Bavarian University of Erlangen, which gives its name to a certain school of dogmatic theologians, who count Delitzsch amongst their most prominent advocates. Finally, Dr. Delitzsch was made ordinary professor of the Exegesis of the Old and New Testaments, in his own University of Leipzig; and on the 26th of October, 1867, delivered an inaugural lecture on Physiology and Music in their Relations to Grammar, &c., which he published, in an amplified form, with the title of 'Physiologie und Musik in ihrer Bedeutung für die Grammatik, besonders die Hebräische,' 8vo, Leipzig, 1868. The works of Dr. Delitzsch, which are considerable, both in number and in range of subject, include a treatise on the history of Hebrew poetry, 'Zur Geschichte der Jüdischen Poesie, vom Abschluss der heiligen Schriften alten Bundes bis auf die neueste Zeit,' 12mo, Leipzig, 1836; a descriptive and critical study of the Science and Art of Judaism, 'Wissenschaft, Kunst, Judenthum. Schilderungen und Kritiken,' 12mo, Grimma, 1838; 'Jesurun; sive, Prolegomenon in Concordantias Veteris Testamenti, a J. Fuerstio editas, libri tres,' &c., 8vo, Grimma, 1838; Contributions to a Study of the Scholastic Learning of the Jews and Mohammedans of the Middle Ages, 'Beiträge zur Mittelalterlichen Scholastik unter Juden und Moslemen,' 8vo, Leipzig, 1841; a treatise on Mysticism and the Mystics, entitled, 'Wer sind die Mystiker? Eine gründliche Belehrung über das was Mysticismus ist und nicht ist. Gegen die Sprachverwirrung unserer Zeit,' 8vo, Leipzig, 1842; Studies in Biblical Theology and Apologetic Criticism, 'Biblich-theologische und apologetisch-kritische Studien,' 2 vols, 8vo, first volume, Leipzig, 1845, and second, Berlin, 1848, produced jointly with Carl Paul Caspari; 'On the House of God, or the Church, &c.,' 'Vom Hause Gottes, oder der Kirche. Katechismus in drei Hauptstücken,' 8vo, Dresden, 1849; a System of Biblical Psychology, 'System der biblischen Psychologie,' 8vo, Leipzig, 1855, second edition, 1861, English translation, in 'Clark's Foreign Theological Library,' 8vo, Edinburgh, 1867; Discoveries in Manuscripts, 'Handschriftliche Funde,' &c., 8vo, Leipzig, vol. i., 1861, vol. ii., 1862; For and against Kahnis, &c., 'Für und wider Kahnis. Kritik der Dogmatik von Kahnis mit Bezug auf dessen Vertheidigungsschrift,' 8vo, Leipzig, 1863; and a treatise on the Relation of Government and Labour in the time of Christ, a Contribution to the Contemporary History of the New Testament, being the substance of five Lectures delivered at the Leipzig Young Men's Association, in the winter of 1867—68, and published with the title of 'Handwerkerleben zur Zeit Jesu. Ein Beitrag zur neutestamentlichen Zeitgeschichte,' 8vo, Erlangen, 1868.

But it is as a biblical scholar, critic, and commentator that Dr. Delitzsch is most widely known; and in this department, besides the works to which allusion has already been made, may be mentioned his 'De Habacuci Prophetæ Vita atque Ætate, Commentatio historico-isagogica, cum Diatriba de Pseudodorothei et Pseudepiphani Vitis Prophetarum,' 8vo, Leipzig, 1842; 'Symbolæ ad Psalmos illustrandos isagogicæ, Dissertitur I. de Psalmorum indole partim Jehovica partim Elohimica; II. de Psalmorum Ordine ejusque Causis ac Legibus,' 8vo, Leipzig, 1846; New Researches into the History of the Canonical Gospels,

'Neue Untersuchungen über Entstehung und Anlage der Kanonischen Evangelien,' 8vo, Leipzig, 1853, &c.; Commentaries upon Solomon's Song, 'Das Hohelied untersucht und ausgelegt,' 8vo, Leipzig, 1851; on Genesis, 'Die Genesis ausgelegt,' 8vo, Leipzig, 1852, third edition, 1860; on Hebrews, 'Commentar zum Briefe an die Hebräer,' &c., 8vo, Leipzig, 1857; English translation, in 'Clark's Foreign Theological Library,' 8vo, Edinburgh, vol. i. 1868. In 1861 Dr. Delitzsch joined with Dr. Carl Friedrich Keil, Professor of Exegesis in the University of Dorpat, to publish a voluminous 'Biblicher Commentar über das Alte Testament,' of which the first Part, 'Biblicher Commentar über die Bücher Mose's,' was published in 2 vols, 8vo, Leipzig, 1861—1862, and translated into English, for 'Clark's Foreign Theological Library,' in 3 vols, 8vo, Edinburgh, 1864—65; second Part, 'Biblicher Commentar über die prophetischen Geschichtsbücher, &c.,' in 2 vols, 1863—64; and a third Part, 'Biblicher Commentar über die poetischen Bücher, 1864, &c.; English translation of the last two Parts, for 'Clark's Foreign Theological Library,' 4 vols, 8vo, Edinburgh, 1865—67. Of the foregoing, Dr. Delitzsch is especially responsible for the Commentary on the poetical books; and it may be of interest to remark that he, as a commentator on Genesis, and an associate commentator on the Pentateuch, refers, with slight reservation as to the manifest continuation, the authorship of the Five Books to Moses, upon whose Law was based the whole of the Ecclesiastical polity, of the social and national life, and of the poetical and literary activity of the Jews. The Old Testament is the basis of the New; and the fact that the Pentateuch was the production of Moses, is insisted upon in order to ascertain the identity of the divine government, and the continuity of purpose in the several Covenants.

DEMESTE, JEAN, was born in 1743, and died in 1783. He was a military surgeon in the service of the Prince of Liège. He cultivated chemistry and the kindred sciences, but his notions were as fanciful as those of the alchemists. A work by him, once popular, is entitled 'Lettres du Docteur Bernard sur la Chimie, la Docimasie, la Crystallographie, la Lithologie, la Minéralogie et la Physique en général,' 2 vols, 12mo, Paris, 1779. A German translation appeared in 1784. Mineralogy is indebted to Demeste for first distinctly pointing out the value of the truncation of the angles and edges of crystals in showing the derivation of new forms, and he is said to have introduced the term.

* DEMETZ, FRÉDÉRIC AUGUSTE, originator of the Mettray reformatory system, was born on the 12th of May, 1796; studied law, and was admitted member of the bar of Paris. In 1821 he was nominated juge-suppléant of the tribunal; then juge d'instruction; afterwards vice-president of the Chamber of Correctional Police; and, in 1832, Conseiller à la Cour. In 1836 he went to the United States to study the penitentiary system there adopted. His American inquiries respecting juvenile crime produced a powerful impression, which was deepened by the investigations and experience of the following years. He at length convinced himself that though punishment was inefficacious to deter the juvenile criminal, it might be possible by judicious treatment to reform him, and he resolved to devote himself to the attempt. Aided by a former colleague, M. Bretignières de Courtelles, he founded at Mettray an Agricultural and Penitentiary College, the purpose of which was to reclaim, by special education, young offenders who had not yet become steeped in vice, and who, under the usual system, would have been imprisoned with older and hardened offenders. Demetz believed that the only chance of reclamation lay in a separation of the two classes, thereby removing the vitiating influence of the more desperate criminals. He also organised a society of foremen or managers of trades, to teach the inmates of the reformatory. With the countenance and sanction of the judicial authorities, he gradually brought the system into excellent working order, and the results have been most satisfactory. Other colonies on the same plan were established elsewhere; and there were combined with them correctional schools for children of the higher classes viciously inclined but not actually criminal. Demetz's scheme was described by himself in 'Société Paternelle; fondation d'une Colonie Agricole de jeunes détenues à Mettray: Statutes Constitutifs de la Société,' 8vo, Paris, 1839; and he has drawn up a series of annual Reports on the progress and actual condition of the establishment at Mettray. In England his system has been described in 'A Collection of Papers on Reformatories,' edited by Mr. Jelinger Symons, 8vo, London, 1855, and is noticed in the Reports, &c., of the Rev. Sydney Turner. The system of M. Demetz has been taken as the model for most of the reforma-

tories established in this country; and when he came to England in 1855 to visit these institutions, he was received with a respectful regard which he warmly appreciated. M. Demetz is a corresponding member of the Academy of Moral and Political Sciences.

DE QUINCEY, THOMAS [E. C. vol. ii. col. 567]. Mr. De Quincey died on the 8th of December, 1859.

DERBY, EDWARD GEOFFREY SMITH STANLEY, EARL OF [E. C. vol. ii. col. 568]. In February, 1858, on the resignation of Lord Palmerston, the Earl of Derby found himself for the second time in the position of First Lord of the Treasury, and his cabinet, amongst other difficulties, had to face the question of parliamentary reform, which had been left unsettled by the two preceding administrations. The measure submitted by Mr. Disraeli to the House of Commons did not recommend itself to the adoption of the legislature. Hereupon an appeal was made to the country; and as the results of the general election did not leave the ministry a working majority, in obedience to a vote of want of confidence, Lord Derby resigned office in June, 1859. Some real service, however, was effected during his short-lived administration, which, in the face of considerable resistance, succeeded in carrying the India Bill, by which the government of that vast dependency was transferred from the East India Company to the Sovereign. Whatever the ostensible reason of the defeat of Lord Derby's cabinet, it was felt that the true one lay in the complication of foreign affairs, which seemed to the popular mind to demand the direct presidency of Viscount Palmerston, whose party, under his leadership, and, after his death, under that of Lord Russell, swayed for the next seven years the destinies of the nation.

Freed from the cares of office, the Earl of Derby recurred during this interval to the studies of his youth, in which also he found relief from the attacks of that disease to which he finally succumbed. Whilst at Oxford he had gained, in 1819, the Chancellor's Prize for Latin verse by his poem on 'Syracuse'; and he now caused to be privately circulated—"not published," as the title-page expressly averred—his 'Translations of Poems, Ancient and Modern,' 8vo, London, 1862, a volume in which the poets of Greece, Rome, France, Italy, and Germany, were represented, and which included thirteen English versions of the 'Odes' of Horace, and the translation of the first Book of the 'Iliad'—the first instalment of his greatest work in this department. The volume was so well received that its author, who was sensitively alive to the verdict of friendly criticism, was encouraged to proceed in his translation of Homer, which at length appeared, with a dedication to the Prince of Wales, under the title of 'The Iliad of Homer, rendered into English Blank Verse,' 2 vols. 8vo, London, 1864, fifth edition, 1865, sixth edition, incorporating the 'Translations' already mentioned, 2 vols. sm. 8vo, London, 1867. The 'Iliad,' which, without claiming to supersede all other translations, vindicated the scholarly reputation of the author, called forth a number of imitators, and even attracted the critical attention of foreign students; and, amongst others, that of Dr. Wilhelm Henkel, who published a comparative review of the English translators of the Homeric poems from the time of Chapman, which he entitled 'Ilias und Odyssee und ihre Uebersetzer in England, von Chapman bis auf Lord Derby,' 8vo, Hersfeld, 1867. The profits of the translation of the 'Iliad,' which were considerable, were devoted to founding a scholarship at Wellington College. It was also during the lull of political strife that the cotton famine in Lancashire, consequent upon the Civil War in America, called forth one of the most amiable and admirable manifestations of Lord Derby's character. So long as his activity could be beneficial, he, as the head of Lancashire society, acted as chairman of the Central Relief Fund, for which he worked so strenuously, and to which he contributed so munificently—at once heading the list of contributions with a donation of 10,000*l.*—that to his providence, and delicate and kindly feeling, more than one generation of operatives will have to confess themselves indebted. A single literary souvenir of this disastrous epoch may be mentioned:—'Speech of the Right Honourable the Earl of Derby, K.G., at the County Meeting held in the Town Hall, Manchester, on Tuesday, December 2nd, 1862, in aid of the Relief Fund,' 8vo, Manchester, 1862.

In the summer of 1866 the Earl of Derby, somewhat reluctantly, set himself for the third time to conduct an administration; for the security and permanence of which it was necessary that his party should outbid the Whigs upon the question of parliamentary reform, now more violently agitated than it had been since his advocacy of the first Reform Bill in 1832. He communicated with his colleague, Mr. Disraeli, upon

whom the "education" of the Tories more particularly devolved, his wish for such a settlement of the question as should remove it from the arena of political and party warfare, and advised that a Reform Bill should be introduced, in which the franchise should be given to the working classes "with no niggard hand." In the House of Commons the conduct of the measure of 1867, which resulted in an Act establishing household suffrage, was of course undertaken by Mr. Disraeli; but Lord Derby was unable to further its passage through the House of Lords except by such advice as he could give from his sick chamber whilst prostrate under a more than usually severe and protracted attack of his old enemy, the gout. The responsibilities of office, with his advancing age, pressed upon him with such intensity as to aggravate his disease and to retard his recovery. Accordingly, in February, 1868, he resigned the Premiership, with a recommendation, acted upon by her Majesty, that the office should be conferred on Mr. Disraeli. Yet he did not cease to take an interest in public affairs; and he was frequently in his place in the House of Lords, to speak and to vote for the measures of the Disraeli administration, and afterwards to oppose those of its successors. The last parliamentary speech he delivered was against the second reading of Mr. Gladstone's Bill for the Disestablishment of the Irish Church. Lord Derby died at Knowsley, at 7 o'clock in the morning, on Saturday, the 23rd of October, 1869; and on the 29th of that month his remains were quietly interred in a new family vault in Knowsley Church.

* DERBY, EDWARD HENRY SMITH STANLEY, EARL OF, whose political reputation has been chiefly gained under the title of Lord Stanley, succeeded his father, as fifteenth Earl of Derby, on the 23rd of October, 1869. He was born at Knowsley on the 21st of July, 1826, and was educated at Rugby and at Trinity College, Cambridge, where he graduated in classical honours in 1849. In March of the same year he was an unsuccessful candidate for the representation of Lancaster; whereupon he paid a visit to Canada and the United States of America, making himself acquainted also with the condition of the English West India Islands, upon the claims and resources of which he delivered a remarkable speech in the House of Commons in 1850. In 1849, whilst still prosecuting his Transatlantic tour, he was elected M.P. for King's Lynn, of which borough, after continuously representing it in Parliament for twenty years, he accepted the high stewardship a few months after his call to the House of Peers. Whilst absent on a visit to India he was nominated to the Under-Secretaryship for Foreign Affairs, in his father's first brief administration in 1852. After the fall of the administration in December of that year, he continued out of office until the second accession of his father to power, when he acted under him as Secretary of State for the Colonies from February to May, 1858, and from the latter month to June, 1859, as Secretary of State for India, in the administration of which he had in 1853 projected important reforms. During the Conservative administrations of 1866—68 he held office as Secretary of State for Foreign Affairs, and won great applause for his skilful manipulation of the Luxembourg difficulty between France and Prussia. He has earned the reputation of being amongst the most judicious and progressive members of his party, and his actions and character have been of such a nature as to command the confidence and esteem of all classes. As a Parliamentary committee-man, and as a member of several important Royal Commissions, he has done good service; and his speeches in the House of Commons have from the first commanded respect and consideration for their ability, judgment, and purity of principle. Some of these have been published; amongst others, one, delivered February 21st, 1856, in favour of opening the British Museum and other national institutions on Sunday afternoon, and circulated by the "National Sunday League," 8vo, London, 1856; and another, delivered on the 13th of February, 1859, 'On the Financial Resources of India,' 8vo, London and Bombay, 1859. Lord Stanley was an advocate for the admission of Jews to Parliament; an opponent of Church rates; and an active promoter of popular libraries and institutes, and of technical and general education. It has been mentioned that on the death of his father in October, 1869, he succeeded to the Earldom of Derby. On the 5th of July, 1870, he was married in the Chapel Royal, St. James's, to Mary Catherine, Dowager Marchioness of Salisbury; and two days after accepted the high stewardship of King's Lynn, an appointment which was intended by the corporation as an integral part of their congratulations upon that event. On the 24th of August, 1870, Lord Derby laid the foundation-stone of a hospital for the new

borough of Bootle, near Liverpool, the site of which he had presented to the corporation. In the course of his speech, he advocated the claims of medical charities and sanitary reform, and especially insisted that, by a wider and more minute attention to the latter, the former might be rendered less necessary. "Now you have got your hospital," he said, "the next thing to try for is that it shall have nothing to do."

DERMODY, THOMAS, whose life parallels that of Chatterton in genius and misery, was born on the 17th of January, 1775, at Ennis, county Clare, Ireland. From his father, a schoolmaster of some ability, but of reckless habits, he received so good an education that when eight years old he was able to render efficient service in the school in teaching Greek and Latin. At ten years of age he is said to have written several short poems, made some spirited translations from Horace and Virgil, and familiarised himself with the masterpieces of English literature. In this there is probably some exaggeration, but he no doubt already exhibited remarkable precocity of will as well as of talent. With only 2s. in his pocket he quitted his father's house (1785), and made his way across the country to Dublin. There he led a strange, vagrant life, finding casual employment, but for the most part roving about the streets in extreme indigence. He was, however, taken notice of successively by a number of friendly persons, who tried in vain to render him assistance, the most persistent in these kindly efforts being Mr. Owenson, the father of Lady Morgan, who, among other kind acts, introduced him to Dr. Young, Fellow of Trinity College (and afterwards Bishop of Dromore), who made arrangements for placing him at college, which were frustrated by his boyish petulance. Even then Mr. Owenson would not give him up, but induced a Mr. Austin to receive him into his establishment, and publish some of his poetry, in the hope of raising a fund in his behalf. Here, however, he disgraced himself, and was dismissed, and again took to his wild course of life, subsisting on the bounty of friends and the uncertain profits of literary contributions to the newspapers. He was now brought under the notice of the Marchioness of Moira, who placed him under Mr. Boyd, the translator of Dante, with a view to prepare him for the University. This time it seemed as though their friendly efforts would succeed. The Attorney-General Wolfe (afterwards Lord Kilwarden) engaged rooms for him at Trinity College, undertook to defray his charges there, and to allow him 30*l.* a year for his personal expenses. But Dermody, now in his 18th year, refused to compromise his independence, broke away from all control, and, entering on a course of reckless dissipation, was soon reduced to the most abject poverty. Occasional papers for the journals saved him from starvation, though he was compelled once and again to sell his clothes to purchase a meal; yet during this wretched period he wrote some of his best pieces, both in prose and verse; of the former class being his pamphlet, occasioned by the French revolution, entitled 'The Rights of Justice; or, Rational Liberty,' 8vo, 1793, at the end of which he added a poem, styled 'Reform.' At length, his resources utterly exhausted, he enlisted in the 108th regiment, and embarked with it for England in September, 1794. In this situation his conduct was unexpectedly good. He was made corporal and sergeant, and on the regiment leaving England, he was, through the interest of Lord Moira, promoted to be second-lieutenant. In Flanders he was wounded, and on his return to England was put on half-pay. Settled in London he again gave way to dissipation; all efforts to reclaim him proved fruitless; a trifling pension from the Literary Fund served only to eke out his existence, and at length, overwhelmed with disease and poverty, he died in a miserable lodging at Perry Slough, Sydenham, on the 15th of July, 1802, and was buried in Lewisham Churchyard. Dermody published a small volume of poems in 1800, and a second in 1801. In 1806 appeared 'A Life of Thomas Dermody, with Specimens of his Writings, by J. G. Raymond,' 2 vols. 8vo, with portrait; and in 1807 'The Harp of Erin; or, the Poetical Works of the late Thomas Dermody,' 2 vols. 8vo.

DESAULT, PIERRE JOSEPH, a distinguished French surgeon and anatomist, was born at Magny-Vernais, in the department of Haute Saône, in 1744. His early education was under the Jesuits; his medical training was completed at the military hospital of Belfort, and the great hospitals of Paris. M. Desault was the first to combine surgery and anatomy in the same course of study, insisting on the importance of correct anatomical knowledge to the due performance of surgical operations. A famous operation of his upon a broken clavicle was described by his greatest pupil, Bichat, in the 'Magasin Encyclopédique.' In 1776 Desault was chosen a member of the French College of Sur-

gery; soon afterwards a member of the Academy; in 1782, surgeon-in-chief to La Charité; and in 1788, surgeon-in-chief to the Hôtel Dieu. He was repeatedly inventing new modes of procedure, and new surgical apparatus; and created a great school of clinical surgery. In 1792 he was a member of the Health Committee of the army. Although arrested as a suspected person by the Jacobins in the following year, he was soon liberated; and in 1794 was appointed Professor of Clinical Surgery at the newly-appointed École de Santé. His health rapidly declined after attendance upon the hapless son of Louis XVI. in the Temple, and he died on the 1st of June, 1795. Desault wrote little; the works bearing his name were written from his notes, by his friends or pupils. His glory is to have been the founder of the French school of clinical surgery.

DESCAMPS, JEAN BAPTISTE, French artist, and writer on art, was born at Dunkerque in 1714. He learnt the principles of design from his uncle, Louis Coyvel, and completed his artistic training at Paris, where for a time he practised painting. He then removed to Rouen, where he founded a school of art, which, proving successful, was made a public academy, with Descamps for director. He was a good teacher, but a mediocre painter, and is now remembered only as the author of 'Les Vies des Peintres Flamands, Allemandes, et Hollandais,' 4 vols. with portraits, 8vo, Paris, 1753—83, long a leading authority on the first of these schools, but which recent research has shown to be too inaccurate to be trusted to alone. Descamps wrote a sort of supplement to this work, and which is frequently bound with it as a fifth volume, 'Voyage Pittoresque de la Flandre et du Brabant,' 8vo, 1769; also 'Sur l'utilité des établissements d'écoles gratuites de dessin en faveur des métiers,' 8vo, 1767. He died at Rouen in 1791.

DESFONTAINES, RENÉ LOUCHE, French botanist, was born in 1751 or 1752, at Tremblay, department of Ile et Vilaine, and was educated at the College of Rennes. In 1783 he travelled in North Africa under the auspices of the Academy of Sciences. He spent two years in collecting plants, animals, and everything bearing upon the natural history of the countries he visited. On returning to France in 1785 he was appointed professor of botany at the Jardin des Plantes in succession to Lemonnier. In his old age he lost his sight, but he still continued his botanical studies, and learned to recognise plants by means of his touch. He died November 16, 1833. He wrote a few papers on zoology, but the greater number of his literary productions relate to plants. His botanical papers are largely taken up with descriptions of new forms. One of the most important was a 'Mémoire sur l'organisation des Monocotyledones, ou plantes à une feuille séminale,' in 'Mémoires de l'Institut,' tome i. pp. 478—502 (1797—1798), which contained many original views. His most important separate work is 'Flora Atlantica, sive historia plantarum quæ in Atlantæ agro Tunetano Algerienai crescunt,' 2 vols. 4to, 1798, with 260 plates. He also wrote a work on the trees and shrubs suitable for cultivation near Paris, catalogues of the plants in the Jardin des Plantes, and other Parisian gardens, and a few other books of less importance.

* DESHAYES, GÉRARD PAUL, French naturalist, was born at Nancy, May 13, 1795. He was educated at Strasbourg, and in 1819 he went to Paris. He is a professor in the Museum of Natural History, and has been president of the Geological Society of France. He has given especial attention to mollusca, both living and extinct, and has written several elaborate and costly works illustrative of their form and structure. He is one of the first living authorities on the tertiary shells of Europe, but especially of France. He wrote the portion of G. Cuvier's 'Règne Animale' which relates to molluscs, and continued the great work of Férussac's on the same group of organisms. The great labour of his life has been the account of the fossil shells of the Paris basin, which is embodied in two works, entitled 'Description des coquillages fossiles des environs de Paris,' 3 vols. 4to, 1824—1837, Paris; and 'Description des animaux sans vertèbres découverts dans le bassin de Paris,' 3 vols. 4to, bound in five, 1856—65. The last mentioned deals only with shells, and is illustrated with 196 plates. He has also written a 'Traité élémentaire de Conchologie,' 3 vols. 8vo, with an 8vo atlas of 130 plates, 1834—1858, an unfinished work; 'Conchologie de l'île de la Réunion,' 8vo, 1863, pp. 144, Paris; a few other works; and upwards of 70 papers in scientific journals, amongst which may be mentioned his 'Anatomie et Monographie du genre Dentale,' in the 'Memoirs of the Nat. Hist. Soc. of Paris,' vol. ii. pp. 321—378 (1825).

DESLONGCHAMPS, JACQUES AMAND EUDES, was

born at Caen, Normandy, January 17, 1794. His parents were poor, but they spared no efforts in order to ensure a liberal education for their son. He attended the scholastic institutions of his native town. In 1812 he was compelled to join the navy, and was appointed an assistant-surgeon in the frigate 'La Gloire.' In 1815 he became the surgeon-assistant-major in the military hospital at Caen. Soon after this he left the navy, obtained a degree of surgery at Paris, and returned to Caen in 1822, when he was elected surgeon to the Board of Relief of that town. During his stay at Paris Cuvier was prosecuting his remarkable researches amongst the mammalian bones of the Montmartre gypsum quarries. Deslongchamps was so interested in them that he began to explore the quarries around Caen as soon as he returned to that town. He found abundance of fossil remains, and amongst others a fine specimen of *Teleosaurus Cadornensis*. This led to his devoting much time to comparative anatomy, and to palaeontology. His numerous papers on the crocodile-like forms of the secondary period are evidence of his eminence in both these branches of science. These researches brought him into connection with Cuvier, Geoffroy St. Hilaire, Humboldt, and other eminent men, with whom he became intimate. He studied corals in company with Lamouroux, wrote articles in the 'Encyclopédie Méthodique' and 'Dictionnaire des Sciences Naturelles,' assisted in founding the Natural History Museum of Caen, and the Linnean Society of Normandy, and contributed most of his papers, which are upwards of 100 in number, to the 'Mémoires' of the Society just mentioned. In 1825 he succeeded Lamouroux as professor of zoology at Caen, and in 1847 was appointed Dean of the Faculty of Sciences. He was a member of numerous learned societies. He died January 17, 1867. His most important papers are those on the oolitic Teleosaurians. In 1863 he published 'Mémoires sur les teleosauriens de l'époque Jurassique du département de Calvados: Première Mémoire.' His last days were spent in finishing the work. His other papers relate to the molluscan, crustacean, and mammalian remains found in the strata around Caen, and to numerous monstrous forms observed by him in plants and animals. His son,

* EUGÈNE-EUDES DESLONGCHAMPS, succeeded his father as professor of zoology at Caen, and has written numerous papers on the geology and palaeontology of his native department.

DESNOYERS, AUGUSTE GASPARD LOUIS BOUCHER, BARON. [E. C. vol. ii. col. 576.] The Baron Desnoyers had ceased to use his graver when the above memoir was written; but it should have been mentioned that his latest labour was a literary one, 'Appendice à L'Histoire de la Vie et des Ouvrages de Raphaël, de M. Quatremère de Quincy,' 4to, with plates, Paris, 1852, to which he afterwards added a supplement. M. Desnoyers died at Paris on the 15th of February, 1857, aged 78.

* DESNOYERS, JULES PIERRE FRANÇOIS STANISLAS, historian and geologist, was born at Nogent-le-Rotrou, October 8, 1800. In 1825 he became the secretary of the Société d'Histoire Naturelle de Paris; in 1830 the secretary to the Geological Society of France; in 1833 an assistant palaeontologist in the Museum d'Histoire Naturelle; and in 1834 librarian to the last-mentioned establishment. He has been the secretary of the Historical Society of France from its foundation, and has served on the committee appointed by government to publish the national historical documents. His historical writings include a 'Histoire du décroissement et de la destruction totale du paganisme dans les provinces de l'empire d'Occident,' 1832; a 'Histoire des différentes incursions des Arabes d'Asie et d'Afrique en Italie, et dans les îles qui en dépendent,' 1838; 'Bibliographie historique et archéologique de la France,' 1834; 'Indication des principaux ouvrages propres à faciliter les travaux relatifs à l'histoire de France,' 1837; and several other papers, all of which have appeared in the publications of one or other of the historical associations with which he is connected. His geological papers relate to the secondary, tertiary, and post-tertiary deposits of various parts of France. He has given considerable attention to the phenomena presented by caves and their contents, more especially as they bear upon the antiquity of man. In 1863 he discovered some bones of *Rhinoceros leptorhinus*, *Elephas meridionalis*, and several other mammalia, on which were marks analogous to those which are producible by flint implements. The deposit in which the bones were found is assigned to the pliocene period; and the evidence is considered to demonstrate that man co-existed with the animals mentioned in this period. If the conclusion is correct, this is one of the earliest records we possess of man in Europe. But the conclusion has been contested, on the ground that such markings may have been produced by rodents, some of the living species of

which groove, striate, chip and dent bones so as to impress markings on them very much resembling those observed by Desnoyers.

* DESOR, EDOUARD, geologist, was born at Friedrichsdorf, near Frankfurt-am-Main, in 1811. In 1832 he went to Paris, and had his attention directed to geology and physical geography by the perusal of Ritter's 'Erdkunde,' vol. i., and by the perception of Prévost, Elie de Beaumont, and others. During a visit to a meeting of naturalists at Neuchâtel he became acquainted with Vogt and Agassiz. He lived with the former for some months at Berne; and he assisted the latter in the prosecution of his researches, partly by joining him in his field excursions and partly by aiding him in his literary works. In 1846 he visited Scandinavia for the purpose of examining the phenomena of boulders; and in 1847 he followed Agassiz to the United States, but owing to some estrangement their mutual friendship cooled, and Desor worked independently. He was actively engaged in the Coast Survey, in Foster and Whitney's exploration of the Lake Superior district, and in Rogers's survey of Pennsylvania. In 1852 he returned to Neuchâtel, and became professor of zoology there. In 1863-64 he accompanied Escher von der Linth and Martius on a scientific expedition to Algeria. His subjects of study have embraced the glacial phenomena, more especially those of the Alps; the geology of the Alps, France, and parts of America; echinoderms; and the antiquity of man. He contributed to the 'Système Glaciaire,' 8vo, 1847, by Agassiz and himself; and has written numerous papers more or less relating to glaciers. His principal geological productions are 'Der Gebirgsbau der Alpen,' 8vo, Wiesbaden, 1865; 'De l'orographie des Alpes dans ses rapports avec la Géologie' in the Bulletin of the Natural History Society of Neuchâtel, vol. vi. pp. 147-211 (1861-63); and, in conjunction with M. Gressly, 'Étude géologique sur le Jura Neuchâtelois' in the 'Mémoires' of the same society, vol. iv. (1859). His contributions to the literature of echinoderms comprise, amongst other things, a 'Catalogue raisonné des familles, des genres et des espèces de la classe des Echinodermes,' 1847, in which Agassiz was a collaborator; a 'Synopsis des échinides fossiles,' 8vo, 1858, which is a summary of the published information illustrated with figures of most of the species; and, along with P. Lorient, 'Echinologie helvétique. Description des oursins fossiles de la Suisse,' 1868-1869. He has given accounts of his researches on the early history and condition of man as indicated by the lake dwellings of Switzerland, Italy, and Germany, and by various recent deposits. Lastly, he has written several papers on the development of species of annelids and *Hydrotzoa*.

DESPRETZ, CÉSAR MANSUÈTE, a French physicist, was born at Lessines, Hainaut, May 13, 1789. After studying chemistry and physics at Paris, he was appointed by Thénard to the post of répétiteur of his course of lectures on chemistry at l'École Polytechnique. He rose successively to the offices of professor of physics at l'École Polytechnique, the Collège Henri Quatre, and (in 1837) at the Sorbonne. He obtained in 1822 a prize offered by the Academy of Sciences for the best memoir on animal heat. In 1825 appeared his Elementary Treatise on Physics, which has gone through several editions. In 1830 he published his Elements of Theoretical and Practical Chemistry. The 'Annales de Chimie' and the 'Comptes Rendus,' from 1817 to 1858, contain above 40 papers by Despretz on the specific heat of metals, the conductivity of metals, the propagation of heat in liquids, the transmission of heat, the absorption of heat in fusion, the elastic force of vapour, the density and latent heat of vapour, the compressibility of liquids, the density of gases under pressure, the laws of high and low musical notes, freezing points, combustion, expansion, fusion, volatility, decomposition, &c. Despretz succeeded Savart at the Academy of Sciences in 1841, and was elected a foreign member of the Royal Society in 1862. He died on the 15th of March, 1863. The titles of his separate works are 'Recherches Expérimentales sur les Causes de la Chaleur Animale,' 8vo, Paris, 1822; 'Traité Élémentaire de Physique,' 8vo, Paris, 1825; 'Éléments de Chimie théorique et pratique,' 8vo, Paris, 1828-30; 'Des Collèges, de l'Instruction Professionnelle, des Facultés,' 8vo, Paris, 1847. In the course of his chemical experiments Despretz produced minute diamonds by the slow action of an electric current on pure carbon.

* DEUTSCH, EMANUEL, a Hebrew, and especially a Talmudic, scholar, was born in Germany, about the year 1834. Having attracted the attention and confidence of the eminent bookselling firm of Ascher, of Berlin, he was by them recommended to Sir Antonio, then Mr., Panizzi, principal librarian

of the British Museum, through whom he received an appointment in that institution, in which he holds at present the position of an assistant officer in the library department. For some years his knowledge of Hebrew literature was of great practical value, without, however, resulting in any considerable degree of general reputation; but in 1867 he contributed to the 'Quarterly Review' an article which had the extraordinary effect of sending the number in which it appeared through several editions, and which was separately published as 'The Talmud: a Critical Essay,' &c., 12mo, London, 1868; Danish translation, 'Talmud. Efter den Engelske Originals,' 8vo, Copenhagen, 1868; Swedish translation, 'Talmud. Öfversättning från Engelskan. Ur Tidskriften Quarterly Review,' 12mo, Stockholm, first and second editions, 1868. Amongst other results of the discussion which the article provoked in England, may be mentioned an anonymous pamphlet entitled 'The Talmud: being a Reply to a late Article in the "Quarterly Review,"' 12mo, London, 1868, the writer of which charges Mr. Deutsch with high colouring, exaggeration and distortion, and indifference to the dogmas of Christianity, and challenges many of his statements and theories.

Over and above his purely literary activities, Mr. Deutsch has done good service in the East for the Committee of the Palestine Exploration Fund, at whose instance he not only examined the excavations in progress at Jerusalem, but also investigated various places of archaeological and historical interest throughout Phœnicia and Syria, at which researches had already been instituted, or at which it was desirable that they should be commenced. In the report of May, 1869, which he made after his return to London, to the secretary of the Fund, he states his conclusions (1) that the signs cut or painted on the bottom rows of the wall of the south-east corner of the Haram were on the stones when they were first laid in their present places; (2) that they do not represent any inscription; and (3) that they are Phœnician. The original builders of that side of the Temple are thus ascertained to have been of the age of Solomon, and probably the craftsmen of Hiram, king of Tyre. Mr. Deutsch also succeeded in recovering the lost letters of the Maccabean Hebrew alphabet. In June, 1869, he embodied the more general results of his investigations in a course of three lectures on Semitic Culture, at the Royal Institution; in which he surveyed, in its outlines, the intellectual work achieved by the nations conventionally called Shemites, and the influence exercised by them upon the life and thought of the ancient and modern world.

DICK, THOMAS, LL.D. [E. C. vol. ii. col. 583]. Dr. Dick died on the 29th of July, 1857.

DICKENS, CHARLES [E. C. vol. ii. col. 583]. After the completion of 'Little Dorrit,' there was a somewhat longer interval than usual before the publication of another important work. In the spring of 1858 Mr. Dickens commenced in St. Martin's Hall, a series of public readings of selected portions of his writings. The novelty of an author of Mr. Dickens's rank occupying so remarkable a position naturally drew great numbers of curious listeners, but his skill, tact, and dramatic power, and the rare subtilty with which he brought out latent and often unsuspected shades of meaning, or touches of pathos, added a new brilliancy to a humorous thought, or rendered a ludicrous passage more irresistibly comical, soon caused the readings to be eagerly sought for their own sakes, and placed Mr. Dickens as unmistakeably at the head of the public readers, as he had long been of the novelists, of England. About this time occurred the separation of Mr. and Mrs. Dickens, to which it would be unnecessary to refer except on account of the publicity he himself gave to it in 'Household Words,' and which having led to a dissolution of the proprietary caused the discontinuance of that journal.

Mr. Dickens immediately (1859) started a new weekly periodical 'All the Year Round,' and continued to conduct it till his death. In it was published, in the first instance, his 'Tale of Two Cities,' and 'Great Expectations,' which last appeared in 1860 in the old orthodox form of a three volume novel, except 'Oliver Twist,' the only one of Mr. Dickens's stories issued in that shape. In the first Christmas Number of 'All the Year Round' appeared also 'The Haunted House,' and each succeeding year was issued a Christmas Number till 1867, when with the story of 'No Thoroughfare' he abandoned the field to his multitudinous imitators. 'Our Mutual Friend,' in 1864, was a return to the familiar monthly serial and a renewal of former triumphs, though the story hardly retained to the end the old popularity.

In June, 1865, he was a passenger in the train on the South-Eastern Railway which met with a fearful disaster at Staple-

hurst. The carriage in which he was sitting was one of the few, if not the only one, which did not go over the embankment; and he was apparently unhurt and able to render assistance to his fellow-passengers. It has been said that his nervous system received a serious shock, but in the opinion of his medical adviser it left no lasting effect on his system.

Towards the end of 1867 Mr. Dickens made a second visit to America. In anticipation of it a complimentary farewell dinner on the grandest scale was given to him at the Freemasons' Tavern, November the 3rd, 1867. Lord Lytton presided at the feast, and around the tables sat such an assemblage of distinguished authors, artists, and men of science as has very rarely been brought together. He arrived at Boston November the 19th, and met with a reception as brilliant as had been the farewell. During the five months he remained in America he gave readings in most of the principal cities, and his popularity appeared continually to increase. He quitted New York April the 22nd, 1868. The state of his health would have justified withdrawal for awhile from public exertion, if not from quiet literary labour, but the amazing success of his American readings had stimulated public interest here, and there appeared to be a general desire to prove to him that the feelings of his English admirers were as ardent as those of their brethren in America. He continued his readings from his return, but in consequence of symptoms which showed themselves in the spring of 1869, when Mr. Dickens was at Preston, in the course of a country tour, his medical adviser peremptorily stopped all his remaining country readings, and prescribed complete rest. However, in the following spring, the last series of London readings was undertaken. Of themselves and disconnected from the trying railway work incident to a country series, it was hoped they would not be injurious; but whilst giving them he commenced writing 'Edwin Drood,' and there is no doubt that the strain was too severe. On the 5th of March, 1870, he gave his final reading in St. James's Hall. A fortnight later appeared the first monthly part of his last novel, 'The Mystery of Edwin Drood.' In this he had broken comparatively new ground, and the public were following the story with increasing interest when they were startled by the news of the author's death. Whilst at dinner, June the 8th, 1870, at his residence, Gad's Hill Place, Rochester, Kent, he was seized with sudden illness and rose to leave the room, when he fell heavily. He remained unconscious till his death, a few minutes after 6 o'clock on the following evening—the fifth anniversary of the Staplehurst accident.

In his will, completed only a week before his untimely death, Mr. Dickens left emphatic injunctions that he should "be buried in an inexpensive, unostentatious, and strictly private manner," and that "no public announcement be made of the time or place" of his burial; but the national feeling was stirred to its depths by the intelligence of his decease, and the opinion was universal that Westminster Abbey was his most appropriate resting-place; and there, unostentatiously and without public announcement—the few relatives and private friends who accompanied the body, and Dean Stanley, who read the service, being the only witnesses—he was laid in Poets' Corner, alongside of Macaulay, and beneath the shadow of Addison's monument.

In the memoir above cited we have spoken at sufficient length of Mr. Dickens as a writer. The general and almost unexampled expressions of regret with which the intelligence of his death was received in America as much as in England, and almost as strongly in those countries where he was chiefly known through the inadequate medium of translations, were a sufficient testimony to the hold which his writings had obtained on the public. But along with the feeling arising from admiration of the writer, there was evidenced a warmth of personal sympathy with the man beyond what usually exists between an author, however popular, and his readers. Dickens's thorough honesty of purpose in all that he wrote, strong sense of duty, warm-hearted benevolence, breadth of sympathy, and catholicity of spirit, were as heartily recognised and appreciated as his originality of genius, his humour, and his pathos.

The sixth number, not quite completed, of the 'Mystery of Edwin Drood' was left by its author in MS.,—"its last entire page had not been written two hours" before his death—and no notes or clue as "to its conduct or catastrophe" have been found: it remains therefore in all respects a fragment, but a fragment that will possess an interest akin to that of 'Christabel,' or 'The Story of Cambuscan bold.' His other writings, including the 'Christmas Tales' and the 'Uncommercial Traveller,' have been published in a collected form in the 'Illustrated Library Edition,' 26 vols. post 8vo; the 'People's

Edition, 25 vols. 8vo, and, as the final revision, in the 'Charles Dickens Edition,' 18 vols. royal 16mo.

DIDRON, ADOLPHE-NAPOLÉON [E. C. vol. ii. col. 587]. Subsequent to the date of the above memoir M. Didron published 'Iconographie des Chapiteaux du Palais Ducal de Venise,' 4to, Paris, 1857, and 'Manuel des Objets de Bronze et d'Orfèvrerie du Moyen âge,' 8vo, with engravings, 1859. He died at Paris on the 13th of November, 1867, leaving his great work on Christian Iconography incomplete.

* DIETRICH, DAVID NATHANIEL FRIEDRICH, belongs to a family which has supplied botanists for some generations past, and among the living members of which are several cultivators of botanical science. He himself is a botanist of considerable reputation, and is well known for several works of great labour. He was born in 1800, and early in life was appointed to the inspectorship of the botanical garden of Jena. His published works are 'Flora Media,' 8vo, Jena, 1830; 'Flora Universalis,' of which he is the editor, and which commenced in 1831: in 1852 the number of parts published was 392; 'Encyclopädie des Pflanzen,' 1841, &c., illustrated by upwards of 30,000 figures; 'Deutschland's Flora,' 8vo, 1839, &c.; 'Lichenographie Germanici,' 8vo, Jena, 1834-37; and 'Synopsis plantarum seu enumeratio systematica plantarum plerumque adhuc cognitatum cum differentiis specificis et synonymis selectis,' &c., 8vo, Vimar, 1839-52.

DILKE, CHARLES WENTWORTH [E. C. vol. ii. col. 592]. Mr. Dilke died at Alice Holt, near Farnham, on the 10th of August, 1864, in his 75th year. His son, SIR CHARLES WENTWORTH DILKE, Bart., also noticed as above, was born on the 18th of February, 1800. He was educated at Westminster and Trinity Hall, Cambridge, and studied law, but did not practice. He was an active member of several learned societies, but was chiefly known by his connection with the International Exhibitions of 1861 and 1862, of which he was one of the commissioners, and for his services in that capacity he received in January, 1862, the honour of a baronetcy. In July, 1865, he was elected M.P. for Wallingford, but failed in securing re-election in November, 1868. In the spring of 1869 he visited Russia, partly in the hope that the trip might benefit his failing health. The climate, however, proved too severe, and he died suddenly at St. Petersburg, on the 10th of May, 1869. He was succeeded in his honours by his eldest son, * SIR CHARLES WENTWORTH DILKE, Bart., born 1843, who, like his father, entered Trinity Hall, Cambridge, and studied law. He was first in the law tripos, 1865, took the degree of LL.B., and was called to the bar in 1866. In November, 1867, he was elected member for the newly created borough of Chelsea, and was selected to second the address to the Queen at the opening of the new parliament in February, 1870. Under the strange title of 'Greater Britain,' he published (8vo, 1868), the results of observations made during a visit to America and some of our colonial possessions.

DILLENIUS, JOHANN JAKOB [SHERARD, WILLIAM, E. C. vol. v. col. 477].

* DILLMANN, CHRISTIAN FRIEDRICH AUGUST, an eminent German orientalist, was born on the 25th of April, 1823, at Illingen, a village of Württemberg, near the Baden frontier. He was educated at the Gymnasiums of Stuttgart and Schöthal, and at the University of Tübingen, where from 1840 to 1845 he devoted himself to the study of philosophy, theology, and oriental literature, the last of which he prosecuted under Ewald. Afterwards he acted as a parochial lay assistant for some months of 1845 and 1846; and in the latter year commenced a learned and scientific tour, which embraced Paris, London, and Oxford. At each of these cities he extended his knowledge of the oriental languages; and at the last two gave important assistance in the scientific arrangement and cataloguing of the Æthiopian manuscripts. Indeed it is on his labours to restore the Æthiopian language to its place in comparative philology as the fourth principal language of the Semitic family that his reputation chiefly depends. Upon his return to Tübingen in the summer of 1848, he became repetent in the Theological Seminary there; established himself in 1852 as tutor in the Old Testament Exegesis, and the oriental languages; and in the following year was made extraordinary professor. To this period belongs his publication of the Æthiopian version of the Book of Enoch, 'Liber Henoch. Æthiopice ad quinque Codicum fidem editus,' &c., 8vo, Leipzig, 1851, of which a German translation and exposition were given as 'Das Buch Henoch. Uebersetzt und erklärt,' &c., 8vo, Leipzig, 1853. In the autumn of 1854 Dr. Dillmann accepted an extraordinary professorship in the University of Kiel, where he taught the oriental languages,

and became ordinary professor in 1860. In April, 1864, he removed to Giessen, to fill the ordinary professorship of Old Testament Exegesis. One of the academical lectures delivered soon after his new appointment had for its subject the Origin of the Old Testament Religion, and was published with the title of 'Ueber den Ursprung der Alttestamentlichen Religion. Eine akademische Rede,' &c., 8vo, Giessen, 1865.

His other works comprise 'Liber Jubilæorum qui idem a Græcis H. AETHIOP. GENEXIIS inscribitur versione Græca deparditis nunc nonnisi in Geez Lingua conservatus nuper ex Abyssinia in Europam allatus. Æthiopice ad duorum Librorum manuscriptorum fidem primum edidit,' &c., 4to, Göttingen, Kiel, and London, 1859, the issue of which was limited to 200 copies, and a German translation of which, 'Buch der Jubiläen,' &c., had been contributed by Dr. Dillmann to Ewald's 'Jahrbuch der biblischen Wissenschaft,' vols. 2 and 3, 1849-51, in the 5th volume of which, 1853, appeared Dillmann's 'Das Christliche Adambuch des Morgenlandes. Aus dem Æthiopischen mit Bemerkungen, übersetzt,' &c.; 'Veteris Testamenti Æthiopica,' &c., 4to, Leipzig, 1853, &c.; 'Grammatik der Æthiopischen Sprache,' 8vo, Leipzig, 1857; and 'Lexicon Linguae Æthiopicae cum ex opere Ludoliano tum e permultis Libris Manuscriptis et impressis collectum et digestum,' 4to, Leipzig, 1862, &c.

* DISRAELI, THE RIGHT HONOURABLE BENJAMIN [E. C. vol. ii. col. 608]. The Palmerston cabinet fell before the opposition to the Conspiracy to Murder Bill, which appeared to the national jealousy of the time to be too favourable to the French Government; and Lord Derby, in February, 1858, was again summoned to power, and for the second time conferred the Chancellorship of the Exchequer on Mr. Disraeli, who, with that office, resumed the leadership of the House of Commons. At the suggestion of his chief, who wished to carry a substantial measure of electoral reform whilst still the country was free from popular clamour, Mr. Disraeli, in February, 1859, brought forward his elaborate bill, a principal feature of which was to ensure a lateral extension of the franchise, so that the whole body of the educated classes should be admitted to the suffrage without regard to property qualification. The attempt to carry the bill was unsuccessful; and it was finally defeated in the House of Commons on the 31st of March. An appeal to the country followed; the results of which were so little cheering to the Derby administration that they resigned in June, 1859, and for seven years thereafter their party remained in the cold shade of opposition.

Mr. Disraeli is known as an ardent advocate of "that sacred union between Church and State which has hitherto been the chief means of our civilisation, and is the only security of our religious liberties;" and he signalled his long period of opposition by taking a prominent part, both in parliament and elsewhere, in confronting the ecclesiastical legislation of the Liberal party. Five of his speeches on church matters, delivered between the 4th of December, 1860, and the 25th of November, 1864—and two of which were severally issued as a 'Speech,' &c., 12mo, London, 1862, and 'Church Policy: a Speech,' &c., 12mo, London, 1864—were edited, with a preface, by a "Member of the University of Oxford," with the title of 'Church and Queen,' &c., 12mo, London, 1865. The speeches delivered by Mr. Disraeli in the House of Commons in opposition to Mr. Gladstone's Budgets of February, 1860, and April, 1862, were published as strictures on 'Mr. Gladstone's Finance, from his accession to Office in 1853 to his Budget of 1862,' 8vo, London, 1862. To the same period of official vacation belongs the republication, with a dedication to Lord Stanley (now 15th Earl of Derby), and with "purely literary corrections," of the 'Revolutionary Epick,' 12mo, London, 1864, the first small issue of which, in fifty copies, had taken place thirty years before.

The month of July, 1866, found Lord Derby once more in power, with Mr. Disraeli for the third time as his Chancellor of the Exchequer. They resolved to attempt a settlement of the long-agitated question of Reform, which so many administrations had either failed to solve, or else had agreed to shelve. The franchise was to be given to the working classes, in the words of Lord Derby, "with no niggard hand;" but, though he found in Mr. Disraeli a willing coadjutor, their course was seriously retarded and embarrassed by the hesitations, fears, and disapproval of many members of their own party. It was upon Mr. Disraeli that the conciliation and "education" of the malcontents chiefly devolved; and in this process he was so successful that in 1867 the Tories were induced to accept a policy repugnant to their most cherished traditions, and to pass a measure of Radical Reform which made the Parliamentary

Franchise depend on household suffrage. The professed hope of the promoters of this measure was that of penetrating to a stratum of Conservative feeling which was said to underlie the Liberalism of the lower middle classes. The attitude of Mr. Disraeli with regard to Reform throughout the larger proportion of his political career is exhibited in a volume, edited by Mr. Montague Corry, a barrister of Lincoln's Inn, and entitled 'Parliamentary Reform. A Series of Speeches on that Subject delivered in the House of Commons by the Right Hon. B. Disraeli (1848-1866). Reprinted (by permission) from Hansard's Debates,' 8vo, London, 1867. The memorable Speeches at Edinburgh in which Mr. Disraeli claimed to have "educated" his party to the passing of the Reform Bill, and which gave considerable umbrage to some of his adherents, were published "by authority" with the title of 'The Chancellor of the Exchequer in Scotland. Being two Speeches delivered by him in the City of Edinburgh on the 29th and 30th of October, 1867,' 8vo, Edinburgh and London, 1867.

On the retirement of Lord Derby in February, 1868, Mr. Disraeli succeeded him as First Lord of the Treasury; and his short occupancy of power was signalled by the favour which he showed to the Protestantism, and even the Orangeism, of Ireland, when the question of the disestablishment of the church of that country was agitated by Mr. Gladstone, into whose hands the Premiership fell upon the resignation of Mr. Disraeli in December, 1868. On this occasion the latter accepted for his wife a promotion to the peerage of the United Kingdom, with the title of Viscountess Beaconsfield.

As leader of the opposition in the House of Commons, Mr. Disraeli took action against his rival's Bill for the Abolition of the Irish Church Establishment (1869), to which, whilst virtually accepting the disestablishment and disendowment of that Church, he proposed a series of amendments which he soon ceased to defend, and the effect of which, in Mr. Gladstone's calculation, would have been to add one or two millions to the existing endowment of the Church. With reference to the Irish Land Bill, the passing of which was the great work of the Session of 1870, Mr. Disraeli, and some of his adherents, undertook to demonstrate the inconsistency of the Bill with the rights of property, whilst they explicitly or virtually acknowledged the necessity of buying off agrarian disaffection in Ireland. The final adoption of the Bill in its complete form was furthered by the absence of systematic opposition, and more especially by the forbearance of Mr. Disraeli, who, throughout the Session, avoided unnecessary occasions of conflict.

Mr. Disraeli's latest achievement is, as was his first, of a literary nature, being the production of a novel entitled 'Lothair,' 3 vols. 8vo, London, 1870, which has already gone through several editions, and which has circulated by tens of thousands in the United States of America. It is at this present writing, administering to the comfort of the besieged citizens of Paris, in the *feuilleton* columns of the 'Soir'; a translation into Dutch by A. H. Vester is being issued in parts; and it has been rendered into Russian. Mr. Disraeli holds many honourable appointments: being D.L., J.P., and M.P. for the county of Bucks; an honorary D.C.L. of the University of Oxford, and an honorary LL.D. of the University of Edinburgh; a Governor of Wellington College; a Trustee of the British Museum, and of the National Portrait Gallery. He acted as one of the Royal Commissioners of the International Exhibition, in 1851; and in March, 1852, was named a member of the Privy Council.

DOANE, RIGHT REVEREND GEORGE WASHINGTON, D.D., LL.D., an American poet and divine, second bishop of the Protestant Episcopal Church in the diocese of New Jersey, was born at Trenton, in that State, in the year 1799, and educated at Union College, Schenectady, where he graduated in 1818. He was made deacon by Bishop Hobart in 1821, and in 1823 was admitted to priest's orders. From 1821 to 1824 he officiated at Trinity Church, New York; and in the latter year was appointed the first Professor of Belles Lettres and Oratory in Trinity (at that time called Washington) College, at Hartford, Connecticut. He resigned this office in 1828, and became successively assistant minister and rector of Trinity Church, Boston. On the 3rd of October, 1832, he was elected, and on the 31st of the same month, consecrated, Bishop of New Jersey; and from the summer of 1833 conjoined with the oversight of that diocese the rectorship of St. Mary's Church, Burlington, in which city he had his episcopal residence. Here he died on the 27th of April, 1859, and was succeeded by Dr. W. H. Odenheimer.

Dr. Doane's incumbency of the see of New Jersey was marked by an unexampled increase in the number of the parishes, clergy,

and members of his communion; and he is especially known for his zeal in the cause of education. In 1837 he established St. Mary's Hall, a large female boarding-school, beautifully situated on the shore of the Delaware, in which two hundred girls, from every part of America, as well as from other countries, were supplied with a comprehensive education in accordance with the tenets of the Episcopal Church. In 1846 he likewise founded Burlington College, under a charter from the State Legislature. He was frequently involved in theological and ecclesiastical controversies; and his contributions to polemical literature are not inconsiderable. The number of his several publications is extremely large; and they comprise Sermons, Addresses, Lectures, Charges, Pastorals, Orations, and a few small works of a devotional and biographical nature. A collection of his 'Sermons and Charges' was published in 8vo, London, 1842; and one of his sermons, 'The Child Jesus and the Holy Family,' occurs in the Rev. Alexander Watson's 'Sermons for Sundays, Festivals, and Fasts, and other Liturgical Occasions. Contributed by Bishops and other Clergy of the Church,' three series, in five volumes, 8vo, London, 1845-47. As a poet, Dr. Doane is favourably known for his 'Songs by the Way, chiefly Devotional; with Translations and Imitations,' 8vo, New York, 1824. He has also acted as the American editor of Keble's 'Christian Year.'

DÖDERLEIN, JOHANN LUDWIG CHRISTOPH WILHELM, VON, a distinguished German philologist, son of Professor Johann Christoph Döderlein, a theologian and biblical critic, was born at Jena, on the 19th of December, 1791, and received his early education at Windsheim and Schulpforte. Afterwards he prosecuted his philological studies successively at Munich, at Heidelberg, at Erlangen (where he graduated), and at Berlin. In 1815 he was appointed to the ordinary professorship of philology at the Academy of Berne; and performed the duties of this office until 1819, when he became second professor of philology at the University of Erlangen. In 1827 he was made director of the philological seminary, and died on the 9th of November, 1863.

Döderlein's activity in the department of philology was constant and diversified. He published editions of several of the classical authors, especially of Homer, Horace, and Tacitus; and his other works comprise an important one on Latin Synonyms and Etymologies, 'Lateinische Synonymen und Etymologien,' 6 vols. 8vo, Leipzig, 1826-38; on the Formation of Words in Latin, 'Die lateinische Wortbildung,' 8vo, Leipzig, 1839; Handbook of Latin Synonyms, 'Handbuch der lateinischen Synonymik,' 8vo, Leipzig, 1840, English translation, 8vo, London, 1841; 'Handbuch der lateinischen Etymologie,' 8vo, Leipzig, 1841; Speeches and Essays, &c., 'Reden und Aufsätze. Ein Beitrag zur Gymnasialpädagogik und Philologie,' 2 vols. 8vo, Erlangen, 1843-47; a Glossary of Homer, 'Homerisches Glossarium,' 3 vols. 8vo, Erlangen, 1850-53-58; and Public Lectures, &c., 'Öffentliche Reden, mit einen Anhang pädagogischer und philologischer Beiträge,' 8vo, Frankfurt and Erlangen, 1860.

DOLLFUS. Three members of this family, natives of Mulhouse, or Mülhausen, in Alsace, have risen to distinction. CHARLES ÉMILE DOLLFUS, born on the 10th of April, 1805, was one of four sons of Dollfus-Mieg, a manufacturer who established large cotton and bleaching works at Mulhouse, in 1802. Charles Émile retired early from the business, and entered into political and administrative life. He was one of the founders, and president, of the Industrial Society of Mulhouse, in 1834; mayor of the town in 1843; and elected deputy for the department of Haut Rhin in 1846. He died August 27th, 1858.

* CHARLES DOLLFUS, nephew of Charles Émile, was born 27th of July, 1827. After studying in Switzerland and at Paris, he adopted the profession of the law, and became advocate at Paris and Colmar in 1849-52. He has published the following works: 'Lettres Philosophiques,' 1851; 'Le Calvaire,' 1855; 'Essai sur la Philosophie Sociale,' 1856; 'Révélation et Révélateurs,' 1858; 'Études sur l'Allemagne,' 1864. In conjunction with Neftzer, he established the 'Revue Germanique,' in 1857; and became editor of the 'Revue Moderne,' in 1865; * JEAN DOLLFUS, brother of Charles Émile, and father of Charles, was born on the 25th of September, 1800. In defence of free trade he has published 'Plus de prohibitions sur les fils de Coton: Exposé des Avantages d'une réforme douanière en France pour les Articles de Coton,' 1853; and 'De la levée des prohibitions douanières,' 1860. But he is chiefly known as the founder of the *cités ouvrières*, or workmen's dwellings, in connection with the factory at Mulhouse. When in London in 1861, he took an interest in the model cottages built

by Prince Albert in Hyde Park. On his return home, he obtained plans from M. Muller, a local architect, for dwellings on a new system, and founded the 'Société des Cités Ouvrières,' with a capital of 300,000 francs, of which he himself subscribed to the amount of 175,000 francs. The plan adopted was to build four houses under one roof, separated by substantial walls, and each house lighted at front and side; each house covers 45 square yards, and has about 144 square yards of garden. The arrangement is considered to be advantageous for free ventilation and garden-economy; but it occupies more space than would usually be devoted to workmens' dwellings in England. Each house, with garden, cellar, &c., cost 3,000 francs, or £120. They are not merely rented to the workmen, but actually sold: 250 or 300 francs are paid down, and the remainder, with the interest, is spread over monthly instalments for fourteen years. If the workman or his family, through unavoidable exigencies, is under the necessity of leaving the place, the Society adopt a plan for repurchase at nearly the price that has been paid. The holdings under the company are not unconditional, even when the purchases are completed; for it is found that the comfort and good management of all are better ensured by some kind of central control. The system is understood to work well, returning to the society a fair interest for the capital expended, and ensuring good and wholesome dwellings for working men and their families. Of 700 houses built by the society down to the year 1866, nearly all were disposed of. M. Dollfus has described the system in 'Note sur les Cités Ouvrières,' 1857, and M. Eugène Veron has treated it more fully in 'Les Institutions Ouvrières de Mulhouse et ses Environs.'

* DÖLLINGER, JOHANN JOSEPH IGNAZ, VON, one of the most distinguished of modern Roman Catholic theologians, was born on the 28th of February, 1799, at Bamberg, an archiepiscopal city of Bavaria. His grandfather had been professor of medicine and physician in ordinary to the Prince-Bishop; and his father, Ignaz Döllinger, achieved a considerable reputation by his skill and his writings in anatomy and physiology. He studied theology at Würzburg and Bamberg; and in the year 1822 was admitted to the priesthood, after which he officiated for a short time as chaplain at Ober-Scheinfeld. In 1823 he became a professor at the ecclesiastical seminary of Aschaffenberg; and a few years after published a treatise on the Doctrine of the Eucharist in the first three centuries, 'Die Lehre von der Eucharistie in den drei ersten Jahrhunderten,' 4to, Mainz, 1826. In the same year he was appointed to an ordinary professorship in the faculty of theology in the new University of Munich, the duties of which office, changing only from the chair of ecclesiastical history to that of dogmatic theology, with an interval of a few months' suspension in the troublous times of 1847—48, he has ever since performed. His academical lectures gravitated chiefly towards ecclesiastical history, to which subject he contributed, as an instalment of what he proposed to be a very extensive work, the first volume of his History of the Christian Church, 'Geschichte der Christlichen Kirche,' 2 parts, 8vo, Landshut and Vienna, 1833—35. Four more volumes which had been announced were never written, but the author, being solicited to compile a smaller history, for more general reading, produced a compendium, 'Lehrbuch der Kirchengeschichte,' 2 vols. 8vo, Regensburg and Landshut, 1836—38, second edition, Regensburg, 1843. In this work the history of the first six centuries is given with extreme brevity; but the history of the Middle Ages, though much compressed, displays even more copious erudition than the account of the earlier period in the larger work. Dr. Cox sought to combine the advantages of both these works in a hybrid translation which he entitled 'A History of the Church,' &c., 4 vols. 8vo, London, 1840—42. In 1838 Dr. Döllinger became a member of the Bavarian Academy of Sciences, and published an elaborate treatise on the History, Character, and Influence of Islamism, 'Muhammed's Religion nach ihrer innern Entwicklung,' &c., 4to, Regensburg, 1838. From 1845 to 1847 Dr. Döllinger represented the University of Munich in the Bavarian Chamber, where he was regarded as one of the leaders of the Ultramontanes. Several of his speeches have been published. Having been elected a deputy to the National Parliament in 1848, he exhibited himself, both in his speeches and writings, as the exponent of the highest Catholic views and the champion of ecclesiastical freedom. Regarding the oppression of the Church as the safeguard of absolutism in the State, and the faults and errors of Catholics as a fruitful source of the divisions and disputes among Christians, he sought to disentangle the essential and true from the accidental and superstitious, to reconcile Protestantism with Rome, and religion

with modern society and progress. In 1847 he was appointed provost of the Royal Monastery of St. Cajetan, and director of the Chapel Royal. He is known as an advocate for the separation of Church and State, and the surrender of the temporal power of the Pope, against whose recent assumption of Infallibility he has been one of the most weighty and most prominent protestors.

Amongst the more important of Dr. Döllinger's works there remain for special mention his learned treatise, which so far continues to be a fragment, on the History of German Lutheranism, entitled the Reformation, its internal Development and its Effects, 'Die Reformation, ihre innere Entwicklung und ihre Wirkungen im Umfange des Lutherischen Bekenntnisses,' 3 vols. 8vo, Regensburg, 1846—48; 'Hippolytus und Kallistus; oder die Römische Kirche in der ersten Hälfte des dritten Jahrhunderts,' &c., 8vo, Regensburg, 1853, a polemical work in which he defended the interests of his church against Gieseler, Baur, Bunsen, Wordsworth, and Lenormant; Paganism and Judaism: an Introduction to the History of Christianity, 'Heidenthum und Judenthum. Vorhalle zur Geschichte des Christenthums,' 8vo, Regensburg, 1857, English translation by Mr. N. Darnell, 'The Gentile and the Jew in the Courts of the Temple,' 2 vols. 8vo, London, 1862; Christianity and the Church in the Period of their Foundation, 'Christenthum und Kirche in der Zeit der Grundlegung,' 8vo, Regensburg, 1860, which, regarded as the author's masterpiece, it is understood he intends to continue down to the present time, and which has been translated into English by Mr. Oxenham, as 'The First Age of Christianity and the Church,' 2 vols. 8vo, London, 1866; 'Kirche und Kirchen, Pabstthum und Kirchenstaat. Historische-politische Betrachtungen,' 8vo, Munich, 1861, English translation, by William Bernard MacCabe, 'The Church and the Churches; or, the Papacy and the Temporal Power. An Historical and Political Review,' 8vo, London, 1862. The authorship or supervision is confidently referred to Dr. Döllinger, of the remarkable book by 'Janus' which was published as a remonstrance in advance of the declaration of papal infallibility, under the title of 'Der Pabst und das Concil,' 8vo, Leipzig, 1869, which was the expansion of an article in the 'Augsburger Allgemeinen Zeitung,' entitled 'Das Concil und die Civita,' and of which an authorised English translation appeared as 'The Pope and the Council,' 8vo, London, 1869, third edition, 1870. Dr. Döllinger is a scholar of extensive culture, and he has published Essays and Lectures on a great variety of subjects, as for example, 'On the Religion of Shakespeare,' a 'Commentary on the Paradise of Dante,' and an academical lecture on 'Error, Doubt, and Truth.' He presided for many years over the 'Historische-politische Blätter,' to which, although not a frequent contributor, he supplied articles on 'The Tractarian Movement,' 'John Huss and the Council of Constance,' and 'The Albigenses;' and to a theological encyclopædia he contributed articles on 'Bossuet,' 'Duns Scotus,' and 'Luther,' the last of which was separately published as 'Luther, eine Skizze,' 8vo, Freiburg, 1848, and in English as 'Luther: a Succinct View of his Life and Writings,' 18mo, London, 1853. Finally it may be mentioned that Dr. Döllinger was the editor of a magnificent work, of which two volumes were published, under the direct patronage of Maximilian II., devoted to the illustration of the Political, Ecclesiastical, and Social History of the last Six Centuries, 'Beiträge zur Politischen, Kirchlichen, und Cultur-Geschichte der Sechs letzten Jahrhunderte,' 8vo, Regensburg, 1862—63.

DONALDSON, JOHN WILLIAM, D.D., was born in the year 1812, and educated successively at the Universities of London and Cambridge, at the latter of which he was entered of Trinity College. He took his B.A. degree as a senior optime, and in first class classical honours, his name occupying the second place on the list in 1834, and proceeded M.A. in 1837. He became fellow and classical lecturer of his college; was made deacon in 1839, and admitted to priest's orders in 1840; and took his B.D. and D.D. degrees respectively in 1844 and 1849. Within five years of his bachelor's degree he produced his 'New Cratylus, or Contributions towards a more accurate Knowledge of the Greek Language,' 8vo, Cambridge and London, 1839; second edition, 8vo, London, 1850; third edition, 'revised throughout and considerably enlarged,' 8vo, London, 1859. In this work he endeavoured, on the one hand, to establish a consistent and intelligible theory of inflected language, considered in its most perfect state, that is, as it appears in the oldest languages of the Indo-Germanic family; and, on the other hand, attempted to place the Greek scholarship of this country on a somewhat higher footing, by rendering the resources of a more

comprehensive philology available for the improvement of the grammar and lexicography of the Greek language, and for the criticism and interpretation of the authors who have written in it. In 1841 Mr. Donaldson was appointed to the head mastership of King Edward's School, Bury St. Edmunds, where he devoted himself for several years to the work of direct education. His 'New Cratylus' was followed by a long and successful series of publications elucidating the genius and literature of the two classical languages. Amongst these may be particularised his 'Complete Greek Grammar' and 'Complete Latin Grammar,' which, as well as the 'Exercises,' &c., that were based upon them, went through several editions; and his 'Varronianus: a critical and historical Introduction to the Ethnography of Ancient Italy, and to the philological Study of the Latin Language,' 8vo, London and Cambridge; third edition, 8vo, Cambridge, 1860. He superintended several editions of 'The Theatre of the Greeks,' a work which owed its origin to the Rev. P. W. Buckham, of St. John's College, Cambridge. To the sixth edition of this work, the third with which his name was connected, and of which the slightly modified title was 'The Theatre of the Greeks, a Series of Papers relating to the History and Criticism of the Greek Drama,' 8vo, London, 1849; seventh edition, 8vo, London and Cambridge, 1860, Dr. Donaldson contributed valuable Notes, and an Introduction in the shape of a 'Treatise on the History and Exhibition of the Greek Drama.'

As the result of his study of the oriental languages, which he incorporated with that of the classical, Dr. Donaldson produced a work in which the freedom of speculation on a biblical question provoked the censure of orthodox critics. This was his celebrated 'Jashar. Fragmenta archetypa carminum Hebraicorum in Masorethico Veteris Testamenti Textu passim tessellata, collegit, ordinavit, restituit, in unum Corpus redegit, Latine exhibuit, Commentario instruxit,' &c., 8vo, London and Berlin, 1854; second edition, "aucta atque emendata," 8vo, London and Edinburgh, 1860. Amongst other opposition, 'Jashar' called forth that of the Rev. John J. S. Perowne, who published 'Remarks on Dr. Donaldson's Book, entitled "Jashar,"' 8vo, London and Cambridge, 1855; to which Dr. Donaldson replied with 'A Brief Exposure of the Rev. John J. S. Perowne, by the editor of "Jashar,"' 8vo, London and Bury St. Edmunds, 1855; and further replies and rejoinders followed on either side.

Not long after this controversy Dr. Donaldson gave up his mastership, and resumed his residence at Cambridge. He acted for some time as classical examiner in the University of London; and was appointed to a like office in his own university for 1861. On the 7th of February, however, he was obliged to resign on account of ill health; and three days subsequently, on the 10th of February, 1861, he died at his mother's house in London, after a four weeks' severe illness, which is believed to have been induced or aggravated by overwork.

Dr. Donaldson superintended editions of 'Pindar' and 'Thucydides;' and produced, in addition to the works already mentioned, a letter to Lord John Russell, on 'Protestant Toleration,' 8vo, London, 1850; 'A Comparative Grammar of the Hebrew Language, for the Use of Classical and Philological Students,' 12mo, London and Cambridge, 1853; 'Classical Scholarship and Classical Learning, considered with especial reference to Competitive Tests and University Teaching, a practical Essay on Liberal Education,' 8vo, Cambridge and London, 1856; an essay on 'English Ethnography,' contributed to the 'Cambridge Essays' for 1856; 'Christian Orthodoxy reconciled with the Conclusions of Modern Biblical Learning, a Theological Essay, with Critical and Controversial Supplements,' 8vo, London and Hertford, 1857; 'On some Points connected with the Medo-Persic Dualism, in reply to Mr. Archdeacon Hardwick,' 8vo, Cambridge, 1859; and a translation of Dr. K. O. Müller's 'History of the Literature of Ancient Greece,' the continuation of which, after the author's death, was supplied by the translator, 3 vols. 8vo, London, 1858.

* DONKIN, WILLIAM FISHBURN, Savilian Professor of Astronomy at Oxford University, was born about 1813. He studied at University College, Oxford, and graduated "double first" in 1836; in 1837 was mathematical scholar, and in 1847 Johnson's scholar. This distinguished academical career was succeeded by one hardly less distinguished as mathematical tutor, and in 1842 he was nominated Savilian professor of astronomy in succession to Prof. G. H. Sacheverell Johnson. As a man of science Professor Donkin is chiefly known by a number of valuable papers on probabilities and subjects connected with the higher mathematics, published in various transactions and

journals, of which the following are the more important:—'An Essay on the Theory of the Combination of Observations,' 1850; 'On Certain Theorems in the Calculus of Observations,' 1850; 'On the Motion of a Rigid System about a Fixed Point,' 1850; 'On the Geometrical Representation of Quaternions,' 1850; 'On Arbogast's Method of Derivations,' 1851; 'On the Geometrical Theory of Rotations,' 1851; 'On certain questions relating to the Theory of Probabilities,' 1851; 'Demonstration of a Theorem of Jacobi relating to Functional Determinations,' 1854; 'On a Class of Differential Equations including those which occur in Symmetrical Problems,' 1854; 'On the Equation of Laplace's Functions,' 1856; 'On an Analogy relating to the Theory of Probabilities, and on the principle of the Method of Least Squares,' 1857; 'On the Analytical Theory of the Attraction of Solids bounded by Surfaces of a Class including the Ellipsoid,' 1859; 'On an Application of a Calculus of Operations to the Transformation of Trigonometric Series,' 1860; 'On the Secular Acceleration of the Moon's Mean Motion,' 1861; 'Note on the Limits of the Expression $(1+\frac{1}{n})^n$, when n is a positive Integer,'

1862. In relation to the government or management of the university, he published 'A Defence of Voting against the Proposition to be submitted to Convocation on February 13th, 1845.'

DORBIGNY, A. D., and C. D. [ORBIGNY, D', E. C. S.]

* DORÉ, PAUL GUSTAVE, a celebrated French painter and the most popular of living designers, was born at Strasbourg, in January, 1832. Sent to Paris at the age of 12 in order to complete his education at the Lycée Charlemagne, he in 1848 became a pupil of M. Albert D'Arnoux, better known as Bertal, illustrator of the 'Journal pour rire,' and other popular works. He first exhibited at the Salon drawings of wild forest scenery, which were followed by genre and poetic pictures and battle-pieces, for one of which, the 'Battle of Inkermann,' 1857, he obtained a "mention," while another, the 'Battle of Alma,' was generally considered the most successful of its year. Since then he has exhibited 'Dante et Virgile traversant le Styx,' 'Paolo et Francesca di Rimini aux Enfers,' and other subjects from the 'Divina Commedia;' an 'Episode du Déluge,' and many more. At this present time (1870) a Doré Gallery is open in London, in which are collected his 'Paolo and Francesca,' 'Christian Martyrs,' 'Triumph of Christianity over Paganism,' 'The Neophyte,' 'The Victor Angels,' 'The Flight into Egypt,' 'The Prairie,' 'Spanish Peasants,' 'Mont Blanc,' and other pictures alike important in scale and subject, and amply sufficient to show the reach of his ambition and the diversity of his power.

Had Gustave Doré been a painter only he would have won a high place by his vivid and daring imagination, decision of style, and the mastery he displays over his materials; at the same time he would have been considered as an eccentric, often careless, sometimes reckless, and at the best, incomplete artist. There is usually much in the design to arrest attention; the figures are vigorously, though not always accurately, drawn and well arranged, the effects of light and shadow, however inexplicable, are always cogent and frequently brilliant; but the whole is flung upon the canvas in the roughest manner. The concentration of unnatural light, the masses of gloom, the coloured haze, and the intensity of atmospheric phenomena—which are becoming more and more the distinctive element of the artist's style—are all suggestive of an artificial and theatrical splendour, of scenic effects studied on the stage and with the aid of the lime light, rather than of the simplicity, grandeur and solemnity of Nature.

But Doré's popularity was not won so much by his pictures as by his wood-cut designs. In this line he commenced working while a mere boy on the 'Journal pour rire,' the 'Journal pour tous,' the 'Musée Français-Anglais,' and other serials, and he has continued to work till now, pouring forth designs with such fabulous fertility that if he had never done anything else it would be a marvel how he could have done so much and so well, and yet, as we have seen, he has painted in addition a large number of important pictures, and executed various etchings and engravings. Fifteen years ago his friend About assured us that Doré had published more than ten thousand engravings; how many he has published since it would need a hardy arithmetician to reckon. Doré's earliest decided successes were made by his grotesque and humorous designs, by such as (passing over those made for the journals) the 'Contes Drolatiques' of Balzac, often irresistibly droll, though not seldom coarse and sometimes brutal, faults of his time and country, from which he has happily since worked himself free; 'Rabelais,' the 'Contes de Perrault,'

and 'Le Roi des Montagnes' of Edward About; and even in his later works he has been least theatrical and truest to his native genius in his grotesque and humorous designs—his 'Don Quixote' being as much superior to his 'Juif Errant,' as that is to the strained and artificial 'Elaine.' In designs where the grand borders on the horrible, M. Doré, however, stands alone; into many of the designs for the Inferno the very soul of Dante seems breathed; and though he has often misread Milton, some of the renderings of the Satanic scenes, such, for example, as 'The Uprising of the Fallen Angels,' are hardly less than sublime. Doré's other principal illustrated works include Taine's 'Voyage aux Pyrénées,' 359 cuts; Saintine's 'Chemins des Ecoliers,' 450 cuts, and 'Mythologie du Rhin,' 200 cuts; Segur's 'Nouveaux Contes de Fées,' 46 cuts; the 'Histoire du Capitaine Castagnette,' 46 cuts; the 'Bible Populaire,' and 'La Legend du Croquemitaine.' Of late M. Doré's pencil has been tasked for works on a larger and costlier scale, such as the splendid editions of the Fables of Fontaine (230 cuts) Chateaubriand's 'Attila,' Dante's 'Hell, Purgatory, and Paradise,' 140 engravings; and, finally, Tennyson's 'Paradise Lost,' and the Bible, designed especially for the English market, for which also he is understood to have been for some time past engaged in preparing a series of sketches illustrative of London life.

* DORN, JOHANNES ALBRECHT BERNHARD, a distinguished German orientalist, was born at Scheuerfeld, in the duchy of Coburg, on the 11th of May, 1805. He was educated at the Universities of Halle and Leipzig, where at first he studied theology, but afterwards directed his more particular attention to Eastern learning. He graduated at Leipzig in 1825; and in the same year produced his 'De Psalterio Æthiopico: assumpto Socio Ed. Fr. Ferd. Beer,' 4to, Leipzig, 1825, which he followed with a treatise on the original affinities of the Persian, Germanic, and Græco-Latin languages, 'Ueber die Verwandtschaft des Persischen, Germanischen, und Griechisch-Lateinischen Sprachstammes,' 8vo, Hamburg, 1827. In 1826 he was appointed Professor of Oriental Languages at the University of Charkow, in the Slobodsk-Ukraine, in Russia, although he did not enter upon his duties until 1829, after having devoted a considerable time to a scientific tour in France and England. It was in the latter country that he published his English version of Neamat Ullah's 'History of the Afghans, translated from the Persian,' 2 parts, 4to, London, 1829—36. After spending six years at Charkow, Dr. Dorn was appointed to the professorship of Asiatic History and Geography in the Oriental Institute of the Foreign Office at St. Petersburg; and in 1843 was promoted to be Principal Librarian of the Imperial Public Library. He became also director of the Asiatic Museum; and a member of the Imperial Academy of Sciences, to the 'Mémoires' of which, 4to, St. Petersburg, Sixth Series, 1840, he contributed his Grammatical Observations on the Afghan Language, 'Grammatische Bemerkungen über das Puschtu, oder die Sprache der Afghanen,' a subject to which he returned in his 'Chrestomathy of the Pushtu or Afghan Language; to which is subjoined a Glossary in Afghan and English,' 4to, St. Petersburg, 1847. His other principal works are his contributions from Mohammedan sources towards the History of the Countries of the South Coast of the Caspian Sea, 'Muhammedische Quellen zur Geschichte der Südlichen Küstenländer des Kaspischen Meeres, herausgegeben erläutert und übersetzt,' &c., 4 vols. 8vo, St. Petersburg, 1850—58; Contributions towards a knowledge of the Languages of Iran, 'Beiträge zur Kenntniss der Iranischen Sprache,' 8vo, St. Petersburg, 1860, &c., in which he had the co-operation of Mirsa Muhammed Schafy. Dr. Dorn's more strictly official labours, as Director of the Asiatic Museum, and Imperial Librarian, are represented by his 'Das Asiatische Museum der Kaiserlichen Akademie der Wissenschaften zu St. Petersburg,' 8vo, St. Petersburg, 1846; his 'Catalogue des Manuscrits et Xylographes Orientaux,' St. Petersburg, 1852; and his 'Catalogue des Ouvrages Arabes, Persans, et Turcs, publiés à Constantinople, en Egypte, et en Perse, qui se trouvent au Musée Asiatique de l'Académie,' which occurs in the 'Bulletin' of the Imperial Academy, 8vo, St. Petersburg, vol. x., 1866.

DOUDART DE LAGRÉE, E. M. L. de J. [LAGRÉE, E. C. S.]

DOUGLAS, GENERAL SIR HOWARD, BART. [E. C. vol. ii. col. 639.] General Sir Howard Douglas died on the 8th of November, 1861, at the ripe age of 85.

DOVE, H. W. [E. C. vol. vi. col. 992.]

DOYLE, JOHN, celebrated as a caricaturist under the pseudonym of H. B., was born at Dublin in 1797. In early manhood he paid much attention to art, and obtained some

success in portraiture and in the representation of horses. His celebrity, however, arose from his caricatures of political personages—mostly single figures drawn slightly in lithography, but in which the likeness and attitude were usually caught with the happiest skill, and any peculiarity in either heightened with a refined pungency that hardly ever failed to produce laughter, and to fasten the special phase of aspect or character indelibly on the memory. Cumberland, Wellington, Peel, Morpeth, and Palmerston are photographed by him with far more mental fidelity than the camera is ever likely to reach. Brougham he mercilessly persecuted, exhibiting the back as well as front view of the many-sided man, and making both alike immortal. Old Glory (Sir Francis Burdett), Hume, Disraeli, Eldon, Lyndhurst, Lord John Russell, and Sir James Graham, the future historian may depend on H. B.'s likenesses of, however much he may distrust, and however little he may learn from, those of Lawrence, Richmond, or Grant. Mr. Doyle lived a quiet, retired life, and died at his residence, Clifton Gardens, January 2, 1868. Mr. Doyle was the father of RICHARD DOYLE, so widely known by his quaint, graceful, and humorous designs. [E. C. vol. ii. col. 640.]

* DOZY, REINHART, a learned Dutch orientalist, descended from a French family who took refuge in Holland upon the revocation of the Edict of Nantes (October 24, 1685), was born at Leyden, on the 21st of February, 1820. He was educated at the university of his native city, where he devoted himself with great ardour to the study of oriental languages and the collection of oriental manuscripts. He took his doctor's degree in 1844, and in 1850 and 1857 respectively was appointed extraordinary and ordinary professor of history in his own university. His literary and professional activity has been chiefly, but not exclusively, directed towards oriental subjects in archaeology, philology, literature, theology, and speculation. His works comprise a 'Dictionnaire détaillé des Noms des Vêtements chez les Arabes,' 4to, Amsterdam, 1845, which was "crowned" and published by the Third Class of the Royal Netherlands Institute; 'Historia Abbadidarum, præmissis Scriptorum Arabum de ea Dynastia locis nunc primum editis,' 2 vols. 4to, Leyden, 1846—52; an edition of the Arab text, with introduction, notes, and glossary in French, of the 'Histoire de l'Afrique et de l'Espagne, intitulée Al-Bayān ʿl-Mogrib, par Ibn-Adhārī (de Maroc), et Fragments de la Chronique d'Arib (de Cordouc). Le tout publié pour la première fois, précédé d'une Introduction et accompagné de Notes et d'un Glossaire,' 2 vols. 8vo, Leyden, 1848—51; 'Recherches sur l'Histoire politique et littéraire de l'Espagne pendant le Moyen Âge,' 8vo, Leyden, first volume, 1849; second edition, entirely re-written, 2 vols. 1860; an Academical Lecture, delivered at Leyden on the 9th of March, 1850, on the Favourable Influence produced by the French Revolutions, since 1789, on the Study of the History of the Middle Ages, 'Over den Gunstigen Invloed, dien de Omwentelingen in Frankrijk, sedert 1789, hebben uitgeoefend op de Studie der Middeleeuwsche Geschiedenis. Redenvoering,' &c., 8vo, Leyden, 1850; 'Histoire des Musulmans d'Espagne, jusqu'à la Conquête de l'Andalousie par les Almoravides (711—1110),' 4 vols. 8vo, Leyden, 1861; a treatise on the Religion of Mohammed, 'Het Islamisme,' 8vo, Haarlem, 1863, one of a series or collection of works on the Principal Religions of the World, 'De Voornaamste Godsdiensten'; the Israelites at Mecca, from the time of David to the 5th century of our era, &c., of which a German translation from the original Dutch, appeared as 'Die Israeliten zu Mekka von Davids Zeit bis ins fünfte Jahrhundert unserer Zeitrechnung. Ein Beitrag zur Alttestamentlichen Kritik und zur Erforschung des Ursprungs des Islams,' 8vo, Leipzig and Haarlem, 1864, the object of which was to show that the ancient sanctuary of Mecca was founded about David's reign by a body of emigrating, or rather expatriated Israelites of the tribe of Simeon—that these established the great festival of Mecca, the origin and meaning of which has hitherto lain in obscurity—and lastly, that in the time of the Babylonish captivity a second colony of Israelites, called by the Arabians "the second Gorchum," sojourners, or strangers, arrived at Mecca. Upon this work was founded another, by Dr. H. Oort, pastor of Santpoort, whose book on 'The Worship of Baalim in Israel; based upon the Work of Dr. R. Dozy, "The Israelites at Mecca,"' was "translated from the Dutch, and enlarged with Notes and Appendices, by the Right Rev. John William Colenso, D.D., Bishop of Natal," 8vo, London, 1865. Amongst the latest of Dr. Dozy's works is an Expository List of the Words which have been adopted into Dutch from various oriental languages, 'Oosterlingen. Verklarende Lyst der Nederlandsche Woorden, die

uit het Arabisch, Hebreeuwsch, Chaldeeuswisch, Perzisch, en Turksch, afkomstig zijn,' 8vo, the Hague, Leyden, and Arnheim, 1867.

* DRAPER, JOHN WILLIAM, physiologist and chemist, was born near Liverpool, May 5, 1811. His father was a Wesleyan Methodist minister, and as such was entitled to have his son educated at the school established by the sect at Woodhouse Grove. On leaving this school young Draper was taught by private tutors, and then went to the London University, now called University College. In 1833 he went to the United States, where some of his relations were already settled, and attended at the University of Pennsylvania, from which he received his M.D. degree in 1836. His thesis was especially noticed by the examiners for its excellence. He was immediately appointed to a professorship at Hampden Sidney College, Virginia, but in 1839 he removed to the University of New York, as professor of chemistry and natural history. In 1841 the Medical College connected with the University was formed, and he was transferred to it; in 1850 he was also appointed professor of physiology, and president of the medical faculty. His writings comprise books and papers, but the latter are for the most part incorporated in the former. They abound in original views, and relate largely to some of the most obscure manifestations of natural forces, such as capillary attraction, the properties of the chemical and heat rays of solar light, and catalysis, or as he calls it, the "action of presence." He has written 'A Treatise on the Forces which Produce the Organisation of Plants,' 4to, New York, 1844; 'Human Physiology, Statical and Dynamical,' 8vo, New York, 2nd ed., 1858; 'History of the Intellectual Development of Europe,' 2 vols. 8vo, London, 1864; and text-books on chemistry and natural history.

DREYSE, JOHANN NIKOLAUS VON, inventor of the needle-gun, was born at Sömmerda, in Prussian Saxony, Nov. 22nd, 1787. After learning the trade of a locksmith, under his father, he went to work at Altenberg, Dresden, and other towns. On his way he stopped at Jena (1806), and visited the field where the great battle had been lost by the Prussians. What he there saw and learned impressed him with the fact that the Prussian muskets must have been miserably inefficient; and from that time he resolved on an attempt to improve the infantry weapon. Going to Paris in 1809, he worked for a time as a locksmith, gunsmith, and coachsmith. After a series of experiments, he was empowered by Colonel Paoli to construct a new breech-loader for the French Government, but the attempt was not successful. Returning to Prussia in 1814, he worked for some years as a gunmaker; and in 1821, in partnership with Kronbiegel, established a factory at Sömmerda for making various articles in iron by the aid of machine-tools, then for the first time introduced into Prussia. Having his thoughts frequently directed to the musket, he patented in 1824 a new percussion action; and in 1828, new contrivances connected with the lock and trigger. The Prussian, Austrian, and Danish Governments tried some of his inventions; but he had to contend against many prejudices, which he could not at that time surmount. In 1829, however, Prince William of Prussia (the present King) began to take an interest in the matter, and Dreyse's success was insured. After severe testing between 1830 and 1833, his inventions were recognised by the Prussian Government; and he made his first complete *zündnadelgewehr*, or *needle-gun*, in 1835, with which a rifleman could load and fire 50 shots in 10 minutes. In 1841 a large factory was established at Sömmerda, and a supply of these rifles gradually manufactured for the infantry of Prussia and other German states. Dreyse continued to make improvements in various parts of the arm, by which it became the effective weapon which so greatly aided Prussia against Denmark in 1864, against Austria in 1866, and against France in 1870. In the needle-gun, a steel needle is so placed that, when pressed by a spring acted on by a trigger, it is driven into the heart of the cartridge, where it explodes a small cap of detonating powder. In the Snider-Enfield, used in the British service, a bolt instead of a needle is employed, to give a blow rather than to make a thrust into the cartridge; but a greater point of difference is in the mode in which the rifle is opened and closed, to insert and fire the cartridge. The French Chassepot rifle is somewhat midway in character between the needle-gun and the Snider; it is lighter, and fires a smaller bullet, but with a greater range than the needle-gun. The comparative aggregate military excellencies of these rifles is still a matter of controversy. M. Dreyse received numerous medals and honorary distinctions for his needle-gun, which he continued to improve as long as he lived. He died at Sömmerda,

BIOG. DIV.—SUP.

December 9th, 1867. Ferdinand Pflug describes the gun in detail in his 'N. von Dreyse und die Geschichte des Preussischen Zündnadelgewehr,' 8vo, Berlin, 1866.

* DROUYN DE LHUYS, EDOUARD [E. C. vol. ii, col. 646]. In 1862 M. Drouyn de Lhuys was re-appointed Minister of Foreign Affairs, in succession to M. Thouvenel, who was understood to have shown too warm a sympathy for the newly created Kingdom of Italy. M. Drouyn de Lhuys announced to the diplomatic agents at the various courts that it was the intention of the Government of the Emperor to further by all means the process of conciliation between the Pope and the King of Italy. He gave a peremptory refusal to the demands of Italy for the withdrawal of the French troops from Rome; yet the great work of his ministry may be said to be the Convention of September 15th, 1864, by which he pledged France to withdraw her troops within two years from the proclamation of Florence as the capital of Italy—an agreement, the breach of which has been fruitful of consequences of ill-omen to France. His other principal measures were the treaty of commerce with Italy, January, 1863; the fruitless efforts made for interference in the quarrel between the Northern and Southern States of America, and the proposals for a European Congress; and the ratification, in May, 1865, of a treaty of commerce with Prussia. When the time arrived for carrying out the terms of the September convention, the Emperor was unwilling to comply, and M. Drouyn de Lhuys resigned, ending thereby, probably, his political career. M. Drouyn de Lhuys received the Grand Cross of the Legion of Honour in 1853; the Grand Cross of SS. Maurizio e Lazzero of Italy, 1863; and the Order of the Black Eagle of Prussia, 1865.

* DUBAN, JACQUES FELIX, an eminent French architect, was born at Paris, October 14, 1797, and was a pupil of M. Debret. In 1823 he won the grand prize of the École des Beaux-Arts, which entitled him to study in Italy, where he remained from 1824 to 1829, devoting his attention to the classical works of antiquity and the renaissance. Various restorations of ancient buildings and original designs exhibited by him after his return to Paris were greatly admired by architects and archaeologists; M. Duban was nominated inspector-general of works to the École des Beaux-Arts, and shortly after the government confided to him the task of completing the Palais des Beaux-Arts, commenced by M. Debret, a work which he carried out on a scale of much greater splendour than his predecessor had contemplated. Other important works executed by him were the restoration of the châteaux of Blois, of Dampierre, and of Gaillon. The government of 1848 appointed him architect of the Louvre, and passed a vote of 2,000,000 francs (80,000*l.*) for its embellishment. During the five years in which he retained this post he restored, or almost rebuilt, the façade of the Louvre fronting the water, the Gallery of Apollo, the Salon Carré, and the Salon des Sept Cheminées. In January, 1854, he was removed from the Louvre, but shortly after appointed inspector-general of public buildings. He received the cross of the Legion of Honour in 1836, and was named officer in 1851. In 1854 he succeeded M. Visconti at the Institute. He is also a member of the commissions for the conservation of historical monuments, and of religious edifices.

DUBOIS, PIERRE, a French writer on horology, was born at Châtelleraut, department of Vienne, December 16th, 1802. He was employed as a watchmaker under Lepaute of Paris; and afterwards devoted much attention to the literature of his trade. He wrote on horology and mechanics in the 'Magazin Pittoresque,' and in 'Le Moyen Âge et la Renaissance'; and tried for a time a new periodical under the title 'La Tribune Chronométrique,' but unsuccessfully. His chief work was 'L'Histoire de l'Horlogerie Ancienne et Moderne,' 4to, Paris, 1849—50; this work was illustrated by 400 wood engravings, and comprised biographical notices of the chief watch and clock makers of Europe. A smaller work was 'Des Fabriques d'Horlogerie de la Suisse et de la France,' 18mo, 1853. He also published descriptions, in the 'Patrie' newspaper, of the horological department in the Paris Exhibition of 1855; and 'Collection Archéologique du Prince Pierre Soltykoff,' 4to, 1858. Dubois died at Paris, October 12th, 1860.

* DUBOSCQ, JULES, born in 1817, served an apprenticeship to a relative, M. Soleil, an optical instrument maker, to whom he went in 1830. Under him he studied the planning and construction of apparatus for the diffraction and polarisation of light. In 1849 he succeeded Soleil in his business, and afterwards invented many new kinds of photogenic apparatus. One was an electric lamp, especially adapted for use in mines. He

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was among the first to apply the stereoscope successfully to pairs of photographs. His various instruments won for him the Council Medal of the Great Exhibition of 1851, the first-class medals of the New York Exhibition of 1853 and the Paris Exhibition of 1855, and the Gold Medal of the Société d'Encouragement in 1866. After the International Exhibition of 1862, he was decorated with the legion of honour. At the Paris Exhibition in 1867, Duboseq displayed apparatus for the study of optics. He has contributed to the 'Comptes Rendus' a 'Note sur une régulateur électrique,' 1850; 'Note sur le Collodion sec,' 1850; 'Note sur un Nouveau Compensateur pour la Saccharimètre' (with Soleil), 1850.

DUBUFE, CLAUDE MARIE, a celebrated French painter, born at Paris in 1790, was a pupil of David. He at first painted classical and religious pictures in the manner of his master, but afterwards turned to portraiture, in which he obtained great success. King Louis Philippe and many other distinguished men were among his sitters, but he was most famous as a painter of females, few ladies of the fashionable world of Paris having, it is said, failed to have their charms immortalised by his pencil. To the least attractive he imparted a factitious grace, and the fairest thought her loveliness heightened by his studied sentiment. His semi-nude damsels in the manner of Greuze were also much admired. One of these, 'The Surprise,' is in the National Gallery (No. 457, Vernon Collection), and its shallow meretriciousness attracts every season numerous copyists. M. Claude Dubufe died April 21, 1864. His son

* ENOUD DUBUFE (born about 1818) also enjoys a high reputation as a portrait painter. He was the scholar of his father and of Paul Delaroche. Like his father, he is most celebrated for his female portraits, but has more purity and manliness of style, acquired no doubt in the school of Delaroche. The well-known portrait of Rosa Bonheur, of which a duplicate was in the International Exhibition of 1862, is a good example of his manner.

DU CHAILLU, F. B. [CHAILLU, F. B., Du, E. C. S., col. 365.]

DU CHÂTELET, MARQUISE [CHÂTELET, GABRIELLE ÉMILIE LE TONNELIER DE BRETEUIL, MARQUISE DU, E. C. S., col. 370].

DUCHESNE, JEAN, an eminent French archæologist, the son of a well-known writer on natural history, Professor Antoine Nicolas Duchesne, was born at Versailles on the 28th of December, 1779. Sixty years of his life were spent among the works he has described. In his sixteenth year he was made assistant in the print room of the Bibliothèque Nationale, and in 1839 he rose to be keeper of the collection, which office he retained till his death, March 4, 1855. He published a great number of works, but those of importance are the following:—'Notice des Estampes exposées à la Bibliothèque du Roi, contenant des recherches historiques et critiques sur ces estampes et sur leur auteurs,' &c., 8vo, Paris, 1814, of which a fourth edition was issued in 1855; 'Essai sur les Nielles, gravures des Orfèvres Florentins du quinzième siècle,' 8vo, 1826, a work of great research and value, which must serve as the basis of whatever is written on the subject; 'Voyage d'un Iconographe: revue des principaux Cabinets d'Estampes, Bibliothèques et Musées d'Allemagne, de Hollande et d'Angleterre,' 8vo, 1834; 'Jeux de Cartes tarots du quatorzième au dix-huitième siècle, représentés en cent planches d'après les originaux, avec un précis historique et explicatif,' fol., 1844, a valuable book, but of which the use is circumscribed, only 132 copies having been printed for the Société des Bibliophiles Français. He also wrote the text to the 'Musée de Peinture et de Sculpture, ou recueil des principaux Tableaux, Statues et Bas-reliefs des Collections Publiques et Particulières d'Europe, dessiné et gravé à l'eau forte par Réveil,' 16 vols. 8vo, Paris, 1828—34.

DUCK, STEPHEN, was born at Great Charlton, Wiltshire, about the year 1700. His parents were poor farm labourers, and Stephen was removed early from the village school and put to work in the fields, "lest he should become too fine a gentleman for the family that produced him," the schoolmaster having reported that he learned too fast and too eagerly. He soon forgot what he had learned, but opening manhood brought habits of thoughtfulness, and the sight of some books belonging to an acquaintance who had been in service in London gave him the resolution to master their contents. By the help of a dictionary he and his friend read through 'Paradise Lost' twice, the 'Spectator,' and some other works. Stephen became known as a maker of verses, and his wife vowed that he must have dealings with the devil. Fortunately, or otherwise as some have thought, he was heard of by a young Oxonian named Stanley, who

assisted his studies, encouraged him in his passion for poetizing, and suggested themes for his Muse, among others his own occupation. This led him to write 'The Thresher's Labour,' the best of his verses, and, though now probably never read, with due allowance for the circumstances under which it was written, one of the truest and most pleasing poems of its class in the language. Duck was now taken much notice of; his 'Thresher's Labour' was shown to the Queen, Caroline, wife of George I., who was so pleased with the verses and what she heard of the man, that she sent for him to Windsor, bestowed on him a pension of 30*l.* a-year, made him one of her yeomen-guard, and shortly after appointed him keeper of her library at Richmond Park. Swift saw in this a favourable opportunity to wound the Queen through the sides of the Thresher, as he contemptuously designates him in his bitter verses. Duck's 'Poems on Several Occasions' were published by subscription, 4to, 1736, with a preface and memoir by Joseph Spence, the author of 'Polymetia,' a constant friend and judicious adviser of the author. The list of subscriptions was large, and a fair sum was realised. Duck, a simple-hearted, inoffensive, and pious man, was encouraged to study for the Church, and he appears to have done so most conscientiously. In due time he was ordained, and in January, 1752, instituted to the rectory of Byfleet in Surrey, which his kind friend Spence had used his influence with the Duke of Newcastle to procure for him. Duck is said to have proved an exemplary clergyman, and he was much esteemed as a preacher; but he appears to have become doubtful of his own fitness for the charge, fell into a state of despondency, and drowned himself at Reading, May 30th, 1756. Spence's memoir is the chief authority for the life of Duck, but there is a good deal of incidental information respecting him in the literature of the day, and Southey has introduced a pleasing account of him in his 'Essay on the Lives and Works of our Uneducated Poets,' prefixed to the 'Attempts in Verse' of Thomas Jones, 8vo, 1831.

DUDLEY, DUD, born at Dudley in 1599, was a natural son of the Earl of Dudley, one of eleven children, whose mother was Elizabeth Tomlinson. So little concealment was there of this relationship, that the lady was named in pedigrees and herald's visitations as "the concubine of Lord Dudley." At that time there were 20,000 persons employed within ten miles of Dudley Castle in the manufacture of small articles of iron; but the industry gradually declined, owing to the unwillingness of the Government to permit the use of wood fuel in the furnaces. Dud Dudley, as he grew up to manhood, viewed with regret this decadence, and his thoughts recurred to the thick seams of coal in the neighbourhood. To use his own language, it seemed to him that "God decreed the time when and how the smithies should be supplied, and this island also, with iron; and most especially that this cole and ironstone should give the first and just occasion for the invention of smelting iron with pit cole." Brought home by his father from Balliol College in 1619, Dudley was placed in charge of a small ironwork, and took out a patent in 1620 for using coked coal instead of wood charcoal, and for improvements in the blast. The Government tried some of his new iron in 1621, and pronounced it good; while a brother-in-law of his made excellent gun-barrels of it. He struggled manfully against the jealousy of rival ironmasters, and established small works in four different parts of the district. It was regarded as a mighty achievement to have a blast furnace in which he could make seven tons of iron per week. Notwithstanding all this, however, conspiracies of masters to dispute his patent, and riotings by workmen who disliked his new processes, brought on law-suits, debt, and imprisonment. When the Civil War broke out he abandoned manufactures, and joined the Royalists as a soldier. He was engaged in many of the battles; was military engineer to plan fortifications at Worcester and Stafford in 1643; appointed colonel of dragoons; and in 1645 general of artillery. Being taken prisoner near Madeley in 1648, he effected a hair-breadth escape, and then lived in concealment and poverty during the Commonwealth. At the Restoration he tried hard to obtain a renewal of his patent, and some return for his faithful adherence to the Royal cause; but failed in both objects. In 1665 he published 'Mettallum Martis: or, Iron made with Pit Coale, Sea Coale, &c., and with the same Fuell to melt and fine imperfect Mettals, and refine perfect Mettals.' He re-established a small iron work near Dudley, where he continued to smelt iron with coal. The plan, for various reasons, languished after his time, but to him is due the credit of practically introducing it. Dud Dudley died at St. Helen's, Worcestershire, in 1684.

DUFAY, CHARLES FRANÇOIS DE CISTERNAI, was born at Paris, in September, 1698, and died 16th July, 1739. At the age of 14 he was made lieutenant in a regiment of Picardy, but was more attached to science than to the military art. He accompanied the Cardinal de Rohan to Rome, where he acquired a taste for the study of antiquities. In 1733 he became an Academician, and devoted his studies exclusively to science. He made some capital discoveries in electricity, which are described by Priestley ('History of Electricity') with his usual felicity of style. Taking up the researches of Grey, who in 1729 discovered the properties of conductors, Dufay discovered, he says, "a very simple principle, which accounts for a great part of the irregularities, and, if I may use the term, the caprices that seem to accompany most of the experiments in electricity. This principle is, that electric bodies attract all those that are not so, and repel them as soon as they are become electric by the vicinity or contact of the electric body. . . . Upon applying this principle to various experiments of electricity, any one will be surprised at the number of obscure and puzzling facts which it clears up."

Again he says:—"Chance has thrown in my way another principle more universal and remarkable than the preceding one, and which casts a new light upon the subject of electricity. The principle is that there are two kinds of electricity very different from one another; one of which I call *vitreous*, the other *resinous* electricity. The first is that of glass, rock-crystal, precious stones, hair of animals, wool, and many other bodies. The second is that of amber, copal, gum lac, silk, thread, paper, and a vast number of other substances. The characteristics of these two electricities are, that they repel themselves and attract each other."

"The electric spark from a living body, which," says Priestley, "makes a principal part of the diversion of gentlemen and ladies who come to see experiments in electricity, was first observed by Mr. du Fay. . . . The Abbé Nollet says he shall never forget the surprise which the first electrical spark which was ever drawn from the human body excited both in M. du Fay and himself."—(Pp. 46, 47.)

The important influence of Dufay's discoveries in the science belongs to history, although it is worthy of notice that Franklin's one fluid theory continued during many years to be the favourite mode of explaining electrical phenomena, and it is only in quite recent times that the doctrine of two fluids has been generally maintained.

Dufay was during ten years superintendent of the Jardin des Plantes. On his death-bed he recommended Buffon as his successor. Fontenelle wrote his *éloge*.

DUFRENOY, PIERRE ARMAND, was born at Sevran (Seine-et-Oise), Sept. 5, 1792. In 1803 he went to the Lyceum at Rouen, where Valenciennes was one of his schoolmates. He was then transferred, first, to the Imperial Lyceum, next to the École Polytechnique in 1811, and in 1813 to the Corps des Mines. When the School of Mines was established he was elected to teach geology and mineralogy, and to be one of the directors; and his execution of these duties for 40 years had much influence in securing the prosperity of the establishment. During this period he was also actively engaged in various geological and mineralogical inquiries, mostly in conjunction with Elie de Beaumont. Thus in 1823 these two geologists commenced their great work, the geological map of France. Having many views in common they were able to produce harmonious results, whether labouring separately or together. For 13 years they explored France, Dufrenoy taking the western portion, and Elie de Beaumont the eastern. For the next five years they were occupied in digesting the information they had collected. And in 1841 they issued their 'Carte géologique générale de France,' while the 'Explication' thereof, forming three quarto volumes, was published from 1841 to 1848. This map represents not only the distribution of the strata, but also the soils and physical geography of the country. In the course of their explorations they visited England, and one result of the visit was a 'Voyage métallurgique en Angleterre,' 8vo, Paris, 1827, which was enlarged into two volumes in the second edition, published 1837—1839. On a subsequent occasion Dufrenoy visited England alone on a commission to inquire into the advantages the hot blast has over the cold blast in iron-furnaces; and the results of the inquiry were given in a 'Rapport sur l'emploi de l'air chaud dans les usines à fer de l'Ecosse et de l'Angleterre' ('Annales des Mines,' vol. iv. pp. 431—508, 1833). In conjunction with Elie de Beaumont he also wrote 'Mémoires pour servir à une description géologique de France,'

4 vols. 8vo, 1830—1838. His 'Traité de Minéralogie,' 1st edition, 1844; 2nd edition, 5 vols. 8vo, 1856—1860, is a valuable work, on account of the wide scope of its information. In addition, he has written numerous papers, several of high importance; we may mention his researches on the volcanic district of Auvergne, in which he shows how the tertiary strata and lava streams alternate; his accounts of the Neapolitan volcanic region, in which he distinguishes the different ages of the lavas and other volcanic rocks, and broaches a new theory of the formation of volcanoes. His papers were contributed to the 'Comptes Rendus,' the 'Annales des Mines,' and the 'Bulletins' of the Geological Society of France. He also wrote for the 'Dictionnaire Universel des Arts et Metiers' and the 'Dictionnaire Technologique.' He was a member of the Academy of Sciences, a commander of the Legion of Honour, an inspector-general of mines, and also belonged to numerous scientific societies. He died March 20, 1857.

DUGHET, GASPARD [POUSSIN, GASPARD, E. C. vol. iv. col. 955].

DU HALDE, J. B. [HALDE, J. B. DU, E. C. vol. iii. col. 254].

DUHAMEL, JEAN PIERRE FRANÇOIS GUILLOT, was born at Nicorps, near Coutances (Manche), August 31st, 1730. He was educated at the École des Ponts et Chaussées, the director of which so highly appreciated his talents that he sent him along with M. Jars to study the mines of Germany. The latter published 'Voyages Métallurgiques,' 3 vols. 4to, 1774—1781, Paris, to which Duhamel is understood to have largely contributed. In 1764 he became the director of a large foundry, and soon succeeded in so simplifying the process, as to reduce the expense by one-half, at the same time he doubled the produce. He greatly improved the mode of making steel, of liquidating silver, of separating lead from copper in the ores containing both, and various other metallurgical operations. He wrote many papers, but his principal work in literature is his 'Géométrie souterraine élémentaire, théorique et pratique, où l'on traite des filons ou veines minéralogiques et de leur disposition dans le sein de la terre,' 4to, Paris, 1788. It was adopted in many parts of France and Germany as a practical manual in mining. He died February 19th, 1816.

DUHAMEL DU MONCEAU, HENRI LOUIS, was descended from a Dutch gentleman who visited France about 1400 in the suite of the Duke of Burgundy. He was born at Paris in 1700, and was educated in the college of Harcourt. The course was not to his taste, and he quitted college with only one idea, namely, that men, by studying nature, had created a science called *Physics*. Being now free, he devoted himself to science, and cultivated the friendship of such men as Dufoy, Geoffroy, Lemery, Jussieu, and Vaillant. At the age of eighteen he was requested by the government, under the advice of the Academy, to inquire into the cause of a disease which afflicted saffron. He traced it to a parasitical plant which attached itself to the bulb, and extended under the ground from one bulb to another.

Duhamel, ably assisted by his brother, devoted a long life to the cultivation of science and works of utility, especially such as were likely to benefit the poor. He spent much time in endeavouring to promote the cultivation of vegetables, and this led him to study the physiology of trees. His 'Traité des Arbres et Arbustes qui se cultivent en France en pleine terre,' published in 1755, in 2 vols. 4to, with numerous engravings, is a work of considerable value. In 1740 he became an Academician, and from that time until his death in 1781 he published more than sixty memoirs in the Transactions of the French Academy of Sciences, and these embodied a large number of new and important facts, which had considerable influence on the progress of science, although, from our more perfect knowledge, they are no longer associated with his name. He was the first to prove that soda is a different alkali from potash; he also pointed out many new properties in ether, the soluble tartars, and lime; he showed that oil in contact with cloth produces spontaneous combustion; he studied the formation of bone by feeding young animals alternately with food mixed with madder and with ordinary food; he kept a regular table of meteorological observations at Pithiviers, with details relative to the direction of the needle, to agriculture, to the medical constitution of the year, and to the time of nest-building and the passage of birds. His merits as a vegetable physiologist and agriculturist are of a high order. As Inspector-General of Marine he devoted his attention to naval science, the construction of vessels, the weaving of sail-cloths, the structure of ropes and cables, the method of preserving timber, &c. In these

varied labours he never seemed to think of himself. His clear and charming style had but one obscurity for the reader who wished to separate Duhamel's original discoveries and remarks from those of other men. His brother resided upon Duhamel's estate at Denainvilliers, which name he bore, and the two brothers lived unmarried, and passed a laborious life in the pursuit of science for the good of mankind. After leaving the Academy on the 22nd July, 1781, Duhamel was struck with apoplexy, and died after lingering twenty-two days in a state of coma. He was a fellow of the Royal Societies of London and Edinburgh.

DUJARDIN, FELIX, was born at Tours, April 5, 1801. In 1839 he became professor of mineralogy and geology at Toulouse, and afterwards professor of zoology at Rennes. His earlier works relate to geological subjects, his later to zoological. He wrote several papers on the lithology and geology of Touraine, and many on the lower classes of animals, especially the *Infusoria* and *Entozoa*, although he also gave considerable attention to the *Protozoa*, annelids, insects, and to the zoosperms. His principal works are 'Histoire Naturelle des Zoophytes infusoires,' 8vo, Paris, 1841; 'Histoire Naturelle des Helminthes ou vers intestinaux,' 8vo, Paris, 1844; and along with M. Hupe, 'Histoire Naturelle des Zoophytes échinodermes,' 8vo, Paris, 1861. All these form part of the 'Suites à Buffon.' He founded and edited a scientific journal called 'Hermès,' and wrote 'Promenades d'un Naturaliste,' 1837, some small zoological treatises, and a 'Manuel de l'Observateur au Microscope,' 1843. He died April 8, 1860.

DULONG, PIERRE LOUIS, was born at Rouen on the 12th of February, 1785. At the age of sixteen he entered the Polytechnic School, but was compelled to quit it after two years under the pressure of ill health. He then studied medicine, and on the completion of his course practised as a surgeon in one of the poorer quarters of Paris. As he could never witness suffering without feeling a strong desire to relieve it, the number of his patients increased, while his fortune diminished. He kept an account at a pharmacist's, where his patients got their medicines made up at his expense. During some time he studied botany, but being attracted by the brilliant discoveries of Davy he took up chemistry, and rendered his name famous. He was so fortunate as to secure the post of assistant in Berthollet's laboratory. In 1811 he published a paper on the decomposition of insoluble salts by means of carbonate of potash or of soda, and in October of the same year he discovered a compound of chlorine and nitrogen of a dangerously explosive character, so that while examining it in the following year he lost an eye and two fingers from its effects. Napoleon requested that the composition might be kept secret, under the idea that the chloride of nitrogen might prove a formidable engine of war, but it was found to be quite unmanageable. Davy, who heard some vague rumours respecting it, succeeded in forming the compound, and also in wounding himself during one of its explosions. Dulong also investigated some of the compounds of nitrogen and oxygen, the acids formed by the union of phosphorus and oxygen, the composition of carbonic acid, &c. He also performed a large number of experiments on the respiration of animals; but his most perfect work was in conjunction with Petit on the law of cooling—a model of physico-chemical research.

Dulong was Master of Conferences at the Normal School, and occupied the chair of chemistry of the Faculty of Sciences, and that of the School of Alfort. He died at Paris July the 19th, 1838.

* DUMAS, ALEXANDRE [E. C. vol. ii. col. 662]. In the reissue of the E. C. reference was made to the Supplement for a further notice of Alexandre Dumas, but the original memoir is so full that we find little of consequence to add. Of his later personal career the most noticeable circumstances are his far-far-nade of his personal friendship with the Emperor; his travels; his unexpected appearance as the associate of Garibaldi in his expedition to Naples; his nomination of himself as the historiographer of the campaign, and his extraordinary appointment by Garibaldi to be director of the Neapolitan museums and picture galleries. Of his various travels and personal adventures, culminating in the Neapolitan campaign, he published ample reminiscences in 'Le Caucase: Voyage,' 1859; 'Les Mémoires d'Horace,' 1860; 'Mémoires de Garibaldi,' 1861; in the successive volumes of his own 'Mémoires,' and in his 'Causeries' in 'Le Petit Journal,' 1863, and 'Le Grand Journal' which succeeded it. He has also issued many new romances, as 'Les Compagnons de Jéhu,' 'Les Louves de Machecoul,' 'Le San Felice,' mostly

after the old manner, and of little inherent value, as well, of course, as numerous dramas, as 'La Tour St. Jacques la Boucherie,' in 6 acts and 17 tableaux; 'Les Gardes Forestiers,' in 5 acts; 'L'Envers d'une Conspiration'; 'Le Gentilhomme de la Montagne'; 'Le Prisonnier de la Bastille'; 'Les Mohicans de Paris,' the refusal of permission to act which led to his writing the letter to the Emperor which afforded so much amusement to the Parisians.

* ALEXANDRE DUMAS, the younger [E. C. vol. ii. col. 664] has gone on writing almost as abundantly as his father, and of late with at least as great success. His novels and plays, genuine successors of his 'Demi-Monde,' have exactly hit the corrupt and sensualised taste of the Parisian world; but it is hardly worth while to chronicle their titles here, and we may hope that the terrible trial through which the city of their birth has of late had to pass may do something towards calling forth a condition of moral feeling that will render them no longer endurable even there.

DUMÉRIL, ANDRÉ MARIE CONSTANT, was born at Amiens, January 1, 1774. His successes in early life were remarkably rapid. When only 19 he was appointed demonstrator in the Anatomical School at Rouen. In 1794 he went to Paris, in 1795 he became acquainted with G. Cuvier, in 1798 he obtained his M.D. degree from the Paris University, and in 1799 he competed successfully for the directorship of the anatomical works of Paris, Dupuytren being one of his opponents. In 1801 he was appointed professor of anatomy; in 1822 this was exchanged for the chair of physiology; and this again for the chair of internal pathology in 1830. For a short time he was Cuvier's successor as professor of natural history at the École Centrale of the Pantheon; and in 1802 he commenced his lectures on reptiles and fishes at the Jardins des Plantes, first as Lacépède's substitute, and afterwards as his successor: he continued them for upwards of 50 years. In 1816 he was chosen a member of the Academy of Sciences, in 1837 he received the cross of the Legion of Honour, of which he was afterwards a commander, and he was a member of many scientific bodies. He filled several offices simultaneously, and discharged them all with remarkable punctuality. Even when over 80 years of age he was rarely absent from the sittings of the Academy of Sciences. He died August 2, 1860. He was always working hard, and hence his writings are exceedingly voluminous. His first work was a paper on the organs of smell in insects, published in 1797, his last a large quarto on insects, which appeared in 1860. He assisted Cuvier in editing the first two volumes of the 'Leçons d'Anatomie Comparée.' His papers are 75 in number, and relate to all classes of animals, chiefly regarded from the physiological, anatomical, classificatory, and descriptive points of view; but he also added much to the interest of his observations by his numerous references to habits. A list of his papers is given in the 'Catalogue of Scientific Papers,' published by the Royal Society. Here we append a list of his principal books:—'Essai sur les moyens de perfectionner et d'étendre l'art de l'Anatomiste,' 4to, Paris, 1802; 'Traité élémentaire d'Histoire Naturelle,' 1 vol. 8vo, 1803; 4th edition, 2 vols. 8vo, 1846; 'Zoologie Analytique,' 8vo, 1806; 'Mémoires de Zoologie et d'Anatomie Comparée,' 1807; 'Recueil de quatre cent cinquante formules proposées dans les jurys de Médecine des départements,' 1811–1813; 'Considérations Générales sur la classe des insectes,' 8vo, 1823, which is a revised re-issue of the entomological articles contributed by him to the 'Dictionnaire du Sciences Naturelles'; 'Dissertation sur les Poissons qui se rapprochent les plus des Animaux sans vertèbres,' 1812; 'Dissertation sur la Famille des Poissons Cyclostomes pour démontrer leurs rapports avec les Animaux sans vertèbres,' 1812; 'Erpétologie générale,' 9 vols. 8vo, 1834–1854, in conjunction with M. Bibron; 'Ichthyologie analytique,' 1856; and 'Entomologie Analytique,' 1860. The last two are given in the 'Mémoires' of the Academy of Sciences; and the last forms a large volume of itself, comprising 1336 pages.

* DUMÉRIL, AUGUSTE HENRI ANDRÉ, the eldest son of the foregoing, was born at Paris, November 30, 1812. He has been assistant naturalist in the Museum of Natural History, Paris, since 1840; professor of geology at the Chaptal College since 1847; and in 1857 he succeeded to his father's place in the Museum. In 1869 he was chosen to succeed M. Delessert as a member of the Academy of Sciences. He has written numerous papers on reptiles and fishes. His principal works are, 'De la texture intime des glandes et des produits de Sécrétion en générale,' 8vo, Paris, 1845; and 'Histoire Natu-

relle des Poissons ou Ichthyologie Générale,' 8vo, vol. i. 1865; vol. ii. 1870.

DUMONT, ANDRÉ HUBERT, was born at Liège, February 15th, 1809. He early took an interest in geology, and followed the study of it with so much zeal and skill that his first work, 'Sur la constitution géologique de la province de Liège,' which he submitted to the Royal Academy of Belgium in 1820, was crowned with honour by that body, and published in its 'Mémoires,' vol. viii. (1832); and in 1839 it obtained for him the Wollaston Medal of the Geological Society of London. It also led to his being appointed professor of mineralogy and geology at the University of Liège, and to his being ordered by the Belgian Government to prepare a geological map of the kingdom. Honours were showered upon him, and he was selected to be the director of the Academy of Belgium, which office he filled in 1856, but he had scarcely retired from it when he fell ill, and was carried off in his prime, February 28th, 1857. He spent twenty years in preparing his geological map of Belgium, and personally explored almost every part of the country on foot; it is estimated that he walked 15,000 miles in performing the task. The map was published in 9 sheets, in 1853. The stratigraphical divisions have a peculiar nomenclature, to which objections have been made. The map is distinguished for its great accuracy. The divisions adopted will doubtless be retained in geology, though perhaps not under the names he has selected for them. He relied mainly upon lithological characters in determining the divisions. He wrote numerous papers on the geology of Belgium, which abound in information, and which are printed in the 'Bulletins' and 'Mémoires' of the Royal Academy of Belgium.

DUNDONALD, THOMAS COCHRANE, tenth EARL OF [E. C. vol. ii. col. 668]. The last years of Lord Dundonald's life were spent in endeavouring to remove from the minds of his countrymen any suspicions they might yet entertain respecting his conduct in those affairs for which he had been subjected to obloquy and persecution. Towards the end of 1858, "on that day when I shall have completed the 83rd year of a career strangely chequered, yet not undistinguished," he published a 'Narrative of Services in the Liberation of Chili, Peru, and Brazil, from Spanish and Portuguese Domination,' 2 vols. 8vo. These volumes, full of narratives of daring adventures and dashing seamanship, describe the services he rendered to the governments of Brazil and the South American Republics, and the wrongs he suffered at their hands. His sufferings from his own government he related at length in 'The Autobiography of a Seaman,' 2 vols. 8vo, 1859-60. The first volume carries the narrative down to his attack on the French fleet in the Basque Roads, April 11, 1809, which was marred by the inexplicable timidity of Gambier, the admiral in command, and for which, owing to Captain Cochrane's urgency, Admiral Gambier was tried by a court-martial, but acquitted. The second volume is almost wholly occupied with an account of the court-martial on Admiral Gambier and with Lord Cochrane's own trial for complicity with the fraud of De Beranger. A third volume was to have completed the work, but within a few days of the publication of the second volume the author had passed beyond the reach of praise or censure. He died on the 31st of October, 1860. His life was a strange and stormy one, but whatever be the verdict in other matters, there can be no question that he was one of the ablest and bravest naval captains of modern times.

* DUPANLOUP, FÉLIX ANTOINE PHILIBERT, one of the most prominent divines of the Gallican Church, was born at Saint-Félix, in Savoy, on the 3rd of January, 1802, and in 1810 was sent to Paris for education. Here he studied theology, and in 1825 was admitted to the priesthood, and speedily began to give evidence of his remarkable gifts as a preacher and a catechist. In 1827 he was appointed confessor to the Duc de Bordeaux, and instructor in the catechism to the young princes of the Orleans family in 1828. In 1835 he became one of the parochial clergy of the church of St. Roch, in Paris; and in 1841 was made professor of sacred eloquence in the faculty of theology in the Sorbonne. Being, however, suspended from his office, he received from Archbishop Affré a titular grand-vicariate, and the directorship of the seminary of Saint Nicolas, after which, upon resigning his functions as grand-vicar, he was made a titular canon. He attended Prince Talleyrand in his last moments, and has the credit of effecting his conversion. His nomination to the see of Orleans took place on the 6th of April, 1849; and he was consecrated at Paris on the 9th of December following. From that time, and indeed during his whole career, Monseigneur Dupanloup—who became, in 1854,

a member of the Académie Française—has taken part in every social, political, and ecclesiastical question of importance; and his various publications have been largely provocative of discussion and controversy, especially on Church matters, where his principal opponents have been M. Edmond About and M. Grandguillot. He has been a champion for the liberty of the Church, the unity of Christendom, and the temporal power of the Pope, and a particular and ardent advocate for the religious education of all classes, upon the last of which subjects he has written in nearly all its aspects.

Many of the miscellaneous productions of M. Dupanloup which had been published up to that date, were issued as 'Œuvres Choisies,' 4 vols. 8vo, Paris, 1862, of which the first volume contained the 'Œuvres Oratoires,' the second and third volumes the 'Œuvres Pastorales,' and the fourth the 'Études Ecclésiastiques.' His other works comprise an 'Avertissement à la Jeunesse et aux Pères de Famille sur les Attaques dirigées contre la Religion par quelques Écrivains de nos Jours,' 12mo, Paris, 1863, which immediately went through several editions, and which chiefly combated the views of MM. Rénan, Littré, Taine, and Maury; 'Saint Vincent de Paul et ses Œuvres,' 12mo, Paris and Orleans, 1863; 'La Convention du 15 Septembre et l'Encyclical du 8 Décembre,' 8vo, Paris, 1865; 'L'Athéisme et le Péril social,' 8vo, Paris, fifth edition, 1866; 'Femmes Savantes et Femmes Studieuses,' 8vo, Paris, sixth edition, 1868, English translation, by R. M. Phillimore, entitled 'Studious Women,' 8vo, London, 1868; 'La Liberté de l'Enseignement supérieur,' 8vo, Paris, 1868; 'L'Enfant,' 12mo, Paris, 1869; 'Le Mariage Chrétien,' 12mo, Paris, 1869; and 'Lettre sur le Futur Concile (Economique,' of which an "authorised translation, with Papal Brief," was published by Messrs. S. H. Butterfield and E. Robillard, as 'The Future Ecumenical Council. A Letter of the Bishop of Orleans to the Clergy of his Diocese,' 8vo, London, 1869. The papal brief extolled the eloquence and clearness with which the author had stated "the sound doctrine on the rights and prerogatives of the Holy See, and on its supreme authority in these kinds of assemblies;" but it is by this time historically known that M. Dupanloup joined in protesting, May, 1870, energetically against the dogma of papal infallibility, in the promulgation of which the labours of the Council have, so far, culminated. M. Dupanloup, whose works have been translated, almost in the mass, into German, furnished a 'Lettre' in introduction of M. A. de Beauchesne's recent biographical work, entitled 'La Vie de Madame Elisabeth, Sœur de Louis XVI.,' 2 vols. 8vo, Paris, 1869.

DUPERREY, LOUIS ISIDORE [E. C. vol. ii, col. 674]. Since the account of his important scientific voyage was published, M. Duperrey has contributed largely to our knowledge of the phenomena connected with terrestrial magnetism and terrestrial physics generally. He died September 10th, 1865.

DU PETIT THOUARS, L. M. A. [THOUARS, L. M. A. DU PETIT, E. C. vol. vi. col. 26].

DUPIN, ANDRÉ-MARIE-JEAN-JACQUES [E. C. vol. iii. col. 675]. M. Dupin was re-appointed procureur-general to the Court of Cassation in November, 1857, and continued to take part in public affairs both as procureur and senator as long as his health allowed. He died at Paris on the 8th of November, 1865.

DUPIN, LOUIS ELLIES, a celebrated ecclesiastical historian, was born on the 17th of June, 1657, either in Normandy or in Paris, of an ancient Norman family. At ten years of age he became a pupil of the Collège d'Harcourt, and graduated as M.A. in 1672. Devoting himself to the ecclesiastical profession, he went through a course of divinity at the Sorbonne; and after an extensive study of the fathers, councils, and Church writers and historians, took his degrees of B.D. and D.D. respectively in 1680 and 1684. Two years after the latter date he entered upon the publication of his great work, entitled 'Bibliothèque des Auteurs Ecclésiastiques, contenant l'Histoire de leur Vie; le Catalogue, la Critique, et la Chronologie de leurs Ouvrages, le Sommaire de ce qu'ils contiennent, un Jugement sur leur Stile et sur leur Doctrine, et le Dénombrement des différentes Editions de leurs Ouvrages,' 8vo, Paris, 1686-1714, which, with the 'Bibliothèque des Auteurs sèparez de la Communion Romaine,' &c., 4 vols. 8vo, Paris, 1718, five volumes of 'Tables,' three volumes of 'Remarques,' by D. Petit-Didier, and four volumes of 'Critiques,' by Richard Simon, occupies the immense number of 58 volumes. An incomplete edition was published in Holland in 19 vols. 4to, Amsterdam, 1690-1713; and the work has undergone a variety of impressions in France

and England. The Abbé Goujet published a continuation, with the title of 'Bibliothèque des Auteurs Ecclesiastiques du dix-huitième Siècle; pour servir de continuation à celle du M. Du Pin,' 3 vols. 8vo, Paris, 1736. The 'Bibliothèque,' &c., is lively in style, well-planned, and generally impartial; but certain opinions expressed by the author upon the fathers and the authority of the Holy See drew down upon him the most severe criticism and opposition. Bossuet arrayed himself against Dupin, and accused his work to M. de Harlay, Archbishop of Paris, by whom it was condemned. Subsequently Dupin, who held the appointment of professor of philosophy in the Collège de France, having taken the side of the Jansenists against the bull *Unigenitus*, was deprived of his chair and exiled to Châtelerault. Towards the end of his life he conceived the plan of a union between the Gallican and Anglican Churches, and a memorial of his activity in this direction was published a few years ago, with the title 'D'un Projet d'Union entre les Eglises Gallicane et Anglicane. Correspondance entre Wake, Archevêque de Cantorbéri, et Dupin, Docteur de Sorbonne,' 8vo, Oxford, 1864. Having regard to the same object of the restoration of the unity of Christendom, Dupin is said to have drawn up a plan, at the request of Peter the Great, at that time in France, for the return of the Greek Church to the orthodox communion. Exhausted at length by his uninterrupted labours, Dr. Dupin died at Paris, on the 6th of June, 1719.

Besides the 'Bibliothèque,' upon which his fame principally rests, he produced numerous works in history, profane and ecclesiastical, and in practical divinity. They comprise 'Notas in Pentateuchum,' 2 vols. 8vo, Paris, 1701; 'Le Livre des Psaumes traduit selon l'Hébreu avec des courtes Notes,' 12mo, Paris, 1691 and 1710, which is a translation of 'Liber Psalmorum cum Notis, quibus eorum sensus literalis exponitur,' 8vo, Paris, 1691; 'Traité de la Doctrine Chrétienne et Orthodoxe,' 8vo, Paris, 1703; 'L'Histoire d'Apollone de Tyane convaincue de Fausseté et d'Imposture,' 12mo, Paris, 1705, which was published under the pseudonym of M. de Claireval; 'Traité de la Puissance Ecclesiastique et Temporelle,' 8vo, 1707; 'Bibliothèque Universelle des Historiens,' 2 vols. 8vo, Paris, 1707; 2 vols. 4to, Amsterdam, 1708; 'L'Histoire de l'Eglise en abrégé par Demandes et par Réponses, depuis le Commencement du Monde jusqu'à présent,' 4 vols. 12mo, Paris, 1712, second edition, 1714; and 'L'Histoire Profane depuis son Commencement jusqu'à présent,' 6 vols. 12mo, Paris, 1714—16, a faulty edition of which was published in 6 vols. 12mo, Antwerp, 1717.

DUPONT, PIERRE [E. C. vol. ii. col. 678]. Under the Empire Pierre Dupont continued to delight those who were admitted to his intimacy by throwing off his charming songs with their accompanying airs at the same time as by a single inspiration. But it was long before he published anything. In 1855 appeared the 'Légende du Juif Errant,' with illustrations by Gustave Doré; in 1859, his 'Muse Juvenile: Études littéraires, vers et prose,' and in 1860 'Jean Guêtré.' He lived to see the beginning of the reverses of the France he loved so well; dying at Lyons, July 25, 1870.

DUPPA, or DE UPHAUGH, BRIAN, an English prelate of the 17th century, was born in the year 1588, at Lewisham, in Kent, and educated successively at Winchester and Christ Church, Oxford, at the latter of which he was entered a student in May, 1605. He graduated as B.A. on the 6th of May, 1609; was elected a fellow of All Souls' College in 1612; proceeded M.A. on the 28th of May, 1614; and took the degrees of B.D. and D.D. by accumulation on the 1st of May, 1625. In due course he was ordained, after which he travelled on the Continent; and, having returned to his university, was elected one of the proctors in 1619. In 1629 he was made Dean of Christ Church; acted as vice-chancellor of the university for the years 1632 and 1633; and in 1634 was collated to the chancellorship of Salisbury, with which he held the prebend of Brixworth. In 1638 he was appointed tutor to Charles, Prince of Wales, and afterwards to his brother, the Duke of York; and was presented to the rectory of Petworth, in Sussex, on the 19th of May; on the 29th of which month he was elected to the bishopric of Chichester. In 1641 he was translated to the see of Salisbury, but received no benefit from his preferment on account of the suppression of episcopacy under the Commonwealth. He now shared for some time the fortunes of the king, and after his death retired to Richmond, in Surrey, where he concerted with the Bishop of Ely and others for the continuance of the episcopal succession. At the Restoration, Dr. Duppa was elected, September 10th, 1660, to the see of Winchester, in which he was confirmed on the 4th of

October following; and about the same time was made lord-almoner. He died at Richmond on the 26th of March, 1662, and was buried in Westminster Abbey, on the west side of the Confessor's chapel.

Bishop Duppa was not a voluminous author, and he has left little besides a few sermons and books of devotion. These comprise 'The Soule's Soliloquie: and a Conference with Conscience. As it was delivered in a Sermon before the King at Newport, in the Isle of Wight, on the 25th of October, being the monthly Fast, during the late Treaty,' 4to, 1648; 'Angels rejoicing for Sinners repenting; a Sermon on Luke xv. 10,' 4to, London, 1648; and 'Holy Rules and Helps to Devotion, both in Prayer and Practice,' 2 parts, 12mo, London, 1675, which was often reprinted, and of which an edition was published in 12mo, Derby, 1835. A French translation appeared as 'Traité de la Prière,' &c., 12mo, Berlin, 1696.

* DUPUY DE LÔME, STANISLAS CHARLES HENRI LAURENT, Chief Constructor of the French Navy, was born at Plomeur, near L'Orient, October 15, 1816. His father, an officer in the French marine, placed him in 1835 at L'École Polytechnique, where he studied for the profession of naval engineering. Next he came to England, where his study of iron shipbuilding led him to publish a 'Mémoire sur la Construction des Batiments en Fer,' 4to, Paris, 1844, with folio atlas of plates. Entering the service of the French government, he constructed the ship 'Le Caton' at Toulon; and, as Inspector of the Navy at the same place, prepared reports on the basins and factories necessary for building and repairing war steamers. In 1853 he was appointed first-class engineer. Called to Paris in 1857, he received the appointment of Director of Naval Materiel, or Chief Constructor of the Navy, under the Minister of Marine. He had already gained celebrity by his construction of the 'Napoléon' (1848-52), the first French war steamer at once large and swift; it worked well against adverse currents in the Dardanelles in 1853, on the breaking out of the war with Russia, and was adopted as the type of a new class of vessel. He was the first to convert war sailing vessels into steamers, by cutting them in twain amidships, and lengthening them, to make room for the steam machinery; he began this practice with the 'Eglau,' and continued it with many other ships. After having improved the dépôt of the 'Messageries' Steam Navigation Company at Marseilles, and introduced for them a new class of steamer, he began for the government the process of armour-plating ships of war, which, first applied to the wooden ship 'La Gloire,' was afterwards applied to iron ships of great size and strength. Being made a Councillor of State in 1860, he represented the French Admiralty in the Legislature. He wrote papers to the Académie des Sciences, and also a letter to the 'Times' newspaper, on the principles of naval construction as applied to ironclads; and on all such subjects he is regarded throughout Europe as the leading authority.

DUQUESNOY, FRANÇOIS, known as IL FIAMMINGO, a celebrated Belgian sculptor, was born at Brussels in 1594. The son of a sculptor, he learnt the art from his father, and early acquired so much skill as to be employed in the execution of the statue of Justice for the chief entrance to the Chancellerie of Brussels, two angels for the church of the Jesuits in the same city, figures of Truth and Justice for the façade of the Hôtel du Ville, Hal, and other public works. In 1619 he was sent by the Archduke Albert VI. to Rome, where he formed a friendship with Poussin, and under his influence and guidance devoted himself with ardour to the study of the works of classic antiquity. Duquesnoy soon acquired such renown by the grace with which he sculptured Cupids, bacchanals, and the like, as to be named the Modern Polycletus. Many of these were carved in ivory and in bas-relief. His relievi of children at play, Cupidons, and the like, are found in most great collections and are reckoned the most perfect examples of their class: indeed, nothing can well exceed their exquisite grace, playfulness, and charm of execution. But his chisel was employed on Christian as well as pagan themes. He executed several figures of saints which were much admired, and the pope, Urban VII., commissioned him to carve the colossal statue of St. Andrew and to ornament the baldachino of St. Peter's. These and other works were thought to have placed Duquesnoy at the head of the sculptors of his time. He was invited to Paris by Cardinal Richelieu to found there a school of sculpture, accepted the invitation, and after partial recovery from a severe illness, set out on the journey thither, but died on the way at Livorno, 1646. Eight years later, October 24, 1654, his brother Jérôme Duquesnoy (b. 1612), the pupil and imitator of François, was

condemned to be burned alive at Ghent for an abominable crime, when he is said to have confessed before his death to various atrocities, and amongst others to having poisoned his brother François; but considering the circumstances, and that he was probably tortured to extort confession, we may hope that his reason was affected at the time, and that the statement was not true. Dargenville, in his life of François Duquesnoy, gives a list of his chief works. (*Vies des Fameux Sculpteurs*.)

DURAN, DON AUGUSTIN [E. C. vol. ii. col. 682], was born on the 14th of October, 1789, at Madrid, and died in that city on the 1st of December, 1862.

DURHAM, JOSEPH, A.R.A., was born in London in 1821. He was a pupil of Mr. John Francis, and was afterwards for some time in the studio of Mr. E. H. Baily, R.A. Like most young sculptors, his early essays were classical and poetical in character, but he first attracted notice by his portrait-busts. A bust of Jenny Lind, exhibited in 1848, at once became popular, and being reproduced in parian, met with an extensive sale. Mr. Durham has since produced many imaginative statues and a few groups, but his chief employment, or rather, perhaps, his distinctive eminence, has been in portraiture. His exhibited busts include many well-known names, as General Sabine, Lord Romilly, Lord Palmerston, Charles Knight, J. P. Gassiot, &c., and they are almost invariably satisfactory as likenesses, and admirably chiselled. He has also executed statues of the Queen, and several of the Prince Consort, the most important being that for the Memorial of the Exhibition of 1851 in the gardens of the Horticultural Society. The statue of Sir Francis Crossley, placed by the townsmen in the park presented by Sir Francis to the people of Halifax, is one of his more celebrated works. He has also produced memorial statues of Caxton, Harvey (for the façade of the London University), Shelley, and others. Among his poetic works may be named 'The Parting of Paul and Virginia,' the statues of Hermione and Alastor for the Mansion House; Chastity, 1860; Peace, 1861; and 'The Lady of the Lake,' 1865. A series of bronze statuettes of boys cricketing, entitled 'British Sports,' has had great success as reproduced in parian. Mr. Durham was elected associate of the Royal Academy in 1866.

DYCE, REV. ALEXANDER [E. C. vol. ii. col. 691]. Mr.

Dyce published the last volume of his great book, 'The Complete Edition of the Works of Shakespeare' (6 vols. 8vo), in 1858. The text was declared to be produced on "the only true method," that of a strict adherence to the earliest quartos, but in 1864 he began a new edition (8 vols. 8vo, 1864-68), in which the text was, to use his own words, "altered and amended from beginning to end," whilst it "differed from the former edition as much in the notes as in the text." His first edition was conservative, his last conjectural—and neither is likely to be received as authoritative. In 1856, shortly after the poet's death, Mr. Dyce published 'Recollections of the Table Talk of Samuel Rogers,' a work that went through several editions, and occasioned some discussion on account of the personalities and acerbity of many of the anecdotes. In 1868 he completed an edition of the 'Dramatic Works of John Ford.' Mr. Dyce died at his residence, Oxford-terrace, Hyde Park, on the 15th of May, 1869; he was born at Edinburgh on the 30th of June, 1798. He bequeathed his fine library of 13,000 volumes, including the first folio and other rare editions of Shakespeare's plays, to the South Kensington Museum.

DYCE, WILLIAM, R.A. [E. C. vol. ii. col. 691]. Mr. Dyce continued to work at the frescoes in the Houses of Parliament, but only fitfully, and at length the state of his health compelled him to resign the commission, leaving the largest of the series, 'The Court of King Arthur,' unfinished. Mr. Dyce also executed a number of fresco paintings on the walls of All Saints Church, Margaret-street, but they have unfortunately already required extensive reparation or repainting, and those at Westminster do not promise to be much more permanent. To the Royal Academy exhibitions Mr. Dyce contributed few pictures in his last years. Among them were 'Titian preparing to make his first essay in colouring,' 1857; 'Contentment,' and 'The Good Shepherd,' 1859; 'St. John leading home his adopted Mother,' 'The Man of Sorrows,' and 'Pegwell Bay,' 1860; and 'George Herbert of Bemerton,' 1861, after which he ceased to exhibit. Mr. Dyce was an enthusiast in ecclesiastical church music, composed some pieces, took an active part in choral services, and was one of the founders of the Motett Society. He died at his residence, Streatham, Surrey, February 15, 1864. Mr. Dyce was Professor of the Theory of the Fine Arts at King's College, London.

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EACHARD, JOHN, an Anglican divine of the 17th century, was born in Suffolk, in or about the year 1636, and was educated at Catherine Hall, Cambridge, where he was admitted on the 10th of May, 1653. He graduated as B.A. in 1656; was elected to a fellowship on the 9th of July, 1658; and proceeded M.A. in 1660. In 1675 he was chosen master of Catherine Hall, and in the following year was created D.D. by royal mandate. He filled the office of vice-chancellor of the university in 1679, and for the second time in 1695. He died, at the age of 61, on the 7th of July, 1697, and was buried in the chapel of Catherine Hall.

Dr. Eachard's works include 'The Grounds and Occasions of the Contempt of the Clergy and Religion enquired into in a Letter to R. L.' [signed T. B.], 8vo, London, 1670, which gave rise to some discussion, and especially elicited 'An Answer to a Letter of Enquiry,' &c., 8vo, London, 1671, to which Eachard replied with 'Some Observations upon the Answer to an Enquiry into the Grounds and Occasions of the Contempt of the Clergy, with additions, in a second letter to R. L.,' 8vo, London, 1671; 'Mr. Hobbs's State of Nature considered: in a Dialogue between Philautus and Timothy. To which are added five Letters from the Author of the Grounds and Occasions of the Contempt of the Clergy,' 8vo, London, 1672; and 'Some Opinions of Mr. Hobbs considered in a second Dialogue between Philautus and Timothy,' 8vo, London, 1673. Eachard carried on his polemics with wit and humour, and Dryden was of opinion that by his "raillery and reason he had more baffled the philosopher of Malmesbury, than those who assaulted him with blunt, heavy arguments drawn from orthodox divinity, for Hobbes foresaw where those strokes would fall, and leapt aside before they could descend; but he could not avoid those nimble passes which

were made on him by a wit more active than his own, and which were within his body before he could provide for his defence." The works of Dr. Eachard have gone through many editions, both severally and collectively, of which the most complete is the edition of 'The Works of Dr. John Eachard, &c., with a second Dialogue on the Writings of Mr. Hobbes, not printed in any former edition; and some Account of the Life and Writings of the Author,' by T. D., 3 vols. 12mo, London, 1773-1774.

EASTLAKE, SIR CHARLES LOCK, P.R.A. [E. C. vol. ii. col. 694]. From the appointment of Sir Charles Eastlake as director of the National Gallery in 1855, he gave himself with rare devotion to the duties of the office. At home and abroad he sought out pictures worthy to form part of a national collection. If he erred at all, it was on the side of over-scrupulousness, yet his purchases were attacked in the journals and in Parliament with persevering enmity, but usually in entire ignorance. During the ten years of Eastlake's directorship 155 pictures were added by purchase to the collection, while in the previous 32 years only 96 pictures had been purchased; the details are given in Mr. Wornum's 'Catalogue of the Pictures in the National Gallery: British School,' under Eastlake, pp. 35-36. Sir Charles's purchases included such pictures as the Garvagh Raffaele, 'the Family of Darius,' by P. Veronese, and some most choice works by Fra Angelico, Pietro Perugino, Lippi, Pollajuolo, and other painters of a class previously unrepresented in the gallery. Sir Charles was accustomed to make an annual tour on the Continent for the purpose of acquiring pictures for the National Gallery, and in the course of that undertaken in the autumn of 1865 he was attacked by illness at Milan. Having somewhat recovered, he removed to Pisa, where

he had a relapse. After lying for two months unable to be carried farther, he died on the 24th of December, 1865, aged 72, he having been born on the 17th of November, 1793. His body was brought to England, and interred in Kensal-green cemetery. A brief but valuable 'Memoir of Sir Charles Lock Eastlake,' by Lady Eastlake, is prefixed to a volume of his 'Contributions to the Literature of the Fine Arts,' 8vo, 1870. A second volume of his 'Materials for a History of Oil-Painting,' was published in 1869. A pension of 300*l.* was in 1866 granted from the Civil List Fund to Lady Elizabeth Eastlake, "in consideration of the services rendered by her late husband to the Crown, and of his high attainments in art."

* LADY EASTLAKE (Elizabeth, daughter of Edward Rigby, M.D., of Norwich) is the authoress of the popular 'Letters from the Shores of the Baltic,' 1841; 'Livonian Tales and other Stories'; a translation of Kugler's 'Handbook of Italian Painting'; articles on Dress and Music in the 'Quarterly Review,' and reprinted separately; and a 'Life of John Gibson, R.A., Sculptor,' 1870, as well as of the memoir of her husband mentioned above. She also completed Mrs. Jameson's 'Sacred and Legendary Art.'

* EASTWICK, EDWARD BACKHOUSE, was born at Warfield, in Berkshire, in the year 1814, and was educated at Charterhouse School, London, and at Balliol and Merton Colleges, Oxford. He entered the service of the East India Company, and became so distinguished for his attainments in oriental philology that he passed as interpreter in five different languages, and secured his promotion to various offices of honour and responsibility. Returning to this country, he was appointed in 1845 to the professorship of Urdu in the East India College, at Haileybury, of which, in 1850, he became librarian. Whilst holding office at Haileybury he published 'A Concise Grammar of the Hindustani Language; to which are added Selections for Reading,' 12mo, London, 1847, second edition, enlarged, &c., London, 1858. He compiled for Murray's series of Handbooks 'A Handbook for India; being an Account of the Three Presidencies, and of the Overland Route; intended as a Guide for Travellers, Officers, and Civilians; with Vocabularies and Dialogues of the Spoken Languages of India,' 2 parts, 8vo, London, 1859; previous to which he had edited the 'Autobiography of Lutfullah, a Mohammedan Gentleman,' 8vo, London, first and second editions, 1857. On the 6th of June, 1860, he was called to the bar by the Society of the Middle Temple, and on the 1st of the following month set out to undertake the duties of H. M.'s chargé d'affaires at the court of Tehran; after his return from which, in 1863, he published the 'Journal of a Diplomat's Three Years' Residence in Persia,' 2 vols. 8vo, London, 1864. In June of the latter year he proceeded to Venezuela as Financial Commissioner of the General Credit Company for the Venezuelan loan of 1864; and, returning to this country in the last days of October following, contributed several sketches on Venezuela and its people to 'All the Year Round,' during parts of 1865 and 1866. The more substantial literary result of his mission was, however, his 'Venezuela; or Sketches of Life in a South American Republic; with the History of the Loan of 1864,' 8vo, London, first and second editions, 1868. Besides the foregoing works, Mr. Eastwick has contributed to literature editions and translations of various oriental writers, and especially a translation, partly in verse, of the 'Zartusht-Namah,' or Life of Zoroaster, from the Persian of Zartusht-Behram, which occurs as one of the Appendices to Dr. John Wilson's work on 'The Parsi Religion: as contained in the Zand-Avasta,' &c., 8vo, Bombay, 1843; he has also produced a translation of Franz Bopp's 'Comparative Grammar of the Sanskrit, Zend, Greek, Latin, Lithuanian, Gothic, German, and Sclavonic Languages,' 3 parts, 8vo, London, 1845—50, second edition, 3 vols. 8vo, London, 1856. Mr. Eastwick is C. B., and a member of many learned societies—as the Royal Society, the Society of Antiquaries, the Asiatic Societies of Great Britain and Paris, and of the Oriental Society of Germany. At the general election of 1868 he was sent to the House of Commons as representative, in the Conservative interest, of the associated boroughs of Falmouth and Penryn.

EBERHARD, JOHANN AUGUST, a German philosopher and divine, was born on the 31st of August, 1739, at Halberstadt. From 1756 to 1759 he was a student at the University of Halle, after which, becoming private tutor in the family of the Baron von der Hoorst, whom he accompanied to Berlin, he prosecuted his theological studies in the university of that city. In due course he was ordained, and for some time fulfilled the duties of a pastor at Charlottenburg. Having become an adherent of Semler, who is known as the father of what has been termed the theory of *accommodation* in theology, Eberhard took

the opportunity of propagating his views in a New Apology for Socrates, or the Final Salvation of the Heathen, 'Neue Apologie des Sokrates,' &c., 2 vols. 8vo, Berlin, 1772, third edition, 1788, French translation, by Dumas, 2 vols. Amsterdam, 1773—78. The 'New Apology,' from the publication of which is frequently dated the era of the introduction of German "Neology," went far in the direction of placing Socrates on a level with Christ. The book gave rise to much controversy, and was especially attacked by Ernesti and Lessing; whilst its author saw himself shut out from all chances of professional preferment. He therefore accepted in 1778 a professorship of philosophy at Halle; was named a privy councillor in 1805; and in 1808 took his degree as doctor of theology. He died on the 6th of January, 1809.

The works of Eberhard include a Universal Theory of Thought and Feeling, 'Allgemeine Theorie des Denkens und Empfindens,' 8vo, Berlin, 1776, new edition, 1786; a Preparation for Natural Theology, 'Vorbereitung zur Natürlichen Theologie,' 8vo, Halle, 1781; a History, in the form of Letters, entitled 'Amyntor; eine Geschichte in Briefen,' 8vo, Berlin, 1782; Theory of Literature and the Fine Arts, 'Theorie der Schönen Künste und Wissenschaften,' 8vo, Halle, 1783, third edition, 1790; a Universal History of Philosophy, 'Allgemeine Geschichte der Philosophie,' 8vo, Halle, 1788, second edition, 1796; an Attempt at a Universal Dictionary of German Synonyms, 'Versuch einer allgemeinen Deutschen Synonymik in einem kritisch-philosophischen Wörterbuche,' 6 vols. 8vo, Halle, 1795—1802; a Pocket Dictionary of German Synonyms, 'Synonymisches Handwörterbuch der Deutschen Sprache,' 12mo, Halle, 1802, twelfth edition, Berlin, 1861; a Manual of Aesthetics, 'Handbuch der Ästhetik,' 4 vols. 8vo, Halle, 1803—5, continued and enlarged by Maas, 12 vols. 1818—21, and by Gruber, 6 vols. 1826—30; and the Spirit of Primitive Christianity, 'Geist des Urchristenthums,' &c., 3 vols. 8vo, Halle, 1807—8. Eberhard was a frequent contributor to various periodicals, and especially to the General German Library, 'Allgemeine deutsche Bibliothek,' of Frederick Nicolai, which was the recognised medium of attack upon orthodoxy.

EBERT, FRIEDRICH ADOLF, an eminent German bibliographer, was born at Taucha, near Leipzig, July 9th, 1791. He commenced the study of theology, but directed his attention to general literature and obtained a post in the Leipzig library, and afterwards in that of the university. In 1814 he occupied the office of secretary in the Royal Library, Dresden, where he remained till 1823, when he was appointed librarian at Wolfenbüttel, but was recalled to Dresden in 1825 as librarian to the king, and in 1828 he became chief of the public library. His whole life was spent in libraries, and he died at his post: his death having been caused by a fall from a ladder as he was reaching some books on the library shelves, November 13th, 1834. Ebert had the reputation of being one of the best bibliographers of his day, and the book which will preserve his name fully justifies his fame: 'Allgemeines bibliographisches Lexikon,' 2 vols. 4to, Leipzig, 1821—1830. Of great value also are his accounts of the Dresden Library, and his elaborate work on the knowledge of Manuscripts—'Geschichte und Beschreibung der königlichen öffentlichen Bibliothek zu Dresden,' 8vo, Leipzig, 1822; and 'Zur Handschriftenkunde,' 2 vols. 8vo, Leipzig, 1825—1827. He also wrote several biographical and historical works, of which the most valuable are his life of Taubmann, his essays on intellectual culture in Upper Saxony during the Middle Ages, and his review of past and contemporary art and literature, 'Friedrich Taubmann's Leben und Verdienst,' 1814; 'Culturperioden des obersächsischen Mittelalters,' 8vo, Dresden, 1825; and 'Ueberlieferungen zur Geschichte, Literatur, und Kunst der Vor- und Mitwelt,' 2 vols. Dresden, 1825—1826.

ECK, or ECKIUS, JOHANN, so called from his native village of Eck, in Suabia, but whose patronymic was Mayer, was born on the 13th of November, 1446. He was a student of many universities, repairing to one after another in order to prosecute special subjects under their most eminent professors; and he thus became one of the most distinguished scholars and disputants of the age. He was professor of theology and vice-chancellor of the University of Ingolstadt, in Bavaria; and was for some time on terms of close friendship with Luther, whose 'Theses,' however, he attacked in his 'Obeliake' with a virulence which, being reciprocated, put an end to their intimacy. On the 27th of June, 1519, he commenced at Leipzig a discussion of more than a fortnight on Grace and Free-will, with Carlstadt, a friend and adherent of Luther, who at length, on the 4th of July, became the direct opponent of Dr. Eck on the sub-

jects, mainly of the papal supremacy and the authority of the Councils. A Report of these discussions was published under the title of 'Disputatio Excellentium D. Doctorum Johannis Eccii et Andrea Carolostadii, quæ cepta est Lipsiæ, xxvii Junii, AN. MDXIX. Disputatio secunda D. Doctorum Johannis Eccii et Andrea Carolostadii, quæ cepit xv Julii. Disputatio ejusdem D. Johannis Eccii et D. Martini Lutheri Angustiniani, quæ cepit, iii Julii,' 4to, Leipzig, 1519. Not long after Eck published his work on the primacy, 'Summariorum de Primatu Petri adversus Ludderum Joannis Eckii, Libri tres,' folio, Paris, 1521. In the beginning of 1520 he repaired to Rome, from which he returned, in September following, as the bearer of a bull of Leo X., in condemnation of the doctrines of Luther, which he caused to be fixed up in public places in Miessen, Merseburg, and Brandenburg. For the space of twenty years he confronted, in a long series of combats, generally, but not exclusively, in Germany, the champions of the Reformation. In 1530 he took part in the proceedings of the Diet of Augsburg, and argued against the Protestant Confession; and in 1541 disputed at Worms, and, by adjournment, at Ratisbon, with Melancthon and other divines, on the question of the continuance of sin after baptism. He died at Ingoldstadt, without the recompense of ecclesiastical dignity or emolument, in February, 1543; his last composition being a tract against the articles proposed at the Conference of Accommodation at Ratisbon.

His works, which are numerous, are chiefly controversial, turning on the subjects in dispute between papists and protestants—on the Mass, 'Ad Invictiss. Poloniæ Regem Sigismundum, de Sacrificio Missæ contra Lutheranos. Libri duo,' 8vo, Ingoldstadt, 1526; on the Retention of Images, 'De non tollendis Christi et Sanctorum Imaginibus, contra Hæresim Fælicianam sub Carolo Magno damnatam, et jam sub Carolo V. renascentem Decisio,' 4to, Ingoldstadt, 1522; on Purgatory, 'De Purgatorio contra Lutherum Hostesque Ecclesiæ, Libri quatuor, omnibus verè Christianis utilisimi,' 24mo, Antwerp, 1545. Besides these and other works of a like nature, Dr. Eck published a commentary on the prophet Haggai, and a considerable number of 'Homilies.' But that which obtained for him the greatest praise and performed the best service for his cause, was his Manual of Controversies, entitled 'Enchiridion Locorum communium adversus Lutheranos,' &c., 4to, Landshut, 1525, and Ingoldstadt, 1525; 12mo, Ingoldstadt, 1527; 12mo, Antwerp, 1535; 24mo, Cologne, 1561; and other editions. This was a particular apology for all the disputed tenets and practices of the Church of Rome; and treated the entire series of the subjects contested, from the sacrifice of the mass down to tithes, annates and canonical hours. It formed, in fact, to Eck's party, such an apology as the 'Common-places' of Melancthon was to the Reformers.

ECKERMANN, JOHANN PETER, the friend and secretary of Goethe, was born at Winsen on the Luhe, Hanover, in 1792. He served in the army against Davoust in 1813 and 1814, and obtained a situation in the War Office in 1815. He afterwards studied law, as well as philology and history at Göttingen. In 1822 he made the acquaintance of Goethe, through the medium of his 'Beiträge zur Poesie;' in 1823 became his private secretary in Weimar, and in 1830 accompanied his son to Italy. In 1827 he took his doctor's degree in Jena, and in 1838 was made privy councillor and librarian to the Grand Duchess of Saxe-Weimar. He died in Weimar, on the 3rd of December, 1854. Eckermann is chiefly remembered for his 'Gespräche mit Goethe,' published in three parts, Leipzig and Magdeburg, 1836—48, several times reprinted, and translated into most European languages. By the testamentary desire of Goethe he edited, conjointly with Reimer, an edition of Goethe's works, in 2 vols, large 8vo, Stuttgart, 1837; and another in 40 vols, 8vo, 1839—40.

ECKHART, MEISTER, celebrated as the father of German speculation, and one of the most remarkable mystics of the Middle Ages, was probably born at Strasburg, in the latter half of the 13th century. He became a Dominican; and was successively a student and professor of philosophy in the Dominican College of St. Jacob at Paris. He received his Doctorate in Theology from Rome, at the hands of Pope Boniface VIII., about the year 1300; and in 1304 and 1307 respectively was made provincial of his order for Saxony, and vicar-general in Bohemia, where he distinguished himself by an enforcement of reform and discipline. In 1320, at which time he held the office of prior of Erfurt, he had become obnoxious to the charge of heresy; and in 1327, when he was a resident at Cologne, without ecclesiastical cure or dignity, he found a bitter opponent in the person of Archbishop Heinrich,

BIOG. DIV.—SUP.

who accused him to the Holy See. Eckhart was condemned by a bull of Pope John XII.; and probably died at Cologne in 1329 or the preceding year. He was a bold and profound speculator, an eloquent preacher, and a learned writer. Very few of his writings have been preserved; but he is known to have produced *inter alia* a Commentary on Genesis; on Solomon's Song; on the Book of Wisdom; on the Gospel of St. John, and the Several Gospels for the ecclesiastical year; on the four Books of Sentences; a book of Sermons for the Church Seasons, and another upon the Saints.

His imputed heresy was in the direction of pantheism, and his system foreshadowed, in a very remarkable manner, the system of Hegel, who calls Eckhart the author of "a genuine and profound philosophy." Eckhart's theosophy, in fact, is a striking anticipation of modern German idealism. The "abstract ground of Godhead" of Eckhart answers almost exactly to Hegel's "Logische Idee." The Trinity of process, the incarnation ever renewing itself in men, the resolution of redemption almost to a divine self-development, constitute strong features of family likeness between the Dominican of the 14th century, and both Hegel and Fichte. Several works have lately been devoted to illustrating the life and philosophical position of Eckhart; and amongst these may be mentioned H. Martensen's 'Meister Eckhart. Eine theologische Studie,' 8vo, Hamburg, 1842; and Dr. Joseph Bach's 'Meister Eckhart, der Vater der Deutschen Speculation. Als Beitrag zu einer Geschichte der Deutschen Theologie und Philosophie der Mittleren Zeit,' 8vo, Vienna, 1864.

EDWARDES, MAJOR-GENERAL SIR HERBERT BENJAMIN, K.C.B. [E. C. vol. ii, col. 731]. As Commissioner of the Peshawur Frontier Sir Herbert Edwardes rendered excellent service to the Government of India. By his judicious measures he secured the amity of Afghan, and rendered the district, which was said to be a standing nuisance, one of the strongest places in India; and when the Sepoy insurrection broke out, so far were the warlike hill-men from sympathising with the rebels, that they came in unasked to beg for military employment, and Edwardes was enabled not only to maintain tranquillity in Peshawur, but also to form and despatch a corps of 5,000 hardy warriors to Delhi, besides sending others against a detachment of the mutineers who had advanced towards Peshawur. In 1859 Sir Herbert visited England, was made a Knight Commander of the Bath, and promoted brevet-colonel. He returned to India in 1862, as Agent for the Cis-Sutlej States and Commissioner of Umballah. Failing health compelled him to leave India in 1865, when he received an additional good-service pension of £100; in 1866 was created Knight Commander of the Star of India, and in 1868 was gazetted major-general in the East Indian Army. His constitution was, however, thoroughly shattered, and he died in London, November 23, 1868, at the early age of 49.

EGG, AUGUSTUS, R.A. [E. C. vol. ii, col. 742]. Mr. Egg was elected an academician in 1860. Delicate health interfered much of late with his painting, and led him to spend the winter months in Algeria. On one of these migrations he died at Algiers, March 26, 1863. Though he painted few pictures, some of his best were produced in these last years. The most powerful, though the most painful, was a social tragedy, in three parts, exhibited without a title in 1858, and selected by Mr. Egg as his representative picture for the International Exhibition of 1862. In 1859 he exhibited 'The Night before Naseby;' in 1860, his last picture, 'Katherine and Petruchio.' The National Gallery (British School) possesses his 'Scene from the Diable Boiteux' (No. 444), but it is an unfavourable specimen of his pencil.

EKEBERG, CHARLES GUSTAV, a Swedish traveller, was born in 1716. As a pilot and captain in the service of the East India Company of Sweden he visited many places in the far east. He suffered shipwreck, and many of the other hardships incident to a seafaring life. He was of an active and practical turn of mind, and did great service to his country as the first introducer of the tea plant into Sweden, and by his successful efforts to induce people to adopt vaccination as a means of warding off the attacks of small-pox. His labours procured him numerous honours, such as medals and pensions from many of the sovereigns of Europe. His best known writings are 'Moyen facile d'inoculer la petite variole,' and his account of his travels in 1770 and 1771, written in Swedish, and published in 1773. He also wrote numerous religious tracts. He died April 4, 1784.

ELGIN, JAMES BRUCE, 8TH EARL OF [E. C. vol. ii, col. 752]. In March, 1857, hostilities having been for some time

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carried on between England and China in a desultory manner, Lord Elgin was sent to China as ambassador extraordinary, and at the same time invested with large military as well as civil authority. On his arrival at Hong Kong he received intelligence of the Sepoy mutiny, and appreciating the serious nature of the affair, he at once decided to incur the responsibility of diverting the expedition to India. He accordingly sailed on the 2nd of July to Calcutta. He returned to China in September, and active measures were immediately resumed. Yeh, the Chinese Commissioner, resorted to various diplomatic shifts, but at length (December 16) Lord Elgin, in concert with Baron Gros, the French minister, sent in the ultimatum. The bombardment of Canton was commenced on the 28th of December, and on the 5th of January the English and French forces entered the city. Lord Elgin followed up the first success promptly, and having ascended the Peiho and threatened Peking, the Emperor of China expressed his willingness to treat. The commissioners met at Tien-tsin, and there treaties dictated by Lord Elgin, which for the first time placed foreigners on an equal footing with the Chinese, opened new ports for commerce, regulated transit and other duties, and fixed the relations between foreigners and natives, were signed by Lord Elgin and Baron Gros and the two Chinese commissioners, June 26, 1858. From China Lord Elgin proceeded to Japan, where, after some delay, he succeeded in concluding a satisfactory commercial and political treaty, which was signed at Yedo on the 26th of August, 1858.

On his return to England the services of Lord Elgin received honourable recognition. In the beginning of 1859 he joined the ministry of Lord Palmerston, as postmaster-general. In November, 1859, he was elected lord-rector of the University of Glasgow, his opponent being Mr. Disraeli. But Lord Elgin was not allowed to remain long at home. The Chinese had taken an early opportunity to break the terms of the treaty, and it being found necessary again to despatch a strong expedition to China, Lord Elgin and Baron Gros were sent with it to represent their respective governments. The Tartar troops fought bravely, but were everywhere defeated, and after the capture of the Emperor's summer palace, and preparations being made to bombard Peking, the Chinese submitted to the terms Lord Elgin demanded. A treaty was signed on the 26th of March, 1861, and Lord Elgin returned to England. After a brief repose he was appointed, February, 1862, to succeed Lord Canning as governor-general of India. To the duties of this high office he addressed himself with his usual energy, and had already initiated several important measures, when he succumbed to the climate acting on a frame weakened by overstrained exertion. He died at Dhurumsalla in the Punjab, Nov. 20, 1863.

ELIOT, GEORGE [EVANS, MARIAN, E. C. S. col. 508].

ELKINGTON, GEORGE RICHARDS, was born in Birmingham, October 17th, 1801. Being engaged in the metal-working trades of that town, he was one of the first to avail himself of the discoveries relating to the electro-deposition of metals. He patented processes of his own, and purchased the use of processes invented by others; until at length he established the art of electro-plating or electro-metallurgy as one of the regular trades of Birmingham. Commencing with a small number of helpers in 1839 or 1840, he extended his operations until he had a thousand persons in his employ. Table-plate formed the staple of his manufacture, as of others who have followed him in the same line; but he produced high-class works of art in trophies, vases, cups, presentation-plate, &c., some of them in oxidised silver. The Great Exhibitions of 1851, 1855, 1862, and 1867 contained fine specimens of his work, which obtained numerous prize medals. He employed French as well as English artists to produce his designs. Besides two large establishments in Birmingham and London, he was the owner of iron-mines and copper-works in South Wales. Mr. Elkington died at his residence, Pool Park, Denbighshire, September 22nd, 1865. The local journals, in announcing his death, spoke of him as "the inventor of electro-plating." This brought forward protests from Mr. Spencer and from the brother of the late Mr. John Wright of Birmingham, disputing the claim. There is no evidence that Mr. Elkington himself claimed to have invented the art, or discovered any of the principles on which it rests; he made many improvements in it, and succeeded, by the aid of capital, ingenuity, and energy, in founding a great department of manufacture. There was, in fact, no one inventor of electro-plating; the process was experimentally adopted by Spencer, Jacobi, Jordan, Wright, and others, before Elkington took it up; but Daniell had preceded them all, by producing an electro-copper deposit on a plate of platinum.

ELLESMERE, FRANCIS LEVESON GOWER, EARL OF [E. C. vol. ii. col. 765]. The Earl of Ellesmere died on the 18th of February, 1857. He had published in 1856 a volume of graceful poetry, the 'Pilgrimage and Other Poems,' and his Essays contributed to the 'Quarterly Review,' appeared shortly after his decease.

ELLIOTSON, DR. JOHN, [E. C. vol. ii. col. 766,] died on the 29th of July, 1868, at the age of 82.

ELLIS, SIR HENRY [E. C. vol. ii. col. 768]. With his resignation of the office of principal librarian of the British Museum in 1856, and that of director of the Society of Antiquaries in 1858, Sir Henry may be considered to have closed his public life, though he edited for the Rolls Series of the Chronicles of Great Britain the 'Chronica Johanne de Oxenides,' 8vo, 1859. Retaining almost to the last his remarkable health and vigour, he died at his residence, Bedford Square, on the 15th of January, 1868, in his 92nd year.

ELMES, JAMES, [E. C. vol. ii. col. 771,] died on the 2nd of April, 1862, in his 80th year.

EMERIC-DAVID, TOUISSANT BERNARD, a celebrated French archæologist, was born at Aix, in Provence, August 20, 1755. He was educated for the bar, and practised as advocate, but he did not like the profession, and gave it up on the opportunity offering of succeeding to the business of his uncle, printer to the parliament at Aix. In 1791 he was elected mayor of that city; but the Revolution destroyed his business and compelled him to seek safety in flight. When the death of Robespierre permitted him to return to Paris, he resumed the profession of advocate, but devoted his attention more to the study of art, the taste for which had developed itself during a residence in Italy, and which eventually entirely engrossed his attention. He had published some separate papers, when in 1800 he won the prize of the Institute by his essay entitled 'Recherches sur l'art statuaire considéré chez les anciens et les modernes,' but on its publication in 1805 Giraud, the sculptor, claimed to have furnished Emeric-David with the materials, and a lively controversy ensued as to the true authorship. M. Emeric-David's subsequent works sufficiently vindicate his capacity for the production of the treatise, whatever he may have owed to Giraud's suggestions. From 1809 to 1815 he represented the department of Bouches-du-Rhône in the Corps Législatif, and there voted with the majority for the deposition of Napoleon I., but on the restoration of the Bourbons withdrew from public life. In 1816 he was elected a member of the Institute. He was one of the members of the commission elected by the Academy to continue the 'Histoire Littéraire de France,' and he wrote many articles on the Provençal poets in vols. xvii.—xx.; but he knew little of the old Provençal literature, and his papers are of no value. He died on the 2nd of April, 1839. Besides the works cited and a large number of articles in magazines and encyclopædias, M. Emeric-David wrote 'Discours historique sur la gravure en taille-douce et sur la gravure en bois,' 8vo, Paris, 1809; 'Suites d'Études calquées et dessinées d'après Raphaël, accompagnée de gravures de ces tableaux, et des notices historique et critique,' 8vo and fol., 1818—20; 'Jupiter: recherches sur ce dieu, sur son culte et sur les monuments qui le représentent: précédé d'un essai sur l'esprit de la religion grecque,' 2 vols. 8vo, Paris, 1833. M. Emeric-David attached more value to this than to any of his previous works, as in it he set forth in full his theory of the ancient mythology, and he pursued and further illustrated the subject in corresponding essays on Vulcan (1837) and Neptune (1839). But his system found few adherents at the time, and it has long been obsolete; apart from the theory, however, the works have a substantial value. His 'Histoire de la Peinture au Moyen Âge,' 12mo, 1842, and 'Vies des Artistes Anciens et Modernes,' 12mo, 1853, are reprints of papers contributed by him to the 'Annales' and the 'Biographie Universelle.'

ENCKE, JOHANN FRANZ [E. C. vol. ii. col. 779]. This distinguished astronomer was stricken by apoplexy in 1859, and was consequently unable to devote much more attention to scientific research. In 1863 he obtained leave of absence from the Berlin Observatory, fearing that his health would give way; and in 1864 resigned his post altogether, after holding it forty years. These latter years had not, however, been unfruitful; for, out of the large number of 170 scientific papers written by him, and published between 1815 and 1862, nearly 30 appeared subsequently to the year 1856. They related to comets, telegraphic longitudes, star charts, the existence of a resisting medium in space, &c. He died at Spandau, near

Berlin, on the 2nd of September, 1865, three weeks before the completion of his 74th year.

ENDLICHER, STEPHEN LADISLAS, botanist, was born at Presburg, in Hungary, June 24, 1804. His earlier education was received in his native town, his later in Pesth and Vienna. He then entered the Church, but in the course of a few years he abandoned it, and in 1827 commenced his botanical and linguistic studies. In the following year he was charged with the care of the Imperial Library at Vienna. In 1836 he was elected to be the keeper of the Museum of Natural History at Vienna, and in 1840 was nominated the professor of botany in the university, as also director of the botanic gardens. Endlicher was deeply moved by the political troubles of 1848. The turn taken by them disturbed his mind, he fell into a state of gloom and died March 28, 1849. Endlicher's writings are mostly botanical, but a few relate to ecclesiastical literature. In botany his most important labours have been in connection with the systematic arrangement of plants. One of his earliest works was '*Flora Posoniensis*,' 8vo, 1830, in which he noticed the plants growing about Posen arranged according to the natural system. But this system is more elaborately followed out in his great work, '*Genera Plantarum secundum ordines naturales deposita*,' 4to, Vienna, 1836-1840. At the time of its publication it was the most important work on systematic botany; it has had much influence on more recent systems, and even now it is one of the most complete works on the subject. The arrangement and groupings were formed independently of De Candolle's and Jussieu's works. As a sort of companion work to his '*Genera Plantarum*,' he published a series of figures under the title of '*Ataxya Boravica*,' 4to, Vienna, 1837-40. The figures were drawn by Ferdinand Bauer, who died in 1826, and left numerous drawings rivaling in excellence those of his brother Francis Bauer. In conjunction with Unger, Endlicher wrote '*Grundzüge der Botanik*,' 8vo, 1843, in which he gives an outline of those views of plant structure upon which his classifications were mainly based. Amongst his other works we may notice his '*Prodromus Floræ Norfolkicæ*,' 8vo, 1833, an account of the plants of Norfolk Island, the figures in which were also drawn by Ferdinand Bauer; and his contributions to Von Martius's '*Flora Brasiliensis*.'

ENFANTIN, BARTHÉLEMY (more usually known as Le PÈRE ENFANTIN), the chief disciple of St. Simon, was born at Paris, February 8th, 1796. His father, a banker at Dauphiné, had him educated first at a Lycée, and then (in 1813) at the École Polytechnique. The youth joined with other students in defending Montmartre and St. Chaumont against the enemy during the investment of Paris in 1814. Incurring thereby the displeasure of the Bourbons, he had to turn to a new course of life; he became commercial traveller to a wine merchant, and visited Russia, Germany, and Belgium. In 1821 he became a banker's clerk at St. Petersburg. Returning to Paris in 1823, he accepted the post of cashier of the Caisse hypothécaire. So far his career had been analogous to that of many other young Frenchmen; but in 1825 his thoughts took a new bent. He formed a friendship with Olinde Rodrigues, and the two studied under St. Simon, adopted his ethical and socialistic views, and resolved to carry out his death-bed instructions. They founded a Société en Commandite, or Limited Liability Company, for the maintenance of a journal called '*Le Producteur*,' in which Enfantin wrote largely. He gradually formed a circle of adherents, and was at first supported by the French Liberals generally; but Benjamin Constant and others opposed him when they found to what an excess he carried his favourite doctrines. By the year 1828 he had organised St. Simonian public meetings and lectures, not only at Paris, but at Montpellier, Lyons, Metz, Dijon, and other towns. When the Revolution of 1830 took place he tried to give it a socialistic turn, and obtained the aid of many young men of remarkable ability, who brought the doctrines of their chief before the public in many forms through the agency of the '*Globe*.' Enfantin and Bazard were constituted '*Pères Suprêmes*' by their followers, but soon after began to diverge in their views; and Enfantin pushed the doctrines of St. Simonianism farther even than its founder would have done. Dividing mankind into two classes, the philosophical or calm, and the sensitive or mobile, he declared that the laws imposed by society are unjust towards the latter, especially in relation to the marriage tie. He preached new doctrines, and became the '*Living Law*,' a kind of Messiah, to his adherents, who comprised many women, but also some men who rose afterwards into note. At a model establishment founded at Ménilmontant, community

of goods was declared; a uniform dress was worn; manual labour, religious conferences, and symbolic ceremonies, occupied their attention; and Enfantin, as '*Le Père*,' was supreme over all. The authorities, in 1832, deemed it right to prosecute him on moral and social grounds; he asked to be defended as counsel by two female members of his community—Cécile Fournel and Aglaé St. Hilaire, on the ground that St. Simonianism is essentially a woman's question; but this was of course refused. He was sentenced to one year's imprisonment, and a fine of 100 francs. On his liberation from prison, Enfantin found his followers dispersed, and he made no effort to rally them, but with about a dozen followers withdrew to Egypt, where he stayed a couple of years. Returning to France, he resumed his ordinary place in society; became postmaster at Lyons; and in 1841 was appointed a member of the Scientific Commission to Algeria. He was a director of the Paris and Lyons Railway from 1845 to 1848; co-editor, with M. Duveyrier, of the journal '*Crédit*' in 1848-50; and afterwards director of the Lyons and Mediterranean Railway Company. He died May 31st, 1864.

Enfantin's published writings mostly related to the strange doctrines in which he was a believer. The chief were the following:—'*Economie politique*,' 8vo, 1831; '*Morale*,' 8vo, 1832, a work which was condemned the same year as immoral by the assize court; '*Le Livre Nouveau*,' 8vo, 1832; '*Correspondance philosophique et religieuse*,' 8vo, 1847; '*Correspondance politique*,' 1849; '*Colonisation de l'Algérie*,' 8vo, 1848; and '*La Vie éternelle passée, présente, future*,' 8vo, 1861. He also wrote some controversial pamphlets, and extensively in the journals.

ENGELBERTSZ, or ENGELBRECHTSEN, KORNELIS, an eminent Dutch painter, was the son of an engraver on wood at Leyden, where he was born in 1468. He was one of the first who introduced oil-painting into Leyden. He drew well and finished carefully, and in his designs showed more freedom from ecclesiastical precedent than his predecessors. Very few authentic works by him are known, many having been destroyed by the iconoclasts of the 16th century. The most important is a triptych with its predella, the centre-piece representing the Crucifixion, in the Hôtel-de-Ville, Leyden. The Museum, Vienna, has one, the Museum, Antwerp, two pieces, which are probably authentic: our National Gallery possesses a '*Virgin and Child*' (No. 714), of small size, by him. Engelbertsz died at Leyden in 1533. Lucas Van Leyden was his pupil.

ENTRECASTEAUX, JOSEPH ANTOINE BRUIN, D', was born at Aix in 1734, studied with the Jesuits of that town, and in his 15th year entered the navy. He took an active part in the war then going on, and soon after it was ended he served as commander of a vessel in the Levant, India, China, and other places. In 1791 he was appointed to the command of an expedition sent out by the French Government for the purpose of searching for La Pérouse. He left Brest on September 28. He was accompanied by several geographers and naturalists, amongst others, Beautemps-Beaupré, Willaumez, and Labillardière. The expedition passed by the Cape of Good Hope, and proceeded to the Australian seas. On July 20, 1793, Entrecasteaux died of dysentery and scurvy while making for the island of Waigiou. The command passed into other hands. In August, 1794, De Rossel, who then commanded, was taken by the English; and the natural history specimens and other fruits of the voyage were retained, but ultimately restored to the French at the intercession of Banks. This voyage added largely to our knowledge of the geography and natural history of the area between New Zealand and New Guinea. In addition to discovering new islands, reefs, &c., which were named after the ships or officers, New Caledonia, New Holland, the Louisiade Archipelago, numerous other places were more thoroughly surveyed than they had previously been. Accounts of this voyage have been given by Rossel, Labillardière, and Fréminville.

ERARD, SEBASTIEN, a fertile improver of the pianoforte and harp, was born at Strasburg, April 5th, 1752, and learned his father's trade of cabinet-making. When a lad of only thirteen he showed his daring by climbing the spire of Strasburg Cathedral, and bestriding the cross at the top. Left to his own resources at the age of sixteen, he went to Paris, where he gradually bent his attention to the mechanism of the clavecin—one of the forerunners of the pianoforte. He acquired so much skill that a manufacturer employed him to make a very superior clavecin throughout, with a proviso that the credit of the work should go with the employer and not with the workman. But the truth became known, and Erard's fame established. In 1777, after inventing a '*clavecin mécanique*,' he was patronised

by the Duchesse de Villeroi, who allowed him to fit up a workshop in her mansion. Here he made, for his patroness, the first pianoforte produced in France, with various improvements on others made in Germany and in England. Being joined by his brother Jean Baptiste, he established a factory in the Rue de Bourbon. His double-stringed, five-octave pianoforte came into great favour; his 'piano organisé' (piano and organ combined) displayed great ingenuity; while his transposing key-board, enabling a player to shift the whole range of notes one, two, or three semitones higher or lower, won for him the patronage of Queen Marie Antoinette. Another invention of his was the 'orgue expressif,' in which delicate effects were produced by varying the pressure of the finger. The Revolution caused him to remove to London, where he established a large manufactory of pianofortes and harps. After many improvements of a minor kind, he made the admirable combination known as the "double-action," which enables the harp to be played in all keys; the success was so great that he sold harps to the value of 25,000*l.* in the first year. He took out his first patent for pianos in 1794, returned to France in 1796, where he remained twelve years; returned again to London in 1808; patented his great harp invention in 1811; patented his chief improvement in pianofortes in 1823; and made a fine organ for the Chapel Royal at the Tuileries in 1827. Erard died at Passy, near Paris, August 5, 1831. The two large establishments at Paris and London were left by him to his nephew, Pierre Erard.

* ERCKMANN-CHATRIAN, the conjoint name under which the romances of two popular French writers, Émile Erckmann and Alexandre Chatrian, have been published.

* ÉMILE ERCKMANN was born at Phalsbourg, department of Meurthe, on the 20th of May, 1822. The son of a bookseller, he was educated in the college of his native city, and afterwards studied law at Paris, but having formed a close literary partnership with Chatrian, he in 1857 definitely withdrew from the bar.

* ALEXANDRE CHATRIAN was born at Soldatenthal, in Meurthe, December the 18th, 1826. He was for awhile at the college of Phalsbourg, but his friends having suffered from reverses in trade, he was sent, while still very young, to some glass works in Belgium. There he appeared likely to succeed, but he had set his mind on a literary profession, and, in opposition to the wishes of his friends, he returned to Phalsbourg, and became a tutor in the college. Here it was that in 1847 he and M. Erckmann formed so close a friendship. Of the circumstances which led MM. Erckmann and Chatrian to commence their literary partnership we are not informed; but as early as 1848 they began to write some feuilletons together in a local journal, and together made more than one dramatic effort. These, however, met with little success, and while M. Erckmann returned to the law, M. Chatrian took a situation in the office of the Chemin de Fer de l'Est.

They continued, however, to write in conjunction, and their fraternal perseverance met before long with ample recompence. The 'Illustre Docteur Mathéus, par Erckmann-Chatrian, 18mo, 1859, speedily became popular, and each succeeding volume of Alsatian story deepened the impression made by its predecessor. Still it was not till the publication of the 'Conscrit de 1813' that it was recognised that a new form of the romance of the people had arisen, and that it was the work of a master-hand. Its reputation soon spread beyond France, and now a new story by Erckmann-Chatrian is welcomed throughout the civilised world. The life of the French peasant and labourer, and especially those of Alsace and Lorraine, was never so truly and vividly depicted, and the truth and beauty of the narrative would have alone insured its success. But there was felt to be something beyond that. Although all the characters were persons in humble life, and the scene was laid for the most part in a distant province, the sentiment was one in which all would sympathise. Much as had been written on the horrors of war, the sufferings it caused to the poor and the mischiefs of the conscription were never so distinctly realised in all their extent and bearings; and then, amidst all the licence of the contemporary French romance, the tone of these was invariably pure, and they were at the same time outspoken in their evident truthfulness, and kind and catholic in spirit. The "romans nationaux" of Erckmann-Chatrian comprise the 'Histoire d'un Paysan' (the story of the French Revolution as related by a peasant); 'Madame Thérèse'; 'L'Ami Fritz'; 'Le Conscrit de 1813,' and its continuation, 'Waterloo'; 'La Guerre'; 'L'Invasion'; 'L'Homme du Peuple,' and 'Le Blocus.' They have also published 'Contes Fantastiques'; 'Contes de la Montagne'; 'Maître

Daniel Rock'; 'Contes des Bords du Rhins'; 'Le Fou Yégo,' and some others collected in the volume entitled 'Contes et Romans Populaires.' It is observable that native critics express themselves unable by any difference of style to distinguish between the parts of the stories written by the two authors.

ERCOLE DA FERRARA [GRANDI, ERCOLE, E.C.S.].

ERDMANN, JOHANN EDUARD, was born 13th June, 1805, in Wolmar, Livonia. He received his early education at home and in the Military Academy, in 1819 attended the gymnasium, and in 1823 studied theology at the university in Dorpat. He afterwards, for two years, went through a course of philosophy under Schleiermacher and Hegel in Berlin. In 1828 he returned to Wolmar, and the following year was elected pastor there. He returned to Berlin in 1832, took his degree in 1834, and in 1836 was made professor of philosophy in Halle. His principal work is an historical review of recent philosophy, 'Versuch einer wissenschaftlichen Darstellung der Geschichte der neuern Philosophie,' 3 vols, Leipzig, 1834—53. His other works include a dissertation on belief and knowledge, 'Ueber Glauben und Wissen,' Berlin, 1837; Nature and Creation, 'Natur und Schöpfung,' Leipzig, 1840; Body and Soul, 'Leib und Seele,' Halle, 1837; Elements of Psychology, 'Grundriss der Psychologie,' Leipzig, 1862; Elements of Logic and Metaphysics, 'Grundriss der Logik und Metaphysik,' Halle, 1864; Lectures on the State, and on Academic Life and Studies, 'Vorlesungen über den Staat,' Halle, 1861; 'Vorlesungen über akademisches Leben und Studium,' Leipzig, 1858; Psychological Letters, 'Psychol. Briefen,' Leipzig, 1863; Essays on various subjects, under the title of 'Ernstes Spiele,' Berlin, 1855: a treatise on dreams, 'Das Träumen,' Berlin, 1861, &c.

ERICSSON, JOHN [E. C. vol. ii. col. 800]. The statement of Mr. Ericsson's death in the above memoir was premature. He continued to be employed in designing vessels for the United States navy, and among others the celebrated *Monitor*; made various improvements in his own system, and engrafted on it some of the main features of that of Capt. Coles. He died in 1869.

ERICSSON, NILS, the most distinguished of Swedish engineers, was born in 1802. He was the son of Olaf Ericsson, an ironmaster at Langbanahyttan, Wernland, or Vermeland. Having adopted the profession of civil engineering, he was employed by the government in most of the public works relating to railways, canals, docks, &c. The State railways were planned by him on a principle too much neglected in England, i.e., that of proportioning the cost of the works to the probable amount of traffic. He constructed the docks at Stockholm and the canal from Saimen to the Gulf of Finland, and reconstructed the celebrated Trollhätten Canal. The Swedish newspapers announced the death of Nils Ericsson at the beginning of September, 1870.

* ERMANN, GEORG ADOLF, was born in 1806 at Berlin, and there studied those physical and natural sciences which he afterwards cultivated with so much success. At Königsberg he studied under Bessel, who formed so high an opinion of his abilities that he induced him to make a scientific expedition round the globe, and defrayed all the expenses. The principal object Erman was desired to pursue was the collection of facts relating to terrestrial magnetism. About this time (1828) Hansteen was travelling with the same object; and the two journeyed together as far as Irkutsk, in Siberia. Erman then proceeded onwards alone, traversing the eastern part of Siberia as far as Kamtchatka, then along the west coast of America, round Cape Horn, and along the east side to Rio de Janeiro; and, finally, from St. Petersburg to Berlin, which he reached in 1832. The materials thus collected were published in 'Reise um die Erde durch Nord Asien und die beiden Océane,' 7 vols, 1833—42, of which five were devoted to the descriptive, and two to the scientific details. In addition to this he has written largely upon numerous subjects in physical geography, more especially in connection with the Russian empire. Amongst others we may notice his contributions on the specific gravity of oceanic waters, the temperature of Siberia, the meteorology of Russia, terrestrial magnetism in France and Spain, &c. Many of his papers on Russia are given in the 'Archiv für wissenschaftliche Kunde von Russland,' of which he has been the editor since its commencement in 1841; and some occur in Poggenдорfs 'Annalen.' He wrote some papers on shooting stars and eclipses of the sun for 'Astronomische Nachrichten,' and has contributed to several other journals. At present he is professor of physics at the University of Berlin.

ERRARD, CHARLES, celebrated French painter, was born at Nantes in 1606. He was the son and pupil of Charles Errard (painter in ordinary to Louis XIII.), but in 1624 went to com-

plete his studies at Rome, where he remained several years, acquired a considerable reputation, and formed a friendship with Poussin. On his return to Paris he was much employed in painting religious pictures for altars, and in decorating the halls and staircases of various châteaux. Among his larger works of this kind were the great hall of the goldsmiths at Paris; the Palais Royal; the apartments of Cardinal Mazarin, and those of Anne of Austria at the Louvre; the theatre of the Tuilleries; and the châteaux of Fontainebleau, Versailles, and Saint-Germain-en-Laye. Errard was one of the twelve original members (*anciens*) of the Academy of Painting, but he is best remembered as the founder of the Academy of Rome. The plan of this institution—one which has had more influence than perhaps anything else on subsequent French art,—was devised by him and accepted by Colbert, who, in March, 1666, sent Errard to Rome, with twelve pupils, to organise and direct it. Though he formally resigned the presidency in 1683 on account of his age, Errard continued to direct the academy till his death, May 15, 1689. In conjunction with Chambray, Errard wrote a *Parallèle d'Architecture antique avec le moderne*, 8vo, Paris, 1666; and translated Palladio's *Architecture*, and Leonardo da Vinci's *Treatise on Painting*. Errard paid a good deal of attention to architecture, and the church of the Religieuses de l'Assomption in the Rue St. Honoré, Paris, was built from his designs, which were, however, modified by Cheret.

ERRINGTON, JOHN EDWARD, civil engineer, was born at Hull, December 29th, 1806. He first studied under an officer of Royal Engineers engaged on public works in Ireland; then under a railway surveyor, and then under Mr. Rastrick, the civil engineer. As assistant to Mr. Joseph Locke, he was actively engaged in the planning and execution of the Grand Junction Railway (Birmingham to Newton), the Glasgow and Greenock Railway, and Glasgow Harbour. The formation of an economical railway through a mountainous country from Lancaster to Carlisle proved to be an important work in connecting the English and Scottish lines, and brought high repute to Messrs. Locke and Errington. The Caledonian, the Clydesdale Junction, the Scottish Central, the Scottish Midland, and the Aberdeen railways all in turn engaged the attention of the firm. Mr. Errington, as engineer-in-chief, planned and executed the Yeovil and Exeter line. The railway bridges over the Thames at Kew, Richmond, and Kingston were from his designs. Mr. Errington, who joined the Institution of Civil Engineers in 1837, died July 4th, 1862.

ERWIN VON STEINBACH, a famous German mediæval architect, was probably a native of Steinbach, near Bühl, in Baden, though he is claimed by other towns of the same name. While yet young he was of sufficient eminence to be entrusted by Konrad von Lichtenberg, Bishop of Strasburg, with the completion of Strasburg Cathedral. The task assigned to Erwin appears to have been the completion of the nave, the erection of the tower and west front, and the ornamentation of the interior. The foundations were commenced by him in February 1276; the corner stone was laid with due ceremony May 25, 1277. Earthquakes, lightning, and other misfortunes are said to have hindered the progress of the undertaking, but Erwin laboured steadily on for seven-and-thirty years, and though he left the work far from finished, he lived to see it in so forward a state that its completion would be merely a labour of time and patience. How far he had carried forward the grand front is uncertain, but the design is no doubt in the main his. The upper part of the tower was added long after his death, and evidently differs considerably from what he intended. The parts which are understood to be by him, though objections may be taken to the details, place him among the greatest of the architects of the Middle Ages. Whether he built anything else is not known. He is said to have been a sculptor as well as an architect, and to have executed a tribune and other carvings, which were the most admired of any in the cathedral. He died at Strasburg, on the 17th of January, 1318. There is a contemporary statue of him in the cathedral, but he was buried in the cemetery of the chapel of St. John. A memorial was erected in his honour by Steinbach, in Baden, in 1845. Erwin's son, JOHANN, succeeded his father as overseer or architect of Strasburg Cathedral, and superintended the works till his death, March 18th, 1339. He was succeeded by Helz of Cologne. SABINA, the daughter of Erwin von Steinbach, attained celebrity as a sculptor. She executed many of the carvings of Strasburg Cathedral, especially those of the south porch. WENNING, a younger son of Erwin, built the collegiate church of Hasselbach in Baden, where his gravestone bears the date of 1330.

ESCHENBACH, WOLFRAM VON [WOLFRAM VON ESCHENBACH, E. C. vol. vi., col. 792].

ESCHRICHT, DANIEL FREDRIK, an eminent Danish zoologist, was born at Copenhagen, March 18, 1798. In 1825 he took his degree of Doctor of Medicine, and went to Nexø, in the island of Bornholm, in order to follow his practice. This seems to have been somewhat interrupted, owing to his being engaged by the State in making scientific journeys to various countries. In 1830 he became extraordinary, and in 1836 ordinary professor of medicine in the University of Copenhagen. His contributions to science consist of some elaborate and highly valuable investigations on whales, of some elucidations of human physiology, and more or less detailed accounts of entozoa and polyzoa. Amongst the more important may be particularised, *'Description de l'œil humain'*, 1843; *'Recherches Zoologiques, Anatomiques, et Physiologiques sur les Cétacés des Mers Septentrionales'*, 1849; *'Anatomisch-physiologische Untersuchungen über die Bothryocephalen'* in *'Nova Acta Acad. Cæs. Leop.'* xix, pp. 1—152 (1841); *'Undersøgelsen over Hvaldyrene'* (Researches on the Cetacea), in *'Det Kongelige Danske Videnskabskabernes Selskabs naturvidenskabelige og matematiske Afhandlinger'*, xi, pp. 1—378 (1845); xii, pp. 225—396 (1846); i, pp. 85—138 (1849); and his paper written in association with Reinhardt, *'Om Nordhvalen'* (*Balaena mysticetus* L.), in *'Det. Kong. Dans. Vid. Sels. Skrifter'*, v. pp. 433—589 (1861). He died on the 22nd of February, 1863. Just before his death he was preparing a new work on cetaceans, but he had not got beyond a fragment of the introduction, in which he deals, almost exhaustively, with the geographical distribution of these creatures. It appeared in the *'Ann. de Sciences Naturelles'* for 1864, pp. 201—224. His collection of crania of the races of men of Northern Europe was one of the best in existence.

ESENBECK, C. G. NEES VON [NEES VON ESENBECK, E. C. S.].

ESPY, JAMES P., an American meteorologist, was born about 1795. In early life he was occupied in teaching, but owing to his perusal of the works of Daniell and Dalton, he resolved to devote himself to the study of meteorology. He experimented and studied, and the results were given in lectures on meteorology, on which lectures he mainly relied for an income. He took an active part in organising the system of meteorological observation adopted in Pennsylvania. He worked out a theory of storms, which received considerable attention. It is developed in a series of papers contributed to the *'Journal of the Franklin Institute'* for 1831 and following years. He died at Cincinnati, Ohio, January 24, 1860.

* ESQUIROS, HENRI ALPHONSE, a French author who is favourably known in this country for the singular intelligence of English character which his works have displayed, was born at Paris in the year 1814. He made his first literary venture as the author of a volume of poems, entitled *'Les Hirondelles'*, 8vo, Paris, 1834, which he followed with two romances, *'Le Magicien'*, 2 vols. 8vo, Paris, 1837, and *'Charlotte Corday'*, 2 vols. 8vo, Paris, 1840, an illustrated edition, 4to, 1848, and in *'Les Veillées Littéraires Illustrées'*, folio, Paris, 1850. His next work was an anonymous one, *'L'Evangile du Peuple'*, 12mo, Paris, 1840, and as part of *'Les Veillées Littéraires Illustrées'*, folio, Paris, 1850, which, nineteen days after its first publication, was seized and destroyed as being a revolutionary and socialistic adaptation of the life of Christ, whilst its author was condemned, January 30th, 1841, to a fine of 500 francs, and to eight months' imprisonment. Upon this he wrote an apology for the work, which he called *'L'Evangile du Peuple défendu'*, 12mo, Paris, 1841; and as the literary results of his captivity, published *'Les Chants d'un Prisonnier'*, 16mo, Paris, 1841, and *'Souvenirs Politiques de Sainte Pélagie'*, 32mo, Paris, 1841. To these followed a series of small socialistic works on women, *'Les Vierges Folles'*, 32mo, Paris, first three editions, 1841; *'Les Vierges Martyres'*, 32mo, Paris, 1842; and *'Les Vierges Sages'*, 32mo, Paris, 1842. Some years afterwards he produced his *'Histoire des Montagnards'*, 2 vols. 8vo, Paris, 1847, and in *'Les Veillées Littéraires Illustrées'*, folio, Paris, 1850, Spanish translation, 8vo, Bogota, 1855; *'Paris, ou les Sciences, les Institutions, et les Mœurs au XIX^e Siècle'*, 2 vols. 8vo, Paris, 1847; a poem entitled *'Fleur du Peuple'*, 12mo, Paris, 1848; and *'Histoire des Amants célèbres de l'Antiquité'*, 8vo, Paris, vols. i. and ii. 1848, a work which was designed to extend to 6 volumes, and which was undertaken jointly by M. and Madame Esquiros, who were likewise associated in the production of *'L'Accusateur Public'*, folio, Paris, 1848, and *'Le Peuple'*, folio, Paris, 1848, of which four numbers and one number respectively were published. M. Esquiros now

became the editor of a journal at Marseille, and was elected to the Assemblée Nationale as representative for the department of Saône-et-Loire, in 1850, in which year he produced his treatise 'De la Vie future au point de Vue Socialiste,' 8vo, Marseille, 1850; which he followed with 'Histoire des Martyres de la Liberté,' folio, Paris, 1851, and 'Les Fastes Populaires, ou Histoire des Actes héroïques du Peuple et de son Influence sur les Sciences, les Arts, l'Industrie, et l'Agriculture,' 4 vols. 8vo, Paris, 1851—52. After the coup d'état of the 2nd of December, 1851, M. Esquiros was forced into exile, and resided successively in Belgium, Holland, and England. He devoted much time and sympathetic intelligence to a study of English life and the English people, the results of which he communicated from time to time to the 'Revue des Deux Mondes,' and afterwards gave them a substantive publication with the title of 'L'Angleterre et la Vie anglaise,' 4 vols. 12mo, Paris, 1859—64, English translation by Sir L. Wrexall, as 'The English at Home,' 2 vols. 8vo, London, 1861, second series, 1862, and third, 1863. The general elections for the Corps Législatif in 1869 recalled M. Esquiros to France, and he was chosen as the representative of the 4th Circumscription of the Bouches-du-Rhône. Upon the proclamation of the Republic on the 5th of September, 1870, he was appointed to be prefect of Marseille, where he was enthusiastically received, and where he applied himself at once to the task of raising volunteer reinforcements for the defence of the country.

The other works of M. Esquiros include 'La Néerlande et la Vie Hollandaise,' 2 vols. 12mo, Paris, 1859; 'Une Vie à Deux,' 4to, Paris, 1859; 'Les Moralistes Anglais. Pensées, Maximes, Sentences, et Proverbes, tirés des meilleurs Ecrivains de l'Angleterre,' &c., 12mo, Brussels, 1859; 'Cornwall and its Coasts,' 8vo, London, 1865; 'Religious Life in England,' 8vo, London, 1867; and 'English Seamen and Divers,' 8vo, London, 1868.

ESSEX, WILLIAM, an eminent painter in enamel, was the son of an enameller of watch-dials at Clerkenwell, where he was born August 1, 1785. Some early attempts at painting in enamel obtained him the favourable notice of Flaxman and other artists, and an introduction to Messrs. Rundell and Bridge, who employed him in executing enamel miniatures for jewellery. Some which he painted for them of George IV. procured him the appointment of painter in enamel to the king; an appointment he held successively under William IV. and her present Majesty, by whom he was largely patronised. Essex executed a great number of miniature portraits of distinguished personages with exceeding delicacy and refinement; but he perhaps acquired more celebrity by his copies in enamel of paintings after the old masters, and Reynolds, Lawrence, Wilkie, and other eminent English painters. Some of these are of considerable size, and admirably drawn, whilst the handling, as well as the colour, of the respective painters, is imitated with singular fidelity. His variety of imitative power, rare amongst enamel painters, is well shown in the 'Ecce Homo,' after Correggio, the so-called Gevarthus, of Vandyck, Reynolds's 'Strawberry Girl,' Wilkie's 'Cottage Toilet,' and Lawrence's, 'Master Lambton.' Mr. Essex, who retained his skill of hand till an advanced age, died at Brighton, on the 29th of December, 1869.

EUSTACE, JOHN CHETWODE, born about 1765, was educated at the Jesuit College, Stoneyhurst; entered the order; and, about 1795, was appointed professor of literature at the Roman Catholic College, Maynooth. Mr. Eustace wrote an elegy on the death of Burke, and some controversial pamphlets, but he is now only remembered by his 'Classical Tour through Italy, An. MDCCCII,' 2 vols. 4to, London, 1813. This was the first book of its kind in the language, and though it met with some censure, it was very successful, and secured for the author a high reputation. A second edition, 4to, was published in 1814, after which it was several times reprinted in 8vo, the 6th edition in 4 vols. appearing in 1821, and the 8th in 3 vols. in 1841. Eustace obtained his acquaintance with Italy and its antiquities during several visits and occasional residence as private tutor and guardian to some young members of Roman Catholic families. The book was valuable at the time of its publication, and may be referred to with advantage even now, but it has been in the main superseded by later works. Eustace was engaged in collecting materials for a Supplement when he was attacked with fever at Naples, and died there in 1816. The Supplement was completed by Sir R. Colt Hoare. Mr. Eustace wrote an account of a visit to Paris with one of his pupils, 'Letters from Paris to George Petre, Esq.,' 8vo, 1814.

EVANS, GENERAL SIR DE LACY, G.C.B. [E. C. vol. ii. col. 845]. Sir De Lacy Evans was gazetted general in 1861; he

had already received the distinction of Grand Cross of the Order of the Bath and Grand Cross of the Legion of Honour. He continued to represent Westminster and to take his place in the House of Commons until 1865, when increasing years warned him that it was time to retire from public life. He died on the 9th of January, 1870, aged 82.

*EVANS, MARIAN, distinguished as a novelist and poetess under the pseudonym of George Eliot. Miss Evans's first important literary venture was in a field far apart from that which later she cultivated with such eminent success, the translation, namely, of the much-canvassed 'Leben Jesu,' 'The Life of Jesus Critically Examined.' By D. F. Strauss. Translated from the fourth German edition, 3 vols. 8vo, London, 1846. This was followed by a translation of another remarkable German work, 'Das Wesen der Christenthums,' 'The Essence of Christianity.' By L. Feuerbach. Translated from the German by Marian Evans, 12mo, London, 1853. About this time Miss Evans is also said to have been engaged on the editorial staff of the 'Westminster Review,' and to have contributed critical accounts of books of the class indicated by the works above cited.

The earliest stories from her pen, so far as we know, were 'Scenes from Clerical Life,' 8vo, Edinburgh and London, 1858, which had previously appeared in 'Blackwood's Magazine.' The Scenes attracted considerable attention, and the firm yet delicate drawing of the principal characters was recognised by judicious critics, but the work can hardly be said to have made a very deep impression. 'Adam Bede' (3 vols. 8vo, 1859), however, was instantaneously successful. Speculation was rife as to the real author, and half-a-dozen claimants contended, personally or by their champions, for the honour. But while readers were in doubt and darkness as to the name and even sex of the writer, there was no doubt that in George Eliot England possessed a novelist of original genius. Adam Bede and his mother 'Lisbeth, the gentle semi-quakeress Dinah Morris, and above all, Mrs. Poyser, with her ready proverbs and quaint sententious sayings, were universally recognised as veritable creations, beings possessed of life, breath, and personality. It was felt that it was long since a novel had appeared of such assured simplicity of construction, quiet strength of diction, dramatic power, and sweetness of unobtrusive description, combined with purity of feeling, breadth of sympathy, imagination, pathos, and kindly humour. 'The Mill on the Floss,' 1860, had a severe ordeal to bear as the successor of 'Adam Bede,' but on the whole it sustained the trial bravely. 'Silas Marner,' 1861, was a vigorous and spirited, but less ambitious story, in a single volume. The authoress had seemingly reserved her strength for 'Romola,' 1863, a story of great and original power, but in quite a different line from its predecessors, the scene being Florence in the time of Savonarola—a story concerning itself with art and poetry, and which might have been a poem. But eloquent and beautiful as it is, it is not the kind of story to suit the ordinary novel reader, and it was far less popular than its predecessors, and is likely to remain so, whatever critics may say. In 'Felix Holt, the Radical,' 1866, the authoress returned to the scenes and personages of her first success, but here the peasants and working men moved in more stirring times, and were in a sterner mood, and altogether the story was of a more elevated tone of thought and feeling.

From these two the transition was easy to the narrative and dramatic poem. The 'Gipsy Queen,' which appeared in 1868, is poetry of a very high order of excellence, and contains many passages of great beauty, depth, and power, and much noble and subtle thought; but readers generally, remembering Adam Bede, pronounced it deficient in interest. Her latest production is 'Agatha: a Poem,' 8vo, London, 1869. 'Adam Bede' and the 'Mill on the Floss' have been translated into German by J. Freese, the former, 2 vols. Berlin, 1860, the latter, 2 vols. Berlin, 1861.

EVEREST, SIR GEORGE, a distinguished geodesical surveyor, was born at Gwerndale, Brecknockshire, July 4th, 1790. He entered the Military Academy at Woolwich, where he was much noticed by Dr. Hutton, the mathematical master; and in 1806 he went out to India as cadet in the Bengal Artillery. Whilst serving in Java, from 1813 to 1816, he was employed by Sir Stamford Raffles to survey that island. He was next engaged in establishing a system of semaphore signals or telegraphs, from Calcutta to the north-west of British India. The experience acquired in these services led to his being selected as assistant to Colonel Lambton, Superintendent of the Trigonometrical Survey of India. After this, for a time, he went to the Cape of Good Hope, where he detected an error in La Caille's measurement of an arc of the meridian; his papers on this subject, in the

Memoirs of the Royal Astronomical Society, led to a more accurate measurement of an arc by Sir Thomas Maclean. On the death of Colonel Lambton, in 1823, Everest was appointed his successor on the great ordnance survey of India. He completed an arc of the meridian to lat. $24^{\circ} 7' N.$; and the East India Company supplied him with the means for publishing the result of his labours, in 'An Account of the Measurement of the Arc of the Meridian between the parallels of $18^{\circ} 3'$ and $24^{\circ} 7'$; being a continuation of the grand Meridional Arc of India, as detailed by Lieutenant-Colonel Lambton in the volumes of the Asiatic Society of Calcutta,' 4to, London, 1830. After visiting England, Everest returned to India, with some fine surveying instruments made by Troughton; and in 1832 he commenced the prolongation of the arc to the Himalaya. This great work was finished in 1841, and was described in 'An Account of the Measurement of two sections of the Meridional Arc of India, bounded by the parallels of $18^{\circ} 3' 15''$, $24^{\circ} 7' 11''$, and $20^{\circ} 30' 48''$,' 4to, London, 1847. He gradually rose to the rank and title of Colonel Sir George Everest, and was elected member of several scientific societies. He died December 1st, 1866. Colonel Everest was the inventor of an instrument for taking angles in the field with great accuracy.

EVERETT, EDWARD, D.C.L. [E. C. vol. ii. col. 847]. In 1860 Mr. Everett was nominated by the Unionist party a candidate for the vice-presidency of the United States, but was not elected, and thenceforward confined his energy mainly to the furtherance of the moral and intellectual progress of his native State. He was the leader in the movement for the purchase of Washington's estate, Mount Vernon, and its preservation as national property. He died at Boston, January the 15th, 1865.

* EWALD, GEORG HEINRICH AUGUST, VON, one of the foremost biblical scholars in Europe, was born at Göttingen on the 16th of November, 1803, and was educated successively at the gymnasium and the university of his native city. In 1823 he became a professor at the Gymnasium of Wolfenbüttel; and in the same year produced the first fruits of his oriental learning, in the shape of a Critical Enquiry into the Composition of the Book of Genesis, 'Die Composition der Genesis. Kritisch untersucht,' 8vo, Brunswick, 1823. Having, through the recommendation of Eichhorn, his former teacher, received in 1824 a licence to lecture as repetent in the faculty of theology in his own university, he returned to Göttingen, where he was appointed, in 1827 and 1831 respectively, extraordinary and ordinary professor in the philosophical faculty, and in 1835 professor of oriental languages. After Eichhorn's death in 1827 he lectured on Old Testament Exegesis. In the years 1826, 1829, and 1836, he travelled, for the purpose of consulting various oriental manuscripts, to Berlin, Paris, and Italy; and during the same period published several works in oriental philology, 'De Metris Carminum Arabicorum Libri duo, cum Appendice,' &c., 8vo, Brunswick, 1825; 'Liber Wakedi de Mesopotamiæ expugnata Historia e codice Arabico,' &c., 4to, Göttingen, 1827; on some old Sanscrit Metres, 'Ueber einige ältere Sanskrit-Metra,' 8vo, Göttingen, 1827; 'Grammatica critica Linguae Arabicæ cum brevi Metrorum Doctrina,' 2 vols. 8vo, Leipzig, 1831—33; Lectures on Biblical and Oriental Literature, 'Abhandlungen zur biblischen und orientalischen Literatur,' 8vo, Göttingen, 1832; a Critical Hebrew Grammar, 'Kritische Grammatik der Hebräischen Sprache ausführlich bearbeitet,' 8vo, Leipzig, 1827; a Grammar of the Hebrew Language of the Old Testament, 'Grammatik der Hebräischen Sprache des Alten Testaments,' 8vo, Leipzig, 1828, second edition, essentially a new work, 1835, third edition, 1838, and greatly enlarged in successive editions up to the seventh, entitled 'Ausführliches Lehrbuch der Hebräischen Sprache des alten Bundes,' 8vo, Göttingen, 1863, English translation, by Nicholson, from the second German edition, 8vo, London, 1836; and a smaller Grammar for Schools, 'Grammatik der Hebräischen Sprache in vollständiger Kürze,' 8vo, Leipzig, 1828, the later editions of which, in 8vo, Leipzig, 1842 and 1855, and 8vo, Göttingen, 1862, are known as 'Hebräische Sprachlehre für Anfänger.'

The first act of the Duke of Cumberland, on his accession to the throne of Hanover in 1737, was the arbitrary repeal of the Hanoverian 'Staatsgrundgesetz,' or Constitution, against which measure seven professors—Dahlmann, Ewald, Albrecht, Gervinus, Weber, and the brothers Grimm—entered a solemn protest, which, being unavailing, they followed up by resignation. This step, which involved for the time being the destruction of the university, and its numerical weakness permanently, was honoured by the publication of a series of biographies, with portraits, of

the patriotic professors, 'Die Sieben Göttinger Professoren nach ihrem Leben und Wirken,' 8vo, Brunswick, 1838. Of the whole seven, none returned to his duties at Göttingen except Ewald, when the king, in the revolutionary year 1848, invited them back on honourable conditions. Leaving Göttingen on the 12th of December, 1837, he repaired to England, the libraries of which he frequented for the same purposes as those for which he had previously visited the libraries of the Continent; and in 1838 accepted a call to be ordinary professor of theology in the university of Tübingen. Whilst filling this office he published his translation of the Prophets, 'Die Propheten des Alten Bundes, erklärt,' &c., 2 vols. 8vo, Stuttgart, 1840—41, English translation, in part, comprising 'The Prophet Isaiah, chapters i.—xxxiii.,' 8vo, Cambridge and London, 1860; and commenced the issue of his History of the Jewish People, 'Geschichte des Volkes Israel,' 7 vols. 8vo, Göttingen, 1843—59, third edition, 1864, of which a partial translation by Professor Martineau was published as 'The History of Israel,' 2 vols. 8vo, London, 1867—69, second edition, 1869, which brought the history down to the Book of Judges, whilst another portion, the fifth volume, entitled 'Geschichte Christus und seiner Zeit,' was published in English as 'The Life of Jesus Christ,' 8vo, Cambridge and London, 1865, by the Rev. Octavius Glover.

In 1848, as we have seen already, Dr. Ewald resumed his intermitted functions at Göttingen, and published a pamphlet on his Departure from the University of Tübingen, &c., 'Ueber meinen Weggang von der Universität Tübingen, mit andern Zeitbetrachtungen,' 8vo, Stuttgart, 1848; since which time he has prosecuted his researches into special subjects of Biblical History and Criticism, having produced, as the result of his New Testament studies, a Translation and Exposition of the first three Gospels, 'Die drei ersten Evangelien übersetzt und erklärt,' 8vo, Göttingen, 1850; a Translation and Exposition of St. Paul's Epistles, 'Die Sendschreiben des Apostels Paulus übersetzt und erklärt,' 8vo, Göttingen, 1857; a Translation and Exposition of the Gospel, the Epistles, and the Apocalypse of St. John, 'Die Johanneischen Schriften übersetzt und erklärt,' 2 vols. 8vo, Göttingen, 1861—62. Dr. Ewald's other works include a Translation and an Introduction to the Song of Solomon, &c., 'Das Hohelied und der Prediger,' &c., 8vo, Göttingen, 1826; 'Commentarius in Apocalypsin Johannis exegeticus et criticus,' 8vo, Leipzig, 1828; the Poetical Books of the Old Testament, 'Die Poetischen Bücher des Alten Bundes, erklärt,' 4 vols. 8vo, Göttingen, 1835—37, second edition, with the modified title of 'Die Dichter,' &c., 1840—67, being a translation of the Books of the Psalms, Lamentations, Proverbs, Ecclesiastes, the Song of Solomon, and Job. In addition to the foregoing, Dr. Ewald has produced several works of a local, controversial, and political nature; and his contributions to oriental learning in various journals have been of great range and frequency. In 1837 he co-operated with other scholars in founding a valuable periodical entitled 'Zeitschrift für die Kunde des Morgenlandes,' which resulted in 1845 in the formation of the German Oriental Society. In 1849 he established the 'Jahrbücher der Biblischen Wissenschaft,' to which he was the chief, and sometimes the only contributor, and which he continued till 1865; and he has furnished learned disquisitions on Phœnician Inscriptions, on the Æthiopian Book of Enoch, and on the Sibylline Books, to the 'Göttinger gelehrte Anzeigen,' and especially to the Transactions of the Royal Scientific Society of Göttingen.

EWART, WILLIAM [E. C. vol. ii. col. 849]. Mr. Ewart continued to represent the Dumfries District of Burghs down to the Dissolution of 1868. He died at his seat, Broadless, near Devizes, Wiltshire, on the 23rd of January, 1869.

* EYRE, EDWARD JOHN, was born about 1817, in Yorkshire. When about 16 years of age he went to Sydney, commenced sheep-farming, and soon rose to opulence. He settled upon an estate which he had bought on the Lower Murray. He was appointed Protector of the Aborigines, and as such was engaged in settling the numerous disputes which arose between the natives and the colonists, a task which he executed with much tact. In 1839 he made an expedition into the interior of South Australia, but did not penetrate far. In 1840, he again tried to work his way north from Port Lincoln, but not succeeding, he made a journey of 1500 miles along the south coast of Australia, and ascertained the general absence of water-courses. After a visit to England in 1845, he was appointed lieutenant-governor of New Zealand, his brother, Sir George Grey, being governor. In 1854 he became lieutenant-governor of St. Vincent; in 1859-60, he was governor of Antigua. His health being impaired he returned to England, but in 1862 he

was called out again as governor at Jamaica. While at this post a rebellion broke out among the negroes in October, 1865, which he repressed by declaring martial law and executing or punishing the ringleaders. His measures were considered too severe and arbitrary by some persons; an inquiry was instituted, and Eyre himself was superseded. The committee of investi-

gation fully acquitted him of the charges brought against him, but as there was a great deal of ill-feeling prevalent, he was not reinstated in his post. On his return to England he was prosecuted on a charge of murder, and public subscriptions were raised on both sides in order to defray the legal expenses. This trial also resulted in his acquittal.

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FABER, or **FABRI**, **JOHANN**, a prelate of the Romish Church, known, from the title of his principal work, as *Malleus Hæreticorum*, was born at Leuckirchen, in Suabia, in the year 1478. He became a member of the Dominican order, and distinguished himself in several of the universities of Germany. In 1519 he received the appointment of vicar-general to the Bishop of Constance; and in 1526 that of confessor to Ferdinand, King of the Romans, and afterwards Emperor, who entrusted him with a mission to King Henry VIII. of England. He was much engaged in controversy against the leaders of the Reformation, especially against Luther, Zwingle, and Ecolampadius. His manner in argument was impatient and intemperate; and, amongst other indiscreet expressions, he is reported to have exclaimed, when hard pressed in a discussion with Zwingle, "that the world might very well live in peace without the Gospel." In 1531 he was preferred to the bishopric of Vienna, which gave occasion to Erasmus to say that, "though Luther was poor himself, he made his enemies rich." His death is alternatively stated to have taken place on the 21st of May, or the 12th of June 1541. The works of Dr. Faber include his '*Moscovitarum juxta Mare glaciale Religio*,' 4to, Basel, 1526, 8vo, Basel, 1541; '*Adversus Doctorem, Balthasarum Pacimontanum, Anabaptistarum nostri Sæculi primum Authorem, orthodoxæ Fidei Catholicæ Defensio*,' 4to, Leipzig, 1528; and '*Malleus Hæreticorum*,' folio, 1524, which was reprinted at Rome in 1569. He was engaged in a collective publication of a large portion of his works at the time of his death; and they were issued as '*Opera*,' &c., 3 vols., folio, Cologne, 1537-41. The first and second volumes were devoted to his sermons, containing especially a series of seven Discourses on Baptism; to a treatise entitled '*De Fide et bonis Operibus*;' and to a '*Confutatio gravissimi Erroris asserentis in Sacramento Altaris, post Consecrationem non esse totum et integrum Christum*,' which was also published separately in 4to, Leipzig, 1537. The third volume, issued in 1541, contained his Homilies, and a Treatise on the Miseries of Human Life, '*Homiliarum de Tempore et Sanctis, Centuria Prima*,' and '*Declamationes divinæ de humanæ Vitæ Miseria*,' the latter of which had been first published in folio, Augsburg, 1520.

* **FAED**, **THOMAS**, **R.A.**, was born in 1826 at Burley Mill, Kirkcudbrightshire. Following in the footsteps of an elder brother, he went to Edinburgh; became a student in the Trustees Academy; made himself favourably known by some drawings in water colours, and afterwards by oil paintings of Highland shepherds and other rustic homely subjects, and was elected Associate of the Royal Scottish Academy. Mr. Faed's great Scottish success, however, was made with his '*Sir Walter Scott and his friends at Abbotsford*,' 1849, which was engraved. Soon after this he settled in London, and in 1853 succeeded in catching the public eye by a picture in the exhibition of the Royal Academy, '*The Mitherless Bairn*.' Thenceforward he continued to furnish a continuous supply of pictures—some years one, in others many—in the same strain, setting forth in a manner that every one could understand and appreciate illustrations, painted in a broad, bright, clever, conventional way, of humble Scotch domestic life, Scotch piety, thrift, poverty, humour, sentiment; and every year he found his popularity increase. His pictures, among a hundred others, include such subjects as—'*The first break in the family*,' 1857; '*A Listener never hears gude o' himsel*,' 1858; '*My ain fire-side*,' and '*Sunday in the Backwoods*' (a Scotch emigrant family in their settlement), 1859; '*His only pair*,' 1850; '*From Dawn to Sunset*,' 1861; '*The Silken Gown*,' 1863; '*Baith Faithier and Mither*,' 1864; '*The Last of the Clan*,' 1865; '*Ere care begins*,' 1866; '*Homeless*,' 1869; '*When the day is gone*,' 1870. Mr. Faed was elected A.R.A. in 1861; R.A. in

1865. His elder brother, * **JOHN FAED** (born 1820) is also a painter of merit, but more appreciated in Scotland than in England.

FALCONER, **HUGH**, palæontologist and botanist, was born at Forres, in Elginshire, February 29, 1808, and belonged to the old Scotch family of the Falconers of Lethen and Halkerton. He studied first at the grammar-school of Forres, and afterwards at King's College, Aberdeen. In 1826 he took his degree of M.A. at Aberdeen, and then went to Edinburgh to pursue a course in medicine. Here Professor Graham stimulated his love for botany, and Professor Jameson for that of geology and zoology. In 1829 he took his degree of M.D.; and in the same year he was appointed an assistant-surgeon in the Bengal army; but being below the age of admission to duty he spent the few months which were thrown on his hands in assisting Dr. Wallich in the arrangement of his Indian herbarium; and in examining the collections of fossils in London, and some mammalian remains which were obtained from the banks of the Irawaddy river, by Mr. John Crawford. In 1830 Falconer proceeded to Calcutta, and at the first opportunity he examined the fossil bones from Ava in the museum of the Asiatic Society at that place, and the results were given in his first paper, entitled '*Note on certain specimens of animal remains from Ava*,' in '*Gleanings in Science*,' vol. iii. pp. 167-170 (1831). In the following year he was ordered to Meerut, near Delhi, and was charged with the care of some invalids who were about to proceed to the sanatorium of Landour, in the Himalaya Mountains. In his journey he passed through Suharunpore, where Dr. Royle had the superintendence of a botanic garden; and a strong friendship sprang up between them, which had an influence on Falconer's career. When Dr. Royle had leave of absence Falconer was appointed to officiate in his stead, and in 1832, when Dr. Royle left for Europe, the entire management was placed in Falconer's hands as superintendent. Suharunpore is situated in the country between the head waters of the Jumna and Ganges, and a little to the south of a low range of hills, which run in front of, and form a sort of step to, the great Himalaya range. This low range is formed of tertiary deposits, and was called the Sewalik Hills by our subject, a name which had been previously applied rather vaguely, and sometimes to the outer ridges of the true Himalayas. His earliest field explorations had for object the examination of these hills, and partly from some plant remains discovered by Lieutenant (now Sir Proby) Cautley, partly from the character and arrangement of the strata, he determined them to be tertiary. Soon after this conclusion had been arrived at he heard of some obscure fossils which led him to suspect that these strata contained osseous remains. In April, 1834, he found the carapace of a fossil tortoise, and this led to active and extensive operations being undertaken by himself and Captain Cautley, which resulted in the collection of a tropical fossil mammalian fauna of unrivalled richness and variety. It embraced several kinds of creatures related to the elephant, rhinoceros, hippopotamus, horse, camel, giraffe, and many others. Amongst the most striking forms were a four-horned ruminant, *Sivatherium*, and a gigantic tortoise, *Colossochelys Atlas*. There were also numerous birds, reptiles, and fishes. But Falconer and Cautley were sufficiently well versed in palæontology to determine the affinities of the remains found by them, and they lived far beyond the pale of scientific authorities and books. They wrote to Europe for the works of Cuvier and others, but the volumes never reached them. But these obstacles were overcome by dint of enthusiasm and perseverance. They collected specimens of all the animals of the district, and mounted their skeletons so as to facilitate the determination of the nature of the fossils. This work was carried on steadily

for years. Other things, however, also occupied Dr. Falconer's attention. In 1834 he recommended the culture of the tea-plant in India, and he spent some time in traversing the Sewalik hills and their neighbourhood in search of suitable sites. As superintendent he himself explored large areas for species of plants, and employed trained collectors for the same purpose; in which way he added largely to Indian botany. In 1837 he accompanied Burnes's second expedition to Cabul, but when they reached Peshawur he quitted the party, and went to Cashmere, where he lived for many months, busily occupied in making extensive natural history collections. In 1838 he explored the valley of Skuardo and the great glaciers descending from the Muztagh range; and returned to Cashmere by the valley of Astore, where he discovered *Narthex assafetida*, and determined it to be the true source of the assafetida of commerce. He worked his way back to Saharunpore through the Punjab, between which tract and Cashmere he discovered fresh evidence of the Sewalik group of beds. The collections formed in this journey filled nine carts, and comprised many new species of plants and mammalia, and hundreds of species of seeds and birds' skins. His incessant activity at all seasons subjected him to numerous attacks of illness, and his constitution was so weakened that he was obliged to return to Europe on sick leave in 1842. The collections he brought home comprised seventy large chests of dried plants, and forty-five cases (weighing in the aggregate five tons) of fossil bones. From 1843 to 1847 he lived in England. In 1840 Captain Cautley gave to the British Museum his collection of fossils, which had cost him ten years' labour, and filled 214 large chests, the carriage of which from India cost upwards of 600*l*. The whole series, or the great bulk of it, was in a chaotic state, and the leaders of the scientific world urged upon government the desirability of arranging and displaying it. Dr. Falconer was commissioned to do this, and to draw up a work illustrative of the specimens. This work was the 'Fauna Antiqua Sivalensis.' As fast as the specimens could be cleaned and fitted for exhibition, they were figured by Mr. Ford, and in the course of three years 9 parts of the work were issued, each containing twelve folio lithographic plates. The labour of preparing, comparing, and identifying the specimens was so great that little time was available for writing the letterpress; and in December, 1847, the further progress of the work was practically stopped, for Dr. Falconer was then compelled to return to India. On his return to India, he succeeded Dr. Wallich as superintendent of the Botanic Garden at Calcutta, and as such was the adviser to the government on all matters pertaining to Indian plants. He reported on the best means of preserving the teak forests; he recommended and did much towards promoting the cultivation of Cinchona plants in India; wrote reports on the shawls of Cashmere for the Official Catalogue of the Great Exhibition of 1851; on the cochineal insect of the Punjab, and on other subjects. In 1854 he undertook to arrange and catalogue the specimens in the Calcutta Museum, a work of unusual difficulty, owing to their being for the most part without date, place, or reference of any kind. His familiarity with Indian fossils greatly assisted him in reducing them to order. In 1855 he retired from the service, and returned to England, visiting the Crimea, the Holy Land, and other oriental places on his way home. He now renewed his palæontological researches; but his health compelled him to spend a large portion of his time in the south of Europe. In 1857 he communicated to the Geological Society an important paper 'On the Species of Mastodon and Elephant occurring in the fossil state in England.' The first part was published in the 'Quarterly Journal' of the Society for 1857; but the second was postponed pending the result of some investigations he was engaged in, and was not published until August, 1865. His attention was also largely given to other mammalian genera, such as *Rhinoceros*, *Plagiolax*, *Cervus*, *Spermophilus*, and others; to caves and their fossil contents; and to the antiquity of man. He took an active part in connection with the exploration of Brixham cave, the caves of Dordogne, and the caves of Gibraltar. It was on his return from this last locality in the beginning of 1865 that the diligence in which he was travelling through Spain broke down, and caused his exposure to severe wintry weather, for which his constitution was quite unfitted; the result was that he was attacked with rheumatism, which developed into disease of the heart and lungs, and brought him to his end on January 31, 1865. At the time of his death he was engaged in writing a work 'On Primeval Man,' for which he had special advantages. He was a member of numerous societies. He took great interest in the foundation of scholarships in the University of Edinburgh for deserving students in natural science, and since his death a

BIOG. DIV.—SUP.

'Falconer Memorial' has been provided, consisting of two busts—one placed in the rooms of the Royal Society, the other in the Museum of the Asiatic Society of Bengal at Calcutta,—and of a 'Falconer Fellowship' in the Edinburgh University. Dr. Falconer had a reputation for a depth and range of knowledge, which his published works scarcely seemed to justify. If, however, he published comparatively little, it was owing to his reluctance to commit himself to statements without having thoroughly satisfied himself of their accuracy. His palæontological writings, a large proportion posthumously published, have been brought together under the title of 'Palæontological Memoirs and Notes of the late Hugh Falconer, M.D., etc.,' 2 vols. 8vo, London, 1868, to which is prefixed a biographical sketch by the editor, Dr. Murchison; from which the preceding details have been derived. His voluminous botanical notes have been placed in the library connected with the Herbarium at Kew.

FARADAY, MICHAEL [E. C. vol. ii. col. 871], "Born September 22nd, 1791, Died August 25th, 1867," is the only inscription on a plain slab that marks the grave of this great man in Highgate Cemetery. The year before his death he wrote, "I have told several what may be my own desire; to have a plain simple funeral, attended by none but my own relatives, followed by a gravestone of the most ordinary kind, in the simplest earthly place." In addition to the notice in the E. C., a few personal particulars may be interesting here. They are derived from the outline contributed by Dr. Bence Jones, F.R.S., Secretary to the Royal Institution, to the obituary notices of deceased Fellows of the Royal Society, and it has the rare merit of making the subject of the notice speak for himself, the writer doing scarcely more than connect Faraday's language into a consistent whole. The notice is divided into a series of headings, giving the age of Faraday, with the date, the first being, "Æt. 1 to 12 (1791 to 1804)," the second "Æt. 13 to 19 (1805 to 1811)," the third "Æt. 20 (1812)," after which there are Notices, Extracts from Journals, Letters, &c., for every year down to "Æt. 75 (1867)." Dr. Bence Jones has also published the 'Life and Letters of Faraday,' in 2 vols. 8vo, 1869, and Dr. Tyndall, in a single volume, has given an account of 'Faraday as a Discoverer.'

Faraday belonged to a religious family of nonconformists, known as Glasites, or Sandemanians, their leading doctrine being that the revealed will of Christ should be the supreme and only law, not only in church questions, but in every thought, word, and deed. Faraday held this doctrine throughout his life, as though it had been a special revelation to himself.

Faraday was born at Newington, in Surrey, but his father, obtaining work as a blacksmith in Welbeck-street, went to live in Gilbert-street, but shortly after removed to rooms over a coach-house in Jacob's Well Mews, Charles-street, Manchester-square, where Michael lived for nearly ten years. He has pointed out where he played at marbles in Spanish-place, and where he took care of his little sister in Manchester-square. His education consisted of little more than the rudiments of reading, writing, and arithmetic. At the age of thirteen he was placed in a bookseller's shop, No. 2, Blandford-street; in October, 1805, he was apprenticed to the master of the shop, Riebau, as a bookbinder and stationer, no premium being given. Among the books which Faraday had to bind was Mrs. Marcet's 'Conversations on Chemistry,' his first instructor, while the electrical treatises in the 'Encyclopædia Britannica,' which he was also employed to bind, taught him the rudiments of the science in which he made so many important discoveries. In his scanty leisure he contrived experiments in chemistry and electricity, and in 1810—11 he attended lectures on physics given by Mr. Tatum in Dorset-street, Fleet-street, paying one shilling for each lecture. He also studied perspective, from Taylor's work on that subject. In Tatum's lecture-room he became acquainted with several persons who lent him books, and took interest in his experiments.

He now felt an intense desire for scientific occupation, even though of the lowest kind, and this, he says, "induced me whilst an apprentice to write, in my ignorance of the world and simplicity of my mind, to Sir Joseph Banks, then President of the Royal Society. Naturally enough, 'No answer,' was the reply left with the porter." The very different behaviour of Sir Humphry Davy is described in the original memoir. On the 1st of March, 1813, Faraday was engaged as assistant in the laboratory of the Royal Institution at a salary of 25*s*. a week, with two rooms at the top of the house. Faraday continued his connection with the City Philosophical Society, founded in 1808 at Mr. Tatum's house, consisting of thirty or forty persons, who met every Wednesday evening for mutual instruction. This

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society was very useful to the members, some of whom adopted, with Faraday, a mutual improvement plan. "It consisted, perhaps, of half-a-dozen persons, who met of an evening to read together, and to criticise, correct, and improve each other's pronunciation and construction of language. The discipline was very sturdy, the remarks very plain and open, and the results most valuable. This continued for several years."

In October, 1813, Faraday accompanied Sir Humphry Davy through France, Italy, Switzerland, the Tyrol, Geneva, &c., and returned in April, 1815. His letters and journal contain some remarkable passages and some interesting particulars respecting Sir Humphry and Lady Davy. Soon after his return his salary was raised to 30*s.* a week. In January, 1816, he began a course of seventeen lectures on chemistry at the City Philosophical Society, and his first scientific paper was published in 'The Quarterly Journal of Science.' Later in life, when collecting his 'Experimental Researches on Chemistry and Physics,' he reprinted this paper, which was an account of an analysis of native caustic lime, he says: "I reprint this paper at full length; it was the beginning of my communications to the public, and in its results very important to me. Sir Humphry Davy gave me the analysis to make as a first attempt in chemistry, at a time when my fear was greater than my confidence, and both far greater than my knowledge; at a time, also, when I had no thought of ever writing an original paper on science. The addition of his own comments, and the publication of the paper, encouraged me to go on making, from time to time, other slight communications, some of which appear in this volume. Their transference from the 'Quarterly' into other journals increased my boldness, and now that forty years have elapsed, and I can look back on what successive communications have led to, I still hope, much as their character has changed, that I have not, either now or forty years ago, been too bold."

About this time Faraday was incessantly employed, as appears by a letter written in February, 1816, in which he says:—"It is now 9 o'clock p.m., and I have just left the laboratory and the preparation for to-morrow's two lectures. Our double course makes me work enough; and to them add the attendance required by Sir H. in his researches, and then if you compare my time with what is to be done in it, you will excuse the slow progress of our correspondence on my side." In consideration of the additional labour caused by Mr. Brande's lectures in the laboratory, his salary was increased to 100*l.* per annum. In the following August, when Mr. Brande left London, he gave the 'Quarterly Journal' in charge to Faraday. In 1818 he had six papers in this journal, but the year 1820 was one of the most important of his life, for in this year his first paper was read to the Royal Society, on two new compounds of chlorine and carbon, and on a new compound of iodine, carbon, and hydrogen. In this year, too, he proposed to the sister of his friend, Mr. Edward Barnard, of Paternoster-row, and having obtained permission to bring his wife to the institution, was married on the 12th of June, 1821. Faraday desired that the day should be considered just like any other day, and some of his relations felt hurt at not being asked to the wedding. As previously arranged by himself, "there will be no bustle, no noise, no hurry occasioned even in one day's proceeding. In externals, that day will pass like all others, for it is in the heart that we expect and look for pleasure."

In this year he published an account of some experiments on electro-magnetism, which now belong to science, but at the time they were supposed by some to have interfered with an inquiry on which Dr. Wollaston was engaged, so that when Faraday became a candidate for admission into the Royal Society, there was some opposition to his election, and Davy even requested him to take down his certificate. Faraday replied, that "he had not put it up; that he could not take it down, as it was put up by his proposers." At length, however, the opposition was withdrawn, and Faraday was elected January 8, 1824. He was also the original secretary of the Athenæum Club; but finding the occupation to interfere with his pursuits, he resigned in May, 1824. About this time he was associated with Mr. Brande in the delivery of the morning course of chemical lectures at the Institution, and in 1826 he was relieved from the duty of chemical assistant at the lectures.

Faraday's position as an original inquirer and lecturer was now fully established, but he preserved the freshness and simplicity of his character, as appears by a letter from Mrs. Faraday's brother, who frequently dined at the Royal Institution. He says, "After dinner we nearly always had our games, just like boys—sometimes at ball, or with horse chesnuts instead of

marbles, Faraday appearing to enjoy them as much as I did, and generally excelling us all." In 1831, the first series of 'Experimental Researches in Electricity' was read before the Royal Society, a work which was continued to 1856, and afterwards published separately in four volumes octavo. In order to find time for this investigation, Faraday declined a large amount of highly remunerative work, as an analytical chemist and scientific adviser, which was offered to him. Some idea of the amount of self-denial thus required will be gained from the report of a committee of the Royal Institution on the salaries of its officers in December, 1832. "The committee are certainly of opinion that no reduction can be made in Mr. Faraday's salary, 100*l.* per annum, house, coals, and candles, and beg to express their regret that the circumstances of the Institution are not such as to justify their proposing such an increase of it as the variety of duties which Mr. Faraday has to perform, and the zeal and ability with which he performs them, appear to merit." In 1835 Faraday's scientific services attracted the attention of government, and it was proposed to give him a pension. In an interview with Lord Melbourne, his lordship is said to have expressed his opinion that the system of giving pensions to literary and scientific persons was a piece of gross humbug, whereupon Faraday retired, and wrote to Lord Melbourne a letter in which he says:—"I could not, with satisfaction to myself, accept at your lordship's hands that which, though it has the form of approbation, is of the character which your lordship so pithily applied to it." Lord Melbourne had the good sense to write to Faraday a letter of explanation which amounted to an apology, and the pension was granted on the 24th of December, 1835. In 1836 Faraday was appointed adviser to the Trinity House, on the condition that the appointment should not involve anything like periodical routine attendances, but only occasional consultation. He held this post during thirty years.

We get a further glimpse of Faraday's domestic life from Miss Reid, a niece of Mrs. Faraday's, who resided during some years at the Institution. She says, "He was fond of all ingenious games and he always excelled in them. For a time he took up the Chinese puzzle, and after making all the figures in the book, he set to work and produced a new set of figures of his own." He also amused himself with papyro-plastics and made a chest-of-drawers, pigeon-house, &c. When dull and dispirited, his wife used to take him to Brighton or somewhere out of town. "Once they had very wet weather in some out-of-the-way place and there was a want of amusement, so he ruled a sheet of paper and made a neat draught-board, on which they played games with pink and white lozenges for draughts." He was also fond of bagatelle, "he never missed seeing the wonderful sights of the day—acrobats and tumblers—giants and dwarfs;" he was also fond of the theatre.

Faraday often complained, after he had reached fifty years of age, of giddiness and want of memory, but he was greatly relieved by rest and travel and change of air; nevertheless he continued to perform first-rate scientific work. In 1858, Prince Albert offered him a house on Hampton Court green, but as it required repair, he expressed some doubt as to whether he could afford the expense, when the Queen undertook everything that was necessary, and Faraday took up his abode there. In 1860, he gave his last course of Juvenile Lectures 'on the chemical history of a candle,' and on the 20th of June, 1862, he gave his last Friday evening discourse on 'gas-furnaces.' This year he paid particular attention to the magneto-electric light, proposed for light-houses. He was also examined at great length by the public school commissioners, and strongly recommended the study of natural science as a part of education. When asked at what age physical science should be introduced, he said, "I have never found a child too young to understand intelligently what I told him." In 1865 he resigned his office at the Trinity House, and also his position at the Royal Institution, as director of the laboratory. In 1866, Faraday's favourite assistant, Anderson, died, and at length, in 1867, at the age of 75, died "this blacksmith's son from Jacob's Well Mews, full of religion and gentleness, genius and energy, who searched for and trusted to facts in his experimental researches, and thus left to science a monument of himself that may be compared even to that of Newton."

At the request of the Chemical Society, M. Dumas, the personal friend of Faraday, delivered in the theatre of the Royal Institution, an eloquent *éloge* in the French language, and the council of the Chemical Society founded a Faraday Lectureship. The members of the Chemical Society met at dinner on the

occasion of the inaugural Faraday lecture by M. Dumas, and there was also a meeting at the Royal Institution, under the presidency of H.R.H. the Prince of Wales, for the purpose of considering what measures should be taken for the promotion of a memorial, when it was resolved that a subscription not exceeding five guineas in amount from any one person, be made for the provision of a public memorial to Faraday. A large sum of money was collected, which it is proposed to spend in the production of a statue to be erected in St. Paul's Cathedral or in the British Museum. An appeal was made to the Government, but as Faraday was only a civilian, there was no precedent for contributing anything from the public purse. It was felt, and is still felt, that a more appropriate memorial would be a Faraday College, in which poor boys in poor schools who display an unusual amount of talent might be collected together and trained up in science.

FAREL, GUILLAUME, known as the pioneer of the Reformation in Switzerland, was the son of a gentleman of Dauphiny, and was born at Farel, or Fareau, near Gap, in the year 1489. He was educated at home as a strict adherent of the Romish Church; and, contrary to the wish of his father, who intended him for a military career, he elected to devote himself to a life of study, and about the year 1510 repaired to the University of Paris. After long and severe mental disquietude, he accepted the doctrine of salvation by grace, then propounded by Lefèvre, the Doctor of Étapes, by whose recommendation he became a teacher in the College of Cardinal Lemoine, one of the four principal houses of the theological faculty of Paris, and equal in rank to the Sorbonne. In 1521 he received an invitation from Briçonet, Bishop of Meaux, who was favourably inclined to the Reformation, to preach in that city, where he boldly propagated the new opinions. In 1523, in consequence of the persecution which was commenced at Meaux by the Franciscans, Farel retired to Strasburg, where he was received by Bucer and Capito, as he was afterwards by Zwingle at Zurich, by Haller at Berne, and by Eccolampadius at Basel, where in 1524 he publicly defended theses in opposition to the doctrines and usages of the Papists. Being obliged to quit the city, he undertook the evangelisation of Montbéliard, under the protection of the Duke of Württemberg, the lord of that place. In 1528 he was commissioned by the Council of Berne to expound the Scriptures to the people of Aigle and its neighbourhood, and extended his labours to Lausanne and Neuchâtel, and afterwards to Geneva, where he openly attacked the tenets of the Papacy. He was obliged to retire from Geneva, however, in consequence of ecclesiastical opposition; but was recalled in 1534, when the inhabitants were inclined to look with greater favour upon the Reformation. Being banished once more from Geneva, in 1538, on account of his contumacy against the decrees of the Synod of Berne, he retired to Neuchâtel, where, with inconsiderable intervals, he exercised his ministry for the rest of his life, and where he died on the 13th of September, 1565. His works, which are not voluminous, include 'Theses,' published at Basel, in German and Latin; 'Disputatio Bernæ habita,' 1528; 'Epistre envoyée au Duc de Lorraine,' 12mo, Geneva, 1543; a book against libertines, entitled 'The Sword of the Spirit,' 1550; 'Substance and brief Declaration necessary for all Christians,' 1552; and a 'Treatise of the Blessed Sacrament of the Lord, and of His Testament,' 1553. The life and labours of Farel have been the subject of several works of recent issue in Germany; and amongst the French and English works conversant about him may be mentioned 'Farel. Notice par Henri Monod,' 8vo, Paris, 1866; a 'Life of William Farel; or, Life in Action,' &c., 12mo, London, 1848, by "Philos;" and the Rev. W. M. Blackburn's 'William Farel; the Story of the Swiss Reform,' 8vo, Edinburgh, 1867.

FARINELLI, whose real name was CARLO BROSCHI, one of the most celebrated singers that ever lived, was born at Naples, January 24th, 1705. Evincing at an early age a taste for music, he was subjected by his father to an outrage against nature, as a means of obtaining or preserving for him that peculiar kind of soprano or feminine voice which was at that time so much admired in Italy. Having studied music under Porpora and Pistocchi, young Farinelli made his début at the Teatro Alberti, where he at once produced a great sensation by playing female characters—women at that time being forbidden to appear on the stage in the Roman theatres. He warbled a flute composition in competition with the greatest flautist of the age, and won the contest by his marvellous beauty of tone and rapidity of execution. For twelve years he was quite the rage in Italy, meeting with extraordinary success at all the principal theatres and opera houses. In 1734

there was a remarkable rivalry in London: Farinelli at the Lincoln's Inn Theatre, under Porpora; against Caffarelli at the Haymarket, under Handel. A story is told that Caffarelli himself admitted that the perfection of singing could be heard only from his great rival. After earning 15,000*l.* in three years in England, Farinelli went for a time to Paris, where he was in immense favour with the court of Louis XV. Philip V. of Spain being affected with melancholy, his Queen invited Farinelli, in 1737, to come to Madrid, where his singing was more beneficial to the monarch than any medical aid. This led to the bestowal of more honours and influence than were ever before or since enjoyed by a singer. During more than twenty years—first under Philip V., and then under Ferdinand VI.—Farinelli lived at the Spanish Court, receiving a munificent allowance, singing to the King and Queen whenever required, managing an Italian company at the Palace, and possessing great influence in the distribution of Court favours. Dismissed by Charles III. in 1762, he retired to Bologna, built a beautiful mansion, and resided peacefully there. He encouraged Martini to write his History of Music, and collected the best library of music known to that day. He died July 15, 1782. Dr. Burney described Farinelli as being the most exquisite and perfect singer ever known; while the singer was credited by other writers with many kindly and estimable qualities.

FARINI, LUIGI CARLO, an Italian physician, statesman, and historian, was born at Russi, in the province of Ravenna, on the 22nd of October, 1812. He was educated at the University of Bologna, where in 1831 he carried off the highest honours of the year. He now became secretary to his uncle, Domenico Farini, then newly appointed as director of police for the province of Forlì, under the provisional government of the Romagna, but left the quiet of this employment to take part as a volunteer in the expedition directed against Rome. The Austrian invasion arrested the revolution, and young Farini returned to prosecute his medical studies at Bologna. Having completed these, he practised successively in the village of Montessudolo, at Ravenna, and at his native place of Russi; and gave many proofs of his professional and scientific attainments. His liberal opinions rendered him obnoxious to the government of Gregory XVI.; and, being expelled from the Roman States in 1843, he first took refuge in Tuscany, and afterwards proceeded to France, everywhere extending his medical experience. The political amnesty granted on the 16th of July, 1846, by Pius IX., who in the previous month had succeeded to the Papal throne, permitted him to return to Italy; and he accepted, under the new Pope, an honourable professional appointment at Osimo. On the 10th of March, 1848, five days before the proclamation of the Constitution, he became Under-Secretary of State for the Interior, or Home Department; but resigned with his colleagues after the Allocation of the 29th of April, in which the Pope declared for a policy which favoured Austria at the expense of the hopes of the liberals of Italy. In October of the same year he was made Director of the Board of Health, but was ejected in February, 1849, by the Triumvirs of the Republic. He resumed his post on the entry of the French into Rome in July following; but was again dismissed by the Triumvirate of Cardinals. He now took refuge at Turin, where he became a contributor to several journals, but especially to 'Il Risorgimento,' the organ established by Counts Cavour and Cesare Balbo, for the advocacy of Italian unity; and published the most important of his works, 'Lo Stato Romano dell' Anno 1815 all' Anno 1850,' 2 vols. 8vo, Turin, 1850; second edition, "corretta ed accresciuta," 4 vols. 12mo, Florence, 1850—53, English translation, of which the first three volumes were the work of the Right Hon. W. E. Gladstone, and the last the work of a lady under his direction, 4 vols. 8vo, London, 1851—54; French translation, by Jules Amigues, 'L'Etat Romain,' &c., 8vo, Paris, 1862. Having occupied several important offices, the provisional government of the Duchy of Modena, on the flight of the Duke in June, 1859, was entrusted to Farini; who was sent to Naples in 1860, as Extraordinary Commissioner from the Government of Victor Emmanuel, to carry out the measures necessary for the incorporation of Southern Italy with the rest of the Peninsula. He resigned this office in January, 1861, and became, soon after, Minister of Commerce and Public Works. In the beginning of 1862 his health failed, and he refused, in March, to take part in the Ratazzi administration. He was summoned, however, by a decree of the 8th of December, to undertake the presidency of the Cabinet; and when he was compelled to resign, on the 24th of March, 1863, a liberal pension expressed the national gratitude for his signal services. He died on the 1st of August, 1866.

Farini addressed letters to Mr. Gladstone on 'La Diplomazia e la Quistione Italiana,' 8vo, Turin, 1856; and in 1858 and 1859 to Lord John Russell, on 'La Quistione Italiana,' and 'Il Conte Buol ed il Piemonte,' which were reprinted as an Appendix to a French 'Mémoire sur les Affaires d'Italie,' 8vo, Brussels, Leipzig, and Paris, 1859. A French collection of Farini's political correspondence was published with the title of 'Lettres sur les Affaires d'Italie,' 8vo, Paris, 1860. One of his earliest works, in which he combined the views of the statesman and the man of science, was conversant about the cultivation of rice in Italy, 'Sulle Quistioni Sanitarie ed Economiche agitate in Italia intorno alle Risaie Studi e Ricerche,' &c., 8vo, Florence, 1845.

FARR, WILLIAM, M.D. [E. C. vol. vi. col. 993].

FARRAGUT, DAVID GLASCOE, an American naval officer of distinction, was born near Knoxville, State of Tennessee, in 1801. In 1811 he entered the United States navy as a midshipman on board the 'Essex,' and afterwards served in the line-of-battle ship 'Independence.' Obtaining his commission of lieutenant in 1822, he went a cruise to the East Indies, and was then appointed to a post in the Norfolk Navy Yard. As commander, he went to Brazil in the 'Decatur' in 1831; then made a cruise in the 'Natchez' to Brazil in 1833, and another to the West Indies in 1838. As captain, he was engaged with the 'Saratoga,' 20 guns, in the Mexican war of 1847. In 1851 he was assistant-inspector of ordnance; in 1854 he planned a navy yard for California; and in 1855 commanded the steam frigate 'Brooklyn' on the home station. When the Civil War broke out, he was appointed to act with General Butler in the reduction of New Orleans; he set off in January, 1862, passed the forts at the mouth of the Mississippi, and captured New Orleans on the 28th of the same month. In the following month he took Natchez, higher up the Mississippi. Failing to capture Vicksburg by bombardment (partly owing to the shallowness of the water), he returned to the Gulf of Mexico, and operated against the Confederates on the coast of Texas. Bearing the rank of vice-admiral, he ascended the Mississippi again in March, 1863, steamed boldly past the batteries at Port Hudson, and co-operated with General Grant in the military and naval attack which led to the capture of Vicksburg on the 4th of July. While engaged in operations against forts and vessels at Mobile, in August, 1864, his iron-clad monitor or turret-ship, 'Tumseleh,' was blown up by a Confederate torpedo, with the loss of all on board. He was defeated in an attack on Wilmington in December, but succeeded in capturing the place in January, 1865. At the close of the war, the rank of admiral, not till then known in the United States Navy, was created, and bestowed upon Farragut. He commanded an American squadron in the Mediterranean in 1867; and died on the 13th of August, 1870.

FAUJAS DE ST. FOND, BARTHELEMY, a French geologist, was born at Montélimar, May 17, 1741. He received his education from the Jesuits of Lyon, and qualified himself for legal practice at Grenoble; but his taste for natural history induced him to forsake the law, and associate himself with Buffon at Paris. He obtained a situation in the Museum of Natural History, and an appointment as mining commissioner. He occupied himself mainly in exploring Europe for the purpose of discovering the structure of the rocks, their mineral riches, and volcanic phenomena. He opened a mine for puzozolan in the Velay, which was largely used for public works, made very extensive geological collections for the Museum, and in many cases was the first to describe fully and accurately extensive areas of country. His writings are very voluminous. The most noteworthy are his 'Recherches sur le volcan éteints du Vivarrais et du Velay,' fol. 1778, Grenoble, in which he endeavoured to prove that volcanic action was the result of the percolation of water to the heated interior of the earth; 'Voyage en Angleterre, en Ecosse, et aux îles Hébrides,' &c., 2 vols. 8vo, and 4to, 1797, of which German and English translations have been published; 'Histoire Naturelle de la montagne de St. Pierre en Maëstricht,' 8vo, Paris, 1779; and 'Essai de Géologie,' 2 vols. 8vo, Paris, 1803-1809. In 1793 he was made a professor in the Jardin des Plantes, which office he retained till 1818; and on July 18, 1819, he died at St. Fond, in Dauphiné.

* FAVRE, JULES GABRIEL CLAUDE, a French lawyer, orator, and statesman, long recognised as a chief of the democratic party, was born at Lyon, on the 21st of March, 1809, of a mercantile family of Savoyard extraction. He was early destined for the bar, and about the year 1826 proceeded to study law at Paris, where, just before being admitted as an advocate, he took part in the revolution of July, 1830. From this revolution he trusted that a republic would result; but, being disappointed in

this hope, he gave vent to his chagrin in the composition of a petition for the abolition of royalty, which he addressed to the 'National.' He served in the Garde Nationale during the bloody strife between the *ouvriers* and the garrison in 1831; and, returning to Lyon, became a member of the bar of that city. Here he achieved considerable popularity in consequence of his gratuitous avowal of an article in 'Le Précurseur,' by which he drew upon himself the prosecution hanging over the head of the conductor of that journal. The trial resulted, however, in his acquittal; and some record of it exists in the 'Sixième Procès du "Précurseur,"' &c., 8vo, Lyon, 1833, in which year also appeared a brochure, 'De la Coalition des Chefs d'Atelier de Lyon,' 8vo, Lyon, 1833, and 'Anathème,' 8vo, Lyon, 1833, which is a lamentation over the general adherence of France to the July monarchy. In 1834 he defended the "Mutuellistes," a kind of trade-unionists, who were prosecuted as being members of an illegal institution. The trial involved an insurrection; and it was adjourned in 1835 to Paris, where, before the Cour des Pairs, the young advocate commenced his pleading with the remarkable avowal, "Je suis Republicain." He settled in Paris in 1836; and for a few months, jointly with Anselme Pétetin, undertook the political direction of 'Le Mouvement,' which had been quitted by Lamennais. After the revolution of February, 1848, he took office as secretary-general to the Minister of the Interior, M. Ledru-Rollin, whose measures he is believed to have inspired, and in whose name he produced the famous circular which called upon the provincial commissioners of the Provisional Government to take energetic action in favour of the new order of things. He resigned office upon the announcement of his election as representative of the department of the Loire in the Assemblée Nationale, and issued a renunciation of public employment, in spite of which, a short time after, he became secretary-general to the Ministry for Foreign Affairs, under M. Bastide. As a member of the Assemblée, he commanded more constant admiration for his talent than sympathy for his conduct, especially in the bitterness which he displayed as a leading member of the commission appointed to investigate the proceedings of MM. Louis Blanc and Caussidière. In his various speeches he maintained an independent position, and voted with the Right or the Left, according to his sense of the propriety of individual measures. He defended the law which re-established the *cautionnement* of the public journals, and combated successfully the propositions of M. Proudhon.

After the Presidential election, M. Favre passed over to the Opposition; advocated the liberty of the press, on which he delivered a discourse, 'La Liberté de la Presse,' folio, Paris, 1849; attacked the law of deportation, and the foreign policy of the Government, particularly the expedition to Rome, December, 1848. After the *coup d'état* of the 2nd of December, 1851, he was elected a member of the Council-General in the departments of the Loire and the Rhone; but, in consequence of his refusal to take the required oath, was obliged to confine his activity to his professional avocations. Various records of his skill and eloquence as an advocate are extant in volumes and tracts bearing upon the cases in which he was concerned. He displayed great boldness and power of rhetoric in his defence of Orsini in 1858; and in the same year became a member of the Corps Législatif, where he spoke frequently, and was regarded as the chief of the Opposition called "Les Cinq," which protested firmly against the Imperial Government, and was naturally in a constant minority. In August, 1860, he was chosen bâtonnier of the order of advocates in Paris, to which post he was re-elected in 1861. In 1863 he was returned as Opposition deputy for the fifth circumscription of Paris, but chose to represent the department of the Rhone, to which he was also elected. He was a relentless opponent of the Mexican expedition in all its phases; and, interesting himself much in German affairs, professed and sustained, after the convention of Gastein, August 14th, 1856, a protest against the violation of treaties which had been guaranteed by the European powers. In 1868 he became a member of the Académie Française, and his candidature for this honour—against which an objection lay that he was an orator and a politician, rather than a man of letters—was furthered by M. E. Saint-Hilaire, who, under the pseudonym of "Evariste Dillot," published 'Jules Favre et l'Académie Française,' 8vo, Paris, 1867. M. Favre was elected one of the Forty in succession to Victor Cousin; and his discourse upon admission took, according to custom, the shape of a panegyric on his predecessor. It was published as the 'Discours de M. Jules Favre, prononcé à la Reception à l'Académie Française, le 23 Avril, 1868; to

which was appended the 'Réponse de M. de Rémusat, Directeur de l'Académie Française,' 8vo, Paris, 1868. The election was followed by the presentation of the new Academician at the court of the Tuileries, where, at a short interview, the Emperor received from the author's hand, a "splendidly bound" copy of his oration. M. Favre took a prominent part in a general discussion of the laws affecting the Press; and his speech, along with the speeches of eight others, including Berryer, Jules Simon, and Garnier Pagès, was reprinted, by permission, from the columns of the 'Moniteur Universel,' as 'La Loi de la Presse,' 8vo, Paris, 1868. On the 10th of January, 1869, M. Favre took advantage of the newly acquired right of public meetings, to deliver a lecture on the 'Influence of Manners upon Literature,' in which, giving a summary history of the latter from Pericles downwards, he affirmed its intimate connection with political liberty; and concluded by expressing his conviction that the sphere of woman would in the future be so enlarged that she would not be merely the mother of citizens, but a citizen herself, emancipated from all fetters but those of duty and morality. In the general election of 1869 he was beaten in the department of the Rhone by M. Raspail, and by M. Rochefort in that of the Seine; but acquired a seat in the Corps Législatif.

M. Favre strenuously opposed the war which was proclaimed against Prussia on the 15th of July, 1870; and when its misfortunes began to press heavily on France, urged the formation of a strong Defence Committee, and charged the Imperial ministers with having traitorously ruined their country by exposing her unarmed to the overwhelming resources of Prussia. On the 4th of September, two days after the surrender of Napoleon III. at Sedan, he brought forward a motion declaring the Emperor and his dynasty to have forfeited all rights conferred by the constitution. On the day following took place the proclamation of the Republic; and a Provisional Government of National Defence was formed, of which M. Favre was constituted Vice-President, with the office of Minister of Foreign Affairs. On the 6th of September he addressed a circular to the French diplomatic agents abroad, in which, whilst expressing a desire for an honourable peace, he declared the intention of France, not to "cede either an inch of our territory, or a stone of our fortresses;" and in which he sought to separate the action of France from that of the Imperial policy. In a second circular, dated September 17th, M. Favre announced the immediate summons of a freely-elected Assemblée, which might confer upon the administration the prestige of formal and legal validity; accepted the responsibility of France in having tolerated a government which led her to ruin; and admitted the obligation to repair by a measure of justice the ill it had done to Germany. The moderation and candour of this circular procured from Count Bismarck an expression of his willingness to negotiate an armistice with M. Favre; and accordingly the latter proceeded on the 19th of September to a conference with the Chancellor of the North German Confederation, with whom he had interviews near and at Ferrières, the head-quarters of the King of Prussia. The conditions insisted on by one side and the other were found to be impossible of adjustment; and M. Favre reported, in an address to his colleagues, dated September 21st, which was received by them with enthusiastic and unanimous approval, that he took leave of the Count in the following words:—"I made a mistake, M. le Comte, in coming here; but I do not regret it. I have suffered sufficiently to excuse myself in my own eyes, but in any case I only yielded to a feeling of duty. I will report to my government all that you have said, and should they consider it fit to send me again to you, however cruel the task for me, I shall have the honour of returning. I am grateful for the kindness you have shown me, but I fear that all that can be done is to let events take their course. As long as there can be found one element of resistance amongst us, we shall fight you. This becomes an interminable struggle between two nations who should extend their hands to each other. I had hoped for a different solution. I leave, most unhappy, but nevertheless full of hope."

FAWKNER, JOHN PASCOE, one of the pioneers of Australian civilisation, was born in London in 1792. In 1803 he accompanied his father, one of the soldiers sent out to guard convicts at a new penal settlement to be formed on the shores of Port Phillip. Captain Collins, of the 'Calcutta' (appointed governor), finding the country barren and ill-supplied with water, abandoned the settlement after a few months, sailed to Van Diemen's Land, and there founded the penal colony which afterwards expanded into Hobart Town. Young Fawknor led a singularly varied life, by turns a shepherd, a farmer's

labourer, a sawyer at Sydney in Australia, a storekeeper at Launceston in Van Diemen's Land, a bush lawyer, a tavern-keeper, a newspaper proprietor and editor. In 1835 he joined a party in forming a settlement at Port Phillip, the place which he had visited thirty-two years earlier; he succeeded, but only after many struggles and difficulties, during which Fawknor's occupations were as diversified as in previous years—land speculator, sheep grower, and wine-grower being added to those enumerated above. He built the first brick house in what is now Melbourne, and saw the town grow up into a great city. He became, in his old age, a member of the Legislative Council of Victoria; and when he died (September, 1869) the colonists gave him a public funeral, as their most noteworthy representative man.

* FAYE, HERVÉ AUGUSTE ÉTIENNE ALBANS, a French astronomer, was born at Saint Benoît du Sault, department of the Indre, on the 5th of October, 1814. After studying at the École Polytechnique, he went for a time to Holland, and on his return to France received an appointment at the Paris Observatory. In 1841 he succeeded Damoiseau as member of the astronomical section of the Académie des Sciences. On November 22nd, 1843, he discovered, at the Paris Observatory, the comet since known by his name—one of the comets of short period (7.44 years); it was seen again at the subsequent epochs of 1851, 1858, and 1865; this discovery obtained for Faye the Lalande Medal from the Academy of Sciences. In 1846 he wrote a paper on the parallax of one of the stars in Ursa Major; in the following year one on 'Un Nouveau Collimateur Zénithal, et sur une limite Zénithale Nouvelle;' and in 1848 one on Saturn's ring. These were followed by a paper 'Sur les déclinaisons Absolues,' 1850; and 'Des Leçons Cosmographiques,' 1852. In conjunction with C. Galinski, he translated Humboldt's 'Cosmos,' and published it under the title 'Cosmos; Essai d'une Description Physique du Monde,' 4 vols. 8vo, 1847. From 1848 to 1854 he was professor of geodesy at l'École Polytechnique. In the last-named year he received the appointment of rector of the Académie Universitaire at Nancy, and astronomer to the Faculty of Sciences at the same place. His next appointment was that of inspector-general of sciences at the Secondary Schools. He was chosen member of the Bureau des Longitudes in 1862; in 1864 a member of the Imperial Council of Public Instruction; and he has been promoted officer of the Legion of Honour. Many astronomical papers by him have appeared in the 'Comptes Rendus,' and other scientific journals.

FEATHERSTONHAUGH, GEORGE WILLIAM, geologist and traveller, was born in London in 1780. Soon after attaining his majority he travelled through various European countries, then visited the United States, where he married and settled. In 1826 he visited England, formed the acquaintanceship of most of the eminent geologists, attended the lectures of Dr. Buckland, and wrote a short article on the chalk near Norwich. In 1829 he returned to the United States, and drew up an excellent review of 'Geology and its Progress.' In 1831 he commenced the conducting of the 'Monthly American Journal of Geology and Natural Science,' and wrote several articles in it on the progress of science. In 1834 and following years he made extensive explorations in the westernmost wilds of the United States, as a government geologist, and the results were embodied in two reports, published in 1835 and 1836, which gave a general account of the country comprised between the Red River on the south and Lake Superior on the north. From 1839 to 1843 he was engaged in determining the boundary between the United States and British North America. In 1844 he was appointed the British Consul at Havre and continued to be so till his death on September 27, 1866. In 1844 appeared his 'Excursion to the Slave States,' in two volumes, which contained a large fund of information on the scenery, geology, and inhabitants of the countries he had explored. It was so successful that in 1846 two other volumes were issued, entitled 'A Canoe Voyage up the Minnay Sotor, with an account of the Lead and Copper Deposits in Wisconsin, and of the Gold Region in the Cherokee Country,' which, in addition to its mineralogical details, contained very free criticisms on the defects of some of the Anglo-Americans and settlers. As Consul at Havre Mr. Featherstonhaugh was instrumental in facilitating the escape of Louis Philippe to England in 1848. He was a Fellow of the Royal, Geological, and other Societies.

* FÉE, ANTOINE LAURENT APOLLINAIRE, botanist, was born at Ardenes, department of Indre, November 7, 1789. He served in a medical capacity in the army during the Penin-

sular war, and when the French Empire fell he became a civilian, establishing himself as a druggist in Paris. He spent a large portion of his time in endeavouring to raise the status of his profession, and in 1819 founded a Society of Pharmacutists for the Seine department, many of the objects of which were of a purely charitable nature. Soon after this he again entered the army, and filled several offices in the military hospital at Lille, from whence he moved to that at Strasbourg in 1832. Here he became the principal professor and pharmacist, and was also appointed director of the botanical garden, as well as professor of natural history to the Faculty of Medicine of that place. His writings are numerous and varied. Some of earlier date were literary rather than scientific, consisting of poetry, a tragedy, and an identification of the plants noticed by Virgil. In medical literature his principal production is 'Cours d'Histoire Naturelle Pharmaceutique,' 2 vols. 8vo, Paris. In botany he is best known for his 'Essai sur les cryptogames des écorces exotiques officielles,' 4to, 1824—37; 'Méthode lichénographique,' 4to, 1824; 'Mémoires sur la famille des Fougères,' folio, 1844—45, Strasbourg; 'Genera Filicum,' 4to, 1850—52; and, in conjunction with Graziou, 'Cryptogames vasculaires du Brésil,' 1870. Besides these, he has written several other books, a number of articles, comprising several monographs relating to botany, and others relating to zoology, biography, and travels.

FELL, JOHN, a learned prelate of the 17th century, was born at Longworth, in Berkshire, on the 23rd of June, 1625. His father was Dr. Samuel Fell, who was first a canon (1619), and afterwards dean (1638—49) of Christ Church, Oxford, where the younger Fell was admitted a student in 1636. He took his B.A. and M.A. degrees successively in 1640 and 1643; about which time, as a member of the garrison of Oxford, he shared the vicissitudes of the Royalist scholars of the period. He was ordained in due course; and having, in 1648, been deprived by the Parliamentary visitors of his University privileges, he lived, during the continuance of the Commonwealth, in a "retired and studious condition," at Oxford (says Wood), where "he and others kept up the devotions and orders of the Church of England." But the Restoration brought him back to the line of professional promotion. On the 27th of July, 1660, he was made a canon of Christ Church, in the deanery of which he was installed on the 30th of November following, having been created D.D. on the 3rd of October, and placed on the list of the King's chaplains in ordinary. He was appointed Vice-Chancellor of the University on the 3rd of August, 1666; and continued in that office until the 25th of September, 1669, during his incumbency of which he devoted himself with great zeal to the discipline, privileges, prosperity and magnificence of the University. On the 6th of February, 1676, Dr. Fell was consecrated, in the chapel at Winchester House, Chelsea, to the Bishopric of Oxford, with which he was allowed to retain his deanery *in commendam*, in order that he might be as closely connected as before with his college and the University. He died on the 10th of July, 1686, "leaving then behind him the general character of a learned and pious divine, and of an excellent Grecian, Latinist, and philologist, of a great asserter of the Church of England, of another founder of his own college, and of a patron of the whole University." He was buried in the Divinity Chapel, or north aisle, adjoining to the choir of Christ Church Cathedral.

Dr. Fell brought out several editions of ancient authors, and especially of patristic or early ecclesiastical writers; amongst which may be mentioned the 'Phenomena' of Aratus of Soli, 8vo, Oxford, 1672; 'St. Clement's Two Epistles to the Corinthians, in Greek and Latin, with Notes at the end,' 12mo, Oxford, 1677; a translation of St. Cyprian's treatise, 'Of the Unity of the Church,' 4to, Oxford, 1681; and an annotated edition of 'Sancti Cæcili Cypriani Opera recognita et illustrata,' &c., folio, Oxford, 1682. His other works include several 'Sermons'; 'The Life of the most learned, reverend, and pious Dr. Henry Hammond,' 8vo, London, 1680, &c.; 'Grammatica Rationis, sive Institutiones Logicæ,' 8vo, Oxford, 1673; second edition, 1675. Bishop Fell also published, with a preface containing a biography of the author, 'Forty Sermons, &c., by Richard Allestree, D.D., folio, Oxford, 1684.

FELLENBERG, PHILIP EMANUEL VON, founder of the remarkable establishment at Hofwyl, was born at Berne, in Switzerland, June 27th, 1771. His father was a member of the government, and his mother a descendant from the Dutch Admiral, Van Tromp. Receiving his first education at Colmar, he went to Tübingen in 1789 to study the law. He next spent a few years in travelling through Switzerland, France, and

Germany, paying particular attention to the economical and moral position of the artisans and peasants of the places at which he stopped. Visiting Paris soon after the fall of Robespierre, he was much impressed with the evidence there afforded that liberty and right cannot really be appreciated except when education is generally spread among the people. In 1798 he filled a political office in the Canton of Berne, but soon resigned it to carry out the project on which he had set his heart. Purchasing an estate at Hofwyl, near Berne, in 1799, he began in 1801 to organise an educational and industrial establishment. Combining his own ideas with those of his friend Pestalozzi, he formed a scheme for the simultaneous development of the mental and bodily powers of young persons; industrial pursuits, athletic exercises, games, were added to the usual mental and moral training. Normal schools, agricultural schools, a scientific school, a school of art, an infant school, and an agricultural implement factory, formed part of the Hofwyl establishment. It acquired great fame. Pupils came to it from various countries, while princes and statesmen studied the details of the system. After Fellenberg's death, which occurred on the 21st of November, 1844, the institution was conducted for some years by his son Wilhelm, and then abandoned, but not without sowing the seeds of good in many parts of the Continent. The system pursued at Hofwyl has been described very fully by several writers. Fellenberg himself treated of it in the 'Papers on Rural Economy' ('Landwirtschaftliche Blätter'), 1809 and following years, and in other works. Among notices by various hands are the following: 'Coup d'œil de M. Gautheron sur l'influence morale qu'exercera l'établissement d'Hofwyl sur la Masse du Peuple'; 'Lettre de M. Villevielle sur le parti que le midi de la France peut tirer des Moyens et Méthodes Agricoles d'Hofwyl'; 'Vues sur l'Agriculture de la Suisse et les Moyens de la perfectionner'; 'Rapport sur l'établissement d'Hofwyl à la Nation Helvétique'; 'What Fellenberg has done for Education,' 8vo, London, 1839. Hoffmann and Thäer visited and described Hofwyl by order of the King of Prussia. Other reports and accounts have been written by Capo D'Istria, Reugger, Röchholz, Schmertz, Vérécour, Pictet, &c. Further details will be found in Hamm's 'Fellenberg's Leben und Wirken,' Berne, 1845.

FELLOWS, SIR CHARLES [E. C. vol. ii. col. 885—887]. During the latter years of his life Sir Charles Fellows lived in the Isle of Wight, mainly occupied in agricultural pursuits. He died November the 8th, 1861.

* FELSING, JAKOB, an eminent German engraver, was born at Darmstadt, in 1802, and learnt the rudiments of the art from his father, J. K. Felsing, an engraver of some note. About 1822 he went to Italy, and at Milan engraved Carlo Dolci's 'Christ on the Mount,' for which he was awarded the grand prize of the Milan Academy. He afterwards visited the chief cities of Italy, staying a considerable time at Rome, Naples, and Parma, and at the latter place forming an acquaintance with Toschi, whose example had much influence on his manner of engraving. He returned to Darmstadt in 1832, and there executed several excellent plates, chiefly from his Italian studies; among the most popular was Raffaele's 'Violin Player.' After visiting Munich he went on to Paris, and there became intimate with Desnoyers. Returning to Darmstadt in 1839, he executed a good plate of a Holy Family after Cornelius, and later others of Steinbrück's 'Genoviva,' 'St. Katharine' after Mücke, and many more, he having come to be recognised as the representative engraver of the Düsseldorf school. Felsing is one of the most learned as well as able of living engravers, but his later works have hardly borne out, in firmness of line and richness and brilliancy of colour, the promise of his early plates. Felsing is court-engraver and professor at Darmstadt, and a member of the Academies of Milan, Berlin, and St. Petersburg, and associate-engraver of the French Institute.

FERRIER, JAMES FREDERICK, was born at Edinburgh in November, 1808, and was educated at the Universities of Edinburgh and Oxford, at the latter of which he was a member of Magdalen College. Having taken his B.A. degree in 1832, he spent some months at the University of Heidelberg, for the purpose of studying the philosophy and literature of Germany, with the language of which he proved his intimacy by correcting several important errors in all the English translations of 'Faust.' In 1833 he was called to the Scottish bar, but his philosophical predilections interfered with an exclusive devotion to his professional avocations. He became a contributor to 'Blackwood's Magazine' in 1832; and amongst the papers which he furnished may be mentioned those on the 'Philosophy of Consciousness,' April, 1838, on the 'Initial Movements of the Cartesian Philo-

sophy,' and on 'Berkeley's Idealism,' June, 1842, which De Quincey praised as being the most effectual exposition of that system. In 1842 Mr. Ferrier was elected to the chair of history in the University of Edinburgh; and during the illness of Sir William Hamilton in the session of 1844—45, supplied his place in the class of logic and metaphysics. He was elected in 1845 to the professorship of moral philosophy and political economy at St. Andrew's, in which position he continued till his death on the 11th of June, 1864. He went through two unsuccessful candidatures for chairs in the Metropolitan University—once in 1852, when he wished to succeed Professor Wilson, his uncle and father-in-law, in the chair of moral philosophy, and again in 1856, when he sought to occupy the chair of logic and metaphysics left vacant by the death of Sir W. Hamilton. The latter contest was an animated one, and his claims were opposed, among others, by Dr. Cairns, in 'An Examination of Professor Ferrier's "Theory of Knowing and Being,"' 8vo, Edinburgh, 1856, to which Ferrier replied with great vigour in his brochure entitled 'Scottish Philosophy: the Old and the New,' &c., 8vo, Edinburgh and London, 1856; and, with a still vivid remembrance of the contest, wrote 'A Letter to the Right Honourable the Lord Advocate of Scotland, on the Necessity of a Change in the Patronage of the University of Edinburgh,' 8vo, Edinburgh, 1858. The work upon which Dr. Cairns had based his objections to Professor Ferrier was the latter's 'Institutes of Metaphysic: the Theory of Knowing and Being,' 8vo, Edinburgh and London, 1854, in which he sought to demonstrate the truth of a series of propositions in the three divisions of philosophy—first, the Epistemology, or theory of knowledge; secondly, the Agnology, or theory of ignorance; and, thirdly, the Ontology, or theory of being. He thus undertook the solution of problems hitherto unattempted in the humbler speculation of this country; and though opinions may differ in regard to the result, the eminent ability with which the difficulties of the question are encountered is unanimously conceded. Professor Ferrier was accustomed to diversify his ethical course with lectures on the history of philosophical opinion; and these were published after his death under the editorial care of Sir Alexander Grant, the author's son-in-law, and Professor Lushington, with the title of 'Lectures on Greek Philosophy, and other Philosophical Remains of James Frederick Ferrier, B.A., LL.D.,' &c., 2 vols. 8vo, Edinburgh and London, 1866. It remains to be said that Ferrier superintended the publication of the 'Works of Professor Wilson,' &c., 12 vols. 8vo, Edinburgh, 1855, &c.

*FÉTIS, FRANÇOIS JOSEPH, a Belgian writer on musical criticism, biography, and bibliography, was born at Mons, March 25th, 1784. He studied the compositions of Haydn, Mozart, and other great masters, under his father, who was an organist. After producing some trifling compositions as a boy, he was placed in 1800 at the Conservatoire de Music at Paris, under Boieldieu and Roy. In 1803 he commenced a lengthened tour in Italy and Germany, where he paid great attention to the study of mediæval and classical music. In 1818 he became professor at the Conservatoire, and soon afterwards published his 'Traité de Contrepoint et de la Fugue.' Between 1827 and 1835 he conducted the 'Revue Musicale,' and wrote musical articles in many other journals. In 1833 the King of the Belgians gave him the appointment of Chapel Master and Director of the Choir at Brussels. In 1845 he became a member of the Belgian Academy. In 1864, in accordance with a testamentary wish expressed by Meyerbeer, he superintended the production of the opera 'L'Africaine.' Fétis composed very little music, except two comic operettas, 'L'Amant et le Mari,' and 'La Vieille,' but he has written largely on musical subjects. Among his works are 'Coup d'œil sur les qualités de la Musique des Pays Bas,' 'Méthode des Méthodes de Piano,' 'Solfèges Progressifs,' 'Musique mise à la portée de tout le Monde,' afterwards published in English and Italian; 'Traité Complet de la Théorie et de la Pratique d'Harmonie,' 'Curiosités Historiques de la Musique.' Reprinted from his Magazine articles are biographical notices of Stradivari and Paganini, with remarks on the construction and playing of bow and string instruments. But the most important work by Fétis is the 'Biographie Universelle des Musiciens et Bibliographie Générale de la Musique,' 8 vols. 8vo, Brussels and Paris, 1835—44, second edition, 1860—65. Although disfigured by many inaccuracies, this is the best work of the kind extant, Fétis having embodied his own researches with previous biographies written by French, German, English, and Italian authors. In 1864 M. Fétis was made officer of the Legion of Honour, and in 1869, grand officer of the Order of Leopold.

FIAMMINGO, IL, Flemish painter. [CALVERT, DENIS, E. C. vol. ii., col. 40.]

FIAMMINGO, IL, Flemish sculptor. [DUQUESNOY, FRANÇOIS, E. C. S., col. 492.]

*FIELD, CYRUS WEST, one of the chief American promoters of the Atlantic Telegraph, was born at Stockbridge, Massachusetts, November 30th, 1819. Having learned commercial routine in a counting-house, he established himself as a merchant in New York. Retiring from business in 1853, he made a tour in South America, and on his return advocated with great energy the establishment of telegraphic communication between America and Europe. He procured a charter or concession from the Colonial Government of Newfoundland, conferring exclusive privileges for laying down submarine cables from that island to the mainland of America and to Europe, and wires across the island itself. He visited England in 1854 and 1856 to obtain the aid of capitalists in constructing and laying down an Atlantic telegraph; and he personally accompanied the two cable-laying expeditions of 1857 and 1858. After the failure of those cables he was equally zealous in prosecuting the measures which led to the final success of the great enterprise in 1865 and 1866. When the Earl of Derby conferred baronetcies on Mr. Gooch and Mr. Lampson, and knighthood on Mr. Glass, Mr. Canning, Professor Thomson, and Captain Anderson, towards the close of 1866, for their services in relation to this subject, Mr. Field could not participate in the honour, on grounds of nationality; but he was awarded a gold medal by the Liverpool Chamber of Commerce. At a grand banquet given to him by the New York Chamber of Commerce, on the 15th of November in the same year, he gave an interesting narrative of the eventful history of the Atlantic Telegraph, from the first inception of the scheme to its final completion.

FIELD, JOSHUA, civil and mechanical engineer, was born at Hackney, near London, in 1786. Having evinced a great taste for mechanical pursuits while a school-boy, and shown his aptitude by repairing the school clock, he began in 1802 to visit all the factories and workshops into which he could obtain admission. He was engaged for a time at the Government machine-works in Portsmouth Dockyard, under Sir Samuel Bentham; and then went, in 1804, as assistant to Mr. Maudsley in constructing Brunel's block-making machinery. In 1810, when Maudsley established the engineering works still maintained in the Westminster Road, Field was intimately associated with the operations connected with the construction of steam engines, saw mills, block machinery, mint machinery, &c.; and became a partner in the firm in 1822. He aided in constructing the remarkable shield with which Brunel excavated the Thames Tunnel. When transatlantic steaming commenced, he devoted special attention to the construction of the engines for the 'Great Western.' He was concerned in the manufacture of the electric time balls for Greenwich, Liverpool, Edinburgh, and the South Foreland. Mr. Field (who was the first Chairman of the Institution of Civil Engineers, and a Fellow of the Royal Society) died August 11th, 1863.

FIELD, RICHARD, a learned Anglican divine, was born on the 15th of October, 1561, at Hemel Hempstead, in Hertfordshire, and was educated as a commoner of Magdalen Hall, Oxford, where he took his degrees in arts. After he had proceeded M.A., he was for seven years daily reader in logic and philosophy; and won the reputation of being the best disputant of his time in the University. He acted for some time as reader of divinity in the cathedral church of Winchester; and in 1594, by which time he had graduated as B.D., was chosen reader in that faculty at Lincoln's Inn, which office he filled with so great approbation that he was presented by Mr. Kingsmill, one of the benchers, to the living of Boroughclere. In 1598, being then D.D., he was named one of the chaplains in ordinary to Queen Elizabeth, from whom, on the 20th of March, 1602, he obtained a grant by patent of the next vacant prebend at Windsor, in which he was at length installed on the 3rd of August, 1604. He was continued on the list of royal chaplains by King James I.; and was summoned to the conference at Hampton Court in January, 1604. In the year following, when the king was entertained at Oxford, Dr. Field was sent for to assist in the divinity act before his majesty; and the disputation between him and Dr. Aglionby is said to have been the best ever heard in the schools. He was promoted to the deanery of Gloucester in 1609,—where, however, he habitually resided for only four or five weeks in the course of the year—and was appointed to a fellowship in the college proposed to be incorporated at Chelsea. There was every prospect of his speedy elevation to the episcopal bench, when he died of

apoplexy on the 21st of November, 1616, and was buried in the nave of St. George's Chapel, Windsor. He published 'a Sermon preached before the King at Whitehall, on Jude, ver. 3,' 4to, London, 1604; and at the time of his death was engaged upon a work which he proposed to entitle 'A View of the Controversies in Religion, which in these last times have caused the lamentable Divisions in the Christian World.' But of this nothing is extant beyond a portion of the preface. His great work is that 'Of the Church: Five Books,' only four of which were originally published, in 4to, London, 1606, which treated (1) of the Church, its constituent Elements, and the Discipline by which, as a visible Society, it is preserved; (2) of the distinctive Notes or Marks of the Church; (3) the Demonstration of the true Church by those Notes; (4) of the Privileges of the Church, as applicable to Articles of Faith, to Discipline, &c. A Fifth Book followed, 'Concerning the Several Degrees, Orders, &c., of Persons to whom the Government of the Church is Committed,' 4to, London, 1610, to which was added an "Appendix, containing a Defence of such passages of the former Books that have been excepted against, or wrested to the maintenance of the Romish Errors." The complete edition, "very much augmented in the Third Book, and the Appendix to the Same," was published after the author's death, by his son, Nathaniel Field, in 4to, London, 1628.

In this work, which has gone through numerous editions, the last of which, in 8vo, London, 1843, proceeded no further than the first volume, the aim of the author is to vindicate the antiquity and catholicity of Protestantism, in contradistinction from the spurious claims of Popery. It is contended that the Western, or Latin Church was, and continued throughout, a true Protestant Church; and that the adherents of Romish errors were no more than a faction in that Church, at the time of the appearance of Luther.

* FIGUIER, GUILLAUME LOUIS, was born at Montpellier, February 15, 1819, educated at Montpellier and Paris, and in 1846 became a professor in the School of Pharmacy in his native town. He has been engaged as the scientific editor of 'La Presse' and other newspapers, has contributed several papers on organic chemistry and the glycogenic function of the liver to the scientific journals, and has written a large number of works, having for object the popular dissemination of information on the natural sciences. These popular compilations are profusely illustrated with well-executed cuts, and have had an extensive sale. He has also published 'L'Année scientifique et industrielle,' the first volume is for 1856, and the fourteenth, for 1870, appeared towards the end of 1869.

* FILLMORE, MILLARD, thirteenth President of the United States of America, was born at Summer Hill, Cayuga County, in the State of New York, January 7th, 1800. He owed little of his eventual rank to family connexions or to early education. His father, Nathaniel Fillmore, was a New England farmer, who removed to New York State in 1819; at which time young Millard is said never to have seen a book on grammar or geography. The son had learned the trade of a wool-comber, at the same time striving to supply the deficiencies in his early education; but after the removal to Cayuga, he entered a lawyer's office there, and also earned a small income by keeping a school. In 1821 he removed to Buffalo, where he pursued his legal studies. He began to practise at Aurora, Erie County, about 1826. In 1829 commenced his political career, he being elected a member of the State Legislature; this was followed in 1832 by his election to Congress, as one of the Whig party. Rising to distinction as a speaker and a party politician, he was re-elected in 1836 and 1840, and was appointed on many important committees. In 1841 he filled the post next in rank to the Speaker or Chairman of the House of Representatives, that of Chairman of Committee of Ways and Means; and it was under his auspices and direction that the tariff of 1842—a very exciting subject at that time—was prepared and carried through the House. Then ensued a temporary secession from parliament, during which he rose to great practice as a lawyer at Buffalo; he made an unsuccessful attempt to obtain election to the Governorship of New York State in 1844; but was chosen Comptroller of the State in 1847. When General Taylor was elected President of the United States in 1848, Mr. Fillmore was chosen Vice-President by the influence of the Whig party. On the death of Taylor in July, 1850, Mr. Fillmore, in accordance with one of the Constitutional laws of the United States, became President without any further election. Although his party was in a minority in both Houses of Congress, he conducted the business of the country with dignity and impartiality, was suc-

cessful in his policy, and obtained the respect of the nation generally. It was under his presidency that Commodore Perry was sent out on an embassy to obtain the opening of the Japanese ports to American ships and commerce. Mr. Fillmore's term of office expired on the 4th of July, 1853. He tried for re-election to the Presidency in 1856; but was defeated by Mr. Buchanan, who came in on the Democratic interest. Since that date Mr. Fillmore has lived in comparative retirement at Buffalo.

FILMER, SIR ROBERT, a political writer and a defender of absolute government, was the son of Sir Edward Filmer, of East Sutton, in Kent, and was born there about the year 1588. He was educated at the University of Cambridge, where he was matriculated of Trinity College, on the 5th of July, 1604. He married the daughter and co-heir of Martin Heton, Bishop of Ely, and was knighted by Charles I., as a recognition of his enthusiastic loyalty. In the course of the civil wars he suffered much on the King's account; and it is said that during this period his manor house of East Sutton was ten times plundered by the Parliamentary soldiers, and himself imprisoned in Leeds Castle for his attachment to monarchy. Hasted, in his 'History of Kent,' says that Sir Richard Filmer died at East Sutton, and was buried in the church there, in 1653, a date which seems preferable to that of 1647, adopted by Wood and others. To assign 1688, as some have done, as the year of Filmer's death, is as absurd as it is incorrect. Filmer wrote a number of political treatises in favour of arbitrary power, and in an age which teemed and laboured with projects of government, upheld the divine right of kings. His works include 'The Anarchy of a limited and mixed Monarchy,' 4to, London, 1648 and 1652, 8vo, 1679, which was produced as an answer to Philip Hunton's 'Treatise of Monarchy,' &c., 4to, London, 1643; 'The Necessity of the Absolute Power of all Kings; and in particular of the King of England,' 4to, London, 1648, second edition, "with a Preface of a Friend," &c., folio, London, 1680; 'The Freeholder's Grand Inquest, touching our Sovereign Lord the King, and his Parliament,' 4to, London, 1648, reprinted in 'Political Discourses, &c.,' 8vo, London, 1680; 'Observations concerning the Original of Government, against Hobbes, Milton, and Grocius,' 4to, London, 1648, new edition, incorporating the 'Anarchy,' &c., written against Hunton, 4to, London, 1652, 1679, &c.; 'Observations on Aristotle's Politics, touching Forms of Government,' 4to, London, 1652; 'Advertisement to the Jury Men of England touching Witches, with the Difference between an English and an Hebrew Witch,' 1653; 'Quæstio Quodlibetica; or, a Discourse whether it may be lawful to take Use for Money,' 8vo, London, 1653, new edition, 12mo, London, 1678, a work which had been in MS. from about the year 1630; 'Of the Blasphemy against the Holy Ghost,' 1656; and 'Patriarcha; or, the Natural Power of Kings asserted,' 8vo, London, 1680, second edition, by Edmund Bohun, with a "Preface in Vindication of Filmer, and a Conclusion, or Postscript," 8vo, London, 1685. This work, which had passed from hand to hand in MS. for nearly forty years from the date of its production (about 1642), was devoted to the demonstration, in as many chapters, of three propositions:—"(1) That the first Kings were Fathers of Families; (2) It is unnatural for the People to govern, or choose Governors; (3) Positive Laws do not infringe the Natural and Fatherly Power of Kings." The 'Patriarcha' attracted much discussion and opposition. Sir James Tyrrell, the grandson of Archbishop Usher, attacked it with his 'Patriarcha non Monarcha: or, the Patriarch unmonarched; being Observations on a late Treatise, and divers other Miscellanies, published under the name of Sir Robert Filmer, in which the Falseness of those Opinions that would make Monarchy *jure divino* are laid open, and the true Principles of Government and Property (especially in our Kingdom) asserted,' 8vo, London, 1681. But it was Locke who, conferring immortality by his opposition, was the most formidable antagonist of the principles advocated by Filmer, against which he wrote 'Two Treatises of Government: In the former, the False Principles and Foundation of Sir Robert Filmer and his Followers are detected and overthrown. The latter is an Essay concerning the true Original Extent and End of Civil Government,' 8vo, London, 1689, second edition, 1694. Against another opponent Filmer found an advocate in Edmund Bohun, who published 'A defence of Sir Robert Filmer against the Mistakes and Representations of Algernon Sidney, Esq.; in a Paper delivered by him to the Sheriffs, upon the Scaffold in Tower Hill, on Friday, December 7th, 1683, before his Execution there,' folio, London, 1684.

FINIGUERRA, MASO, or TOMMASO, a distinguished Florentine goldsmith, to whom is attributed the invention of

printing from engraved plates, was the son of a goldsmith named Antonio di Tommaso di Finiguerra, and was born at Florence, in January, 1426. He is said to have been a pupil of Lorenzo Ghiberti, and to have assisted him in the execution of the famous bronze gates of the Baptistery at Florence, which were completed about 1450. Baldinucci states that he was the pupil of Masaccio. At this time *nielli*, that is, silver plates engraved with religious subjects, the incised lines being filled with a black composition (*niello*), to produce the full effect of the designs, were much in vogue for ecclesiastical purposes, and Finiguerra abandoning sculpture for engraving upon metal, became the most eminent of the Florentine *niellatori*. About 1450 he was commissioned to make for the baptistery of San Giovanni in Florence a splendid silver pax, partly gilt, and engraved with a representation in *niello* of the coronation of the Virgin. In order to ascertain the progress of their work, it was usual for the engravers occasionally to take sulphur casts, and from these obtain proofs with *niello* on moistened paper. Whilst engaged on his pax, it occurred to Maso to try whether the proof might not be taken direct from the plate, the incised lines being filled with *niello* and the damp paper pressed on it. Vasari says he discovered the process from having let the silver plate, when filled with *niello*, fall on a piece of moistened paper; but this is evidently a fable, as proofs exist which were taken from the work, whilst still unfinished. In any case, the process was successful, and first proofs, and afterwards prints, continued to be thus taken.

This famous pax, still preserved in the Gallery of Florence, is the finest of its kind in existence. It is about eight inches high by three and a half wide. Rumohr has arbitrarily assigned it to Matteo di Giovanni Dei; but he stands alone in the opinion. Passavant, however, seeks to deprive Finiguerra of a greater distinction than his pax. He labours to prove that the method of taking proofs from plates on paper was known in Germany as early as 1446, and he suggests the probability that Finiguerra was shown the process by the Flemish painter Roger van der Weyden, who was in Florence in 1450, the precise time when Maso was engaged in engraving the Coronation. ('*Peintre-Graveur*,' vol. i. pp. 191–198.) Be that as it may—and it can hardly be affirmed that Passavant has proved either of his points—it is certain that Maso was the first to employ the process in Italy, where he has always been regarded as its inventor, and that it led directly to the engraving of plates for printing designs. It does not appear, however, that plates were actually produced for this purpose in Italy till about 1460 or 1465, at least ten years after Maso took his earliest proofs. [ENGRAVING, IN ARTS AND SCIENCES DIVISION, vol. iii. col. 884–5.] One of Finiguerra's proofs from the Coronation Pax is in the British Museum, another in the French National collection, and one or two more exist elsewhere. Duchesne has given a full list of Finiguerra's *nielli*, and the known impressions from them. Finiguerra's death is placed about 1475.

FITTON, WILLIAM HENRY, geologist, was born in Dublin, January, 1780. He attended the school and university there, and acquired his degree of B.A. in 1799. In 1808 he entered the University of Edinburgh, where he formed the acquaintanceship of John Fleming, Sydney Smith, Jeffrey, Lord Brougham, and others. In 1809 he removed to London. In 1811 he began to write geological articles, the first being on the geological structure of the vicinity of Dublin. In 1812 he went to Northampton, and settled as a medical practitioner. He contributed numerous articles to the '*Edinburgh Review*,' in which he did much to diffuse geological information respecting the discoveries of Smith, Buckland, Murchison, and others. As an original observer he worked hard from 1824 to 1836 at developing the true order of the secondary strata of England and France; and the main outcome of his labour was his series of papers on the green-sand beds. First of all a secretary of the Geological Society, he afterwards became its president, in which last capacity he established the Quarterly Journal of the Society, and was influential in promoting the custom of delivering annual addresses. In 1852 the Wollaston medal of the society was awarded him. He was a fellow of the Royal and other scientific societies. He died in London, May 13, 1861.

FITZ-ROY, ADMIRAL ROBERT [E. C. vol. ii. col. 921], was born at Ampton Hall, Suffolk, 5th July, 1805. He was the youngest son of General Lord Charles Fitz-Roy, by his second wife, Frances Anne, eldest daughter of the first Marquis of Londonderry. He entered the Royal Naval College at Portsmouth in 1818, and from 1819 to 1828 served in the Mediterranean and on the coasts of South America, and became flag lieutenant at Rio Janeiro. In 1828 he was appointed to the command of the

'Beagle,' one of the two vessels employed in surveying the shores of Patagonia and Tierra del Fuego. At the end of 1830 the two vessels returned to England, and late in 1831, the 'Beagle,' having been refitted, was again commissioned to renew the survey. During five years a large amount of valuable work was done, not only in correcting the errors of existing maps, but in filling in new details. Every mile of the coast, from the right or northern bank of the river Plata to Cape Horn, was closely surveyed. Every harbour and anchorage was planned; 30 miles of the river Negro and 200 of the Santa Cruz were examined and laid down, and a chart was made of the Falkland Islands. Between 47° and the river Guayaquil the coasts of Chili and Peru were surveyed, every port and roadstead being entered. Many of the discoveries thus made are recorded in the Journal of the Royal Geographical Society, whose gold medal for 1836 was awarded to Fitz-Roy, the Society at the same time acknowledging the importance of the mass of information he had brought home—"perhaps not exceeded by any expedition since the time of Cook and Flinders." An account of the voyage was published in 1839 in 3 volumes. Mr. Charles Darwin was on board the 'Beagle' during the whole of her voyage, and collected the materials for his '*Journal and Remarks*,' and for geological and other works of permanent value.

During the survey in 1834 Fitz-Roy was promoted to the rank of captain. Anxious to fill up some details in the survey, Fitz-Roy, after the return of the 'Beagle' in 1836, hired two vessels, and purchased a third at his own expense, the effect of which was to embarrass him during many years. In 1839 he was elected an Elder Brother of the Trinity House; in 1841 he sat in the House of Commons as member for North Durham; in 1842 he was appointed acting conservator of the Mersey; and in the following year he went out to New Zealand as governor, and continued to be such during three years. He became F.R.S. in 1851; in 1854 he was placed at the head of the Meteorological Department of the Board of Trade. In 1857 he became rear admiral; in 1862, vice admiral; and in 1864, corresponding member of the Academy of Sciences of the Institute of Paris (geography and navigation section).

In carrying out the duties of his appointment at the Board of Trade, Admiral Fitz-Roy displayed a large amount of conscientious zeal. One of his first duties was to supply merchant seamen and others with instruments and instructions for carrying on meteorological observations in various parts of the world. This led to the collection of a large mass of valuable observations, the reduction of which by a competent staff, under a competent leader, would have been of the greatest service to meteorological science; but the admiral not having such a staff at hand, and apparently dreading the accumulation of the observations, interrupted the system of supplying instruments to merchant captains, &c., and employed the strength of his department in originating storm signals, which became very popular, and in publishing weather reports, &c. The intense anxiety of the admiral to do his duty brought on a nervous attack, which led to his death, under very painful circumstances, on the 30th of April, 1866. Every one who came in contact with the admiral felt that he was in the presence of a courteous gentleman, of a kindly nature, who was most anxious to do his duty in a post for which he was scarcely qualified by previous education or mental power.

FLAHAUT DE LA BILLARDERIE, AUGUSTE CHARLES JOSEPH, COMTE DE, a distinguished general and diplomatist, was born at Paris, April 20, 1786. His father, Comte de Flahaut, of an old family of Picardy, was guillotined at Arras in 1793, by order of the revolutionary tribunal. His mother fled to England, and supported herself and her son by writing French novels. She afterwards went to Germany, in 1798 returned to Paris, and in 1802 married the Portuguese diplomatist, De Souza Botelho. At the age of fifteen young Flahaut entered the army of Napoleon; in the Portuguese campaign attracted the notice of Murat, who made him his aide-de-camp; fought at Austerlitz and Friedland; was wounded at Ems; received the Cross of the Legion of Honour, and was promoted to the rank of colonel. Continuing his career of active service, and gaining everywhere credit for courage and conduct, he was made aide-de-camp to Napoleon, accompanied him throughout the Russian campaign, and returned with him to Paris. He had now acquired the personal favour of the Emperor, who selected him to meet the King of Saxony, and conduct him to the capital, March 10, 1813. For his conduct at the battles of Dresden and Leipzig he was created general of division, and received the title of Count. Flahaut adhered to his master to the last, and refusing service under the Bourbons, was one of the first to welcome him on his return from

Elba. In anticipation of the ensuing conflict, he was employed in reorganizing the army, and he was alongside the Emperor throughout the brief campaign which closed at Waterloo. He then returned to Paris, took command of a corps, and was one of the last to lay down his arms.

Flahaut's name was rescued from the list of the proscribed by the intervention of Talleyrand, who had conceived a high opinion of his ability; but he found it necessary to leave France and withdraw to England. Here he won the hand of the daughter and heiress of Lord Keith, and her wealth smoothed his future course. When Louis Philippe became king, Count de Flahaut returned to France. He was appointed Ambassador to Berlin in 1831, and from 1841 to the fall of the monarchy he was minister at Vienna. The change of dynasty offered no impediment to his prosperous career. He was received into great favour at the Court of Napoleon III.; in 1853 was made a senator, and in the following year was appointed one of the committee for editing the Despatches, Letters, &c., of Napoleon I. In 1860 he was appointed ambassador to London, and acquired great popularity in the higher circles by the splendour of his entertainments and the munificence of his hospitality. He was named Grand Chancellor of the Legion of Honour in 1864, and died at the palace of the order on the 31st of August, 1870—living just long enough to know of the terrific disasters to the French arms, but saved from witnessing the downfall of the dynasty which he had so long and so faithfully served.

* FLANDIN, EUGÈNE NAPOLEON, French artist and archæologist, was born at Naples, August 15, 1809, the son of a Frenchman in the service of Murat. Fond of travel and of art, he produced, with little aid from masters, his earliest pictures, views of places he had visited in travelling about Italy; in 1836 sent two views in Venice to the Salon, and, after a couple of journeys to Algiers, painted the 'Assaut de Constantine,' which was purchased by Louis Philippe, for Neuilly. He was nominated in 1839, in conjunction with M. P. Coste the architect, to accompany M. de Sercey on his embassy to Persia. He remained there two years, and on his return to Paris in 1842, his drawings were ordered to be published, after having been favourably reported upon by the commission appointed to examine them. He applied himself with zeal to the work, but was soon called from it, the Academy having named him to the Government as the most suitable person to proceed with M. Botta to Nineveh, to examine and draw the vestiges of buildings and antiquities, the discovery of which was then attracting so much attention. He brought back with him a prodigious quantity of sketches, plans, and drawings. A special credit was granted by the Chamber of Deputies, and the publication of the two series was prosecuted forthwith. The first appeared under the title 'Voyage en Perse,' 1843—54, and consisted of four large folio volumes of plates, illustrating the architecture, sculpture, inscriptions, and topography of Ancient and Modern Persia, executed in conjunction with M. Coste, and two octavo volumes of text by M. Flandin. The reproductions of his Nineveh drawings occupy four of the superb folio volumes of M. Botta's 'Monuments de Ninive,' 1844—54. M. Flandin also wrote many valuable papers on Nineveh and its remains in the 'Revue des Deux-Mondes.' In 1854—56 he published a series of fac-similes, executed in lithography by himself, of 150 of his sketches made upon the Bosphorus, in Constantinople, the Dardanelles, Smyrna, &c., under the title 'L'Orient.' He has since returned to painting, and has exhibited a large number of pictures, chiefly views in the East, but some from Italy.

FLANDRIN, JEAN HIPPOLYTE, one of the most distinguished recent French painters, was born at Lyon in 1809, and, having learnt painting under the best masters in that city, went to Paris in 1829 and entered the atelier of Ingres. In 1832 he obtained the grand prize of Rome, and continued in that city his studies under M. Ingres, who had been appointed head of the French Academy there. From his return to Paris in 1838 he each year exhibited religious pictures, or historical or poetical subjects of a religious order, such as 'Christ blessing Children;' a 'Mater Dolorosa;' 'St. Louis taking the Cross;' 'Dante in the Circle of the Envious;' and came to be looked upon not only as the ablest of Ingres's pupils, but his probable successor as the head of French historico-religious art. The deep religious feeling which pervaded his pictures, and their largeness of conception and style pointed him out as especially qualified for the execution of some great mural works which had been proposed. First among these was the chapel of St. John in the church of Saint-Séverin at Paris. This was followed by the vast frieze of St. Vincent-de-Paul, a work of exceeding loveliness

and pathos, intended to shadow forth the constant presence of Christ; the entire wall paintings of the church of St. Germain des Prés, which he unhappily did not live to finish; and the whole of the decorations of St. Paul de Nîmes. Besides these mural paintings and many easel pictures, M. Flandrin executed numerous portraits, in a broad, manly, vigorous style that left him with few living rivals in that walk of art: two characteristic specimens by him were in the International Exhibition of 1862—the very remarkable portrait of Napoleon III. and the charming one of Mlle. M., exhibited under the title of 'Jeune Fille à l'Œillet.' M. Flandrin received the first medal on three occasions; was decorated in 1841, and promoted to be Officer of the Legion of Honour in 1853, and in the same year elected a member of the Institute. He died at Rome, March 21st, 1864. The 'Lettres et Pensées de Hippolyte Flandrin' were collected and published, with a biographical notice, by M. Laborde, Paris, 1865. A younger brother, * JEAN PAUL FLANDRIN, born at Lyon in 1811, is one of the best landscape painters in France.

FLAVEL, JOHN, a Nonconformist divine, was born about the year 1627, at Bromsgrove, in Worcestershire, where his father, the Rev. Richard Flavel, was at that time minister. He was educated at University College, Oxford, which he entered about 1646; and having taken his B.A. degree, was settled as a probationer at Diptford, by the Standing Committee for the county of Devon, April 27th, 1650, and received Presbyterian ordination at Salisbury, on the 17th of October following. He succeeded Mr. Walplate, to whom he had been assistant, in the rectory of Diptford; but resigned that living in order to proceed to Dartmouth, where he was settled by the Commissioners for the Appropriation of Public Preachers, by an order from Whitehall, dated December 10, 1656. Being ejected by the Act of Uniformity, St. Bartholomew's Day, August 24, 1662, he exercised his ministry under difficulties; and was constrained for some years to seclude himself at Slapton, about five miles from Dartmouth. He fulfilled the duties of his office more openly upon King James's Declaration of Liberty of Conscience, April 4th, 1687; whilst the fuller toleration of William III. completed his freedom and fortified his courage. He died suddenly, on the 26th of June, 1691, at Exeter, whither he had gone in order to be present at a meeting—of which he was elected moderator—of the Nonconformist ministers of Devonshire, held at Topsham, within four miles of the city, for the purpose of considering the propriety of forming a union between the Presbyterians and the Independents—an object which he had much at heart. He was buried in St. Saviour's Church, Dartmouth; but a monument which was placed there to his memory was removed by the order of the magistrates in 1709, after which it was erected in the dissenting meeting-house.

Flavel wrote much, and his several works have been frequently reprinted, both in this country and America. The principal of them are: 'Husbandry Spiritualized; or, the Heavenly use of Earthly Things,' 4to, London, 1669; 'Navigation Spiritualized. With spiritual Poems,' 8vo, London, 1671; 'The Fountain of Life opened; or, a Display of Christ in His essential and Mediatorial Glory,' &c., 4to, London, 1672, which is a series of forty-two sermons; 'A Token for Mourners; or, Boundaries for Sorrow on Death of Friends,' 8vo, London, 1674; 'Divine Conduct; or, the Mystery of Providence, its Being and Efficacy asserted and vindicated,' &c., 8vo, London, 1678; 'The Method of Grace,' &c., 4to, London, 1680, a series of thirty-five sermons; 'Sacramental Meditations,' &c., 8vo, London, 1680; 'Pneumatologia; a Treatise on the Soul of Man,' 4to, London, 1680; 'Preparations for Sufferings; or, the Best Work in the Worst Times,' &c., 8vo, London, 1682; a series of Eleven Sermons, collectively entitled, 'England's Duty,' London, 1689; and the 'Reasonableness of Personal Reformation, and the necessity of Conversion,' &c., 12mo, London, 1691. Flavel's 'Remains' were collected after his death, and published in 8vo, 1691; whilst his 'Works,' in 2 vols. folio, as well as in 6 vols. 8vo, have been several times reprinted, as, for instance, at Edinburgh, Newcastle, and London.

FLOOD, HENRY, an Irish politician and orator, son of the Chief Justice of the Court of King's Bench in Ireland, was born in 1732. After studying at Trinity College, Dublin, he went in 1749 to Oxford. At first he relied for distinction on social position and personal qualities; but under the guidance of Dr. Markham and Mr. Tyrwhitt, he obtained a classical training. In 1759 he became a member of the Irish House of Commons, and was soon recognised as an eloquent and zealous, though not always judicious, advocate of popular rights: urging among other measures, the shortening of parliaments and the

repeal of obnoxious statutes. In 1769 he fought a duel with Mr. Agar on occasion of an election quarrel. Agar was wounded, but challenged Flood a second time, when Agar was killed: Flood was tried for murder, but acquitted. The affair in no way interfered with his prospects or popularity. In 1775 he became a Privy Councillor, and received an appointment under the Irish government; but he resigned this appointment in 1783, because he disapproved of some parts of the ministerial policy; and his Privy Councilship was at the same time taken away from him. His own party complained that they could not rely upon his steadiness; and on one occasion he had a fierce quarrel with Grattan in the House. Almost immediately afterwards he came to England, and was elected member for Winchester in the English House of Commons, and in 1785 for Seaford. Rich and sarcastic in oratory, bitter and formidable in reply, Flood was always eagerly listened to; but he did not obtain commanding influence as a politician. He made his last speech in 1790, in advocacy of a plan of parliamentary reform, which won the approval of Fox. He died December 2nd, 1791, leaving munificent bequests to Trinity College, Dublin. Besides translations of orations by Demosthenes, Cicero, and Æschines (still in MS.), he wrote a 'Poem on the Death of Frederick Prince of Wales,' 1751; 'Translation of the First Pyrrhic Ode of Pindar,' and an 'Ode to Fame,' 1785; and a 'Speech on the Treaty of Commerce with France,' 1787. (*Life and Correspondence of the Rt. Hon. H. Flood*, by W. Flood. 8vo. 1838).

FLORIO, GIOVANNI, a philologist, self-styled the *Resolute*, was born in London, in the year 1552 or 1553, an alternative date which is certified by the inscription round the portrait prefixed to 'Queen Anne's New World of Words,' representing him as being "Æt. 58, A. D. 1611." His parents were Waldenses, who had fled from the Valtelline to this country for the freer enjoyment of liberty of conscience. During the reign of Mary they sought a refuge abroad, but returned to England after her death. About 1576 Florio became French and Italian tutor to Emanuel Burnes, son of the Bishop of Durham, and at that time a commoner of Magdalen College, of which society Florio himself was admitted a member in 1581, and became a teacher of languages in the University. After the accession of James I. he was appointed tutor in French and Italian to Henry Prince of Wales, and to his mother, Queen Anne, to the latter of whom he also became a gentleman of the privy chamber, and clerk of the closet. In the year 1625 Florio retired to Fulham, in order to avoid the plague then raging in London; but he was overtaken by it in his retreat, where he died in August or September of the year just mentioned, and was probably buried in the parish church.

Florio is characterised by Wood as "a very useful man in his profession, zealous in the religion he professed, and much devoted to the English nation." His works comprise—'Florio his firste Fruits; which yeelde familiar Speech, merie Prouerbes, wittie Sentences, and golden Sayings. Also a perfect Induction to the Italian and English Tongues,' 4to, London, 1578; 'Florio's Second Frutes, to be gathered of Twelve Trees, of diuers but delightsome Taste to the Tongues of Italians and Englishmen,' 4to, London, 1591; 'Garden of Recreation, yeelding six thousand Italian Prouerbs,' alternatively entitled in Italian, 'Giardino di Recreatione nel quale crescono fronde, fiori, e frutti,' &c., 4to, London, 1591; 'A Worlde of Wordes; or, most copious and exact Dictionarie in Italian and English,' folio, London, 1598, a "much augmented" edition, dedicated to the wife of James I., and entitled 'Queen Anna's New World of Words,' &c., folio, London, 1611. At present, Florio is remembered better than by his works in grammar and philology, as being the possible original of the character of Holofernes, the schoolmaster in 'Love's Labour's Lost'; and Shakspeare is said to have retaliated in this manner for a passage reflecting upon the English drama and dramatists in 'Florio's Second Frutes':—"The plaies that they do plaie in England are neither right comedies nor right tragedies, but representations of histories without any decorum." But he is known best of all by his English translation of Montaigne's Essays, 'The Essayes, or Morall, Politike, and Millitarie Discourses of Lo: Michaell de Montaigne, Knight of the noble Order of St. Michael, and one of the Gentlemen in Ordinary of the French King, Henry the Third his Chamber,' folio, London, 1603, 1613, 1632, &c. There are several copies of the first edition of this translation in the Library of the British Museum, and two of them are enriched respectively with the autographs of William Shakspeare and Ben Jonson.

FLÖRKE, HEINRICH GUSTAV, botanist, was born De-

cember 24, 1764, at Alten Kalden, in Mecklenburg. In 1775 he went to the University of Butzow, stayed there three years, and then engaged himself as a tutor in a family living at Kittendorf. After a time his pupil, a young nobleman, went to the Göttingen University, and Flörke went with him. While here he became acquainted with Blumenbach, Hoffman, and Persoon. In 1794 his pupil's family procured him the curacy of Kittendorf, but not being able to make his religious convictions harmonise with the dogmas he was required to teach, he resigned his cure, and went to study medicine at Jena. Too poor to hire conveyance, he travelled there on foot, and collected the plants, especially lichens, which he found. The herbarium thus formed is still preserved at Berlin, to which place he went after completing his studies at Jena. His object in going to Berlin was to assist his brother in publishing an encyclopædia of philosophy and technology. His brother died a few months after his arrival; he married his brother's widow, and undertook the sole editorship of the encyclopædia. To his deep regret he was compelled to sell his herbarium, which was bought by a society of naturalists at Berlin. While at Berlin he had established his reputation as a lichenographer, and the lichens collected by Tilesius, Bory St. Vincent, and other travellers were entrusted to him for determination. At this time Acharius was at the height of his fame, and the two were rivals throughout their lives. In 1816 Flörke was appointed to the professorship of natural history at Rostock, which he retained for 15 years. He gave especial attention to the genus *Cladonia*, which formed the subject of his most important work, 'Commentatio nova de Cladoniis,' 8vo, Rostock, 1828. In 1829 he commenced illustrating this work by natural specimens, under the title of 'Cladoniarum exemplaria exsiccata,' of which three parts appeared. In preparing the remaining fasciculi he was struck with apoplexy, and in 1833 and 1834 he did his professorial work, being carried to his class in a chair. In 1835 a fresh attack of apoplexy quite disabled him, and on November 6 of that year he died. His second and principal herbarium is chiefly composed of cryptogams, and is remarkably rich in authentic specimens from Von Martius, Acharius, Agardh, Fée, and many other eminent botanists. The genus *Cladonia* is illustrated by nearly 50,000 specimens. This herbarium is in the Museum at Rostock.

* FLOTOW, FRIEDRICH FERDINAND ADOLF, VON, a musical composer, was born at Teutendorf, Mecklenburg-Schwerin, April 26th, 1812. His taste for music having determined him in the choice of a profession, he went to Paris, and studied under Reicha. In 1830 the Revolution drove him back to Germany, where he composed three drawing-room operettas, 'Pierre et Colombine,' 'Rob Roy,' and 'La Duchesse de Guise,' which afterwards came into some favour in France. Returning to Paris, he took with him the MSS. of some operas of greater pretensions, but did not attract much notice till 1838, when his 'Naufrage de la Méduse' was favourably received at the Théâtre de la Renaissance. This opera was afterwards altered, and brought out in Germany under the name of 'Die Matrosen.' It was followed by 'Le Forestier,' 1840, afterwards, in German, 'Der Förster'; 'L'Esclave de Camoëns,' 1843; the 'Lady Henriette,' a ballet, which afterwards formed the basis for his 'Martha'; 'Alessandro Stradella,' 1844; 'L'Ame en Peine,' 1846. Others were 'Indra,' 'Die Grossfürstin,' 'Rübezahl,' 'Marie Katerina,' and music to the 'Winter's Tale.' The opera of 'Martha,' 1847, was received very favourably, especially when brought out on the Italian stage in England, in 1858. In 1854 Flotow returned to Schwerin, where he became intendant of the Court Theatre. In 1856 appeared his opera 'Albin.' Removing once again to Paris in 1863, he became a corresponding member of the Institute in 1864, and produced his opera of 'Zilda' in 1866. His music, never great or original, is often graceful in melody and instrumentation: it partakes somewhat of the styles of Auber and Adam.

FLOURENS, MARIE JEAN PIERRE, physiologist, was born at Maureilhan, near Béziers, in Hérault, April 14, 1794. In 1814 he went to Paris, and soon became intimate with Chaptal, the Cuviers, and other eminent scientific men. In 1828 he succeeded to Bosc's place in the Academy of Science, and after giving lectures on natural history and anatomy in the Collège de France and Jardin du Roi, he was appointed a full professor in the former institution in 1835. A few years before this he had been elected the perpetual or permanent secretary of the Academy of Science. These two posts he retained up to his death. He sat in the French Chamber of Deputies, and took part in the municipal government of Paris. He was made Commander of the Legion of Honour in 1845, and grand officer in 1859; he was also member of numerous scientific bodies. He

died at Montgeron, near Paris, December 6, 1867. His writings are numerous and important: they are remarkable for the clearness of their expression, ease of diction, and skilful arrangement, and have won for him a high place in the rank of physiological students. His principal forte was neurology, and his most important discovery was the demonstration that each set of movements and sensations depends upon particular nerves and nervous centres for their execution. He singled out a minute point in the medulla oblongata which he considered to be the essential seat of life, the vital nucleus of the whole nervous system. These views were published in 1824 and the few following years; and his subsequent researches were in the main amplifications and confirmations of his earlier views. A large proportion of these papers were collected together in his most important work, under the title of *Recherches expérimentales sur les propriétés et les formations des systèmes nerveux dans les animaux vertébrés*, 2nd ed., 8vo, Paris, 1842. His book, entitled *De la Longévité humaine, et de la quantité de vie sur le globe*, 12mo, 1854, which rapidly passed through three editions, attracted considerable attention. He announced as a law that the full term of life of an animal is five times the period of growth. His other writings, which are partly scientific partly popular in tone, deal with the development of the osseous system, including the teeth; with the skin of man, which he states demonstrates the physical unity of man; the laws of symmetry in animals; instinct and intelligence; Darwin's theory of the origin of species; accounts of the works of Cuvier, Buffon, and Fontanelle; and *Éloges historiques* on the principal naturalists who had died during his perpetual secretaryship. These *éloges* were collected in two volumes in 1856 and 1857.

FOLKEMA, JAKOB, Dutch engraver, was born in 1692 at Dokkum, in Friesland. He engraved many of the designs of Picart, and these, and the series of seven plates of the *History of Meleager*, engraved for the famous Amsterdam edition of Ovid (fol. 1732), are considered his best subject pieces; but he was perhaps most successful with his portraits, among which are those of many eminent contemporaries. Dean Prideaux, after Seeman; Cervantes, after Kort; Johann Ens, after Colla, are well-known examples. Some of his portraits are from miniatures by his sister Anna. Jakob Folkema died at Amsterdam in 1767.

FORBES, JAMES DAVID, geologist and physical geographer, was born in Edinburgh, April 28, 1809. In early life his constitution was so delicate that severe study was forbidden him. Jameson taught him geology, and encouraged the general bias of his mind. One of his earliest geological papers was an account of a boulder, in a letter written to Professor Jameson, which is marked by broad generalisations. He was then not more than 20, and in 1833 he was appointed professor of natural philosophy in the Edinburgh University, which post he held till 1859, when he became principal of St. Salvador and St. Leonard's Colleges at St. Andrews. During his professorship he was in the habit of making frequent visits to the glaciers of Switzerland. He was the first to determine by accurate measurements the varying rate of flow of those bodies of ice, which he regarded as viscous-like masses forced down slopes by pressure, and he added much to our knowledge of glaciers. He confirmed Agassiz's announcement of the former presence of glaciers in the Highlands of Scotland. In 1851 he visited Norway, and drew up an excellent sketch of the glaciers and physical geography of that country. His attention was also given to many other subjects. He wrote largely on volcanoes, his first paper, published in 1828, being a long account of Mount Vesuvius, which was followed by seven others on volcanic phenomena, under the title of *Physical Notices of the Bay of Naples*, and published in the *Edinburgh Journal of Science* for 1828, 1829, 1830, and 1831; on atmospheric pressure; meteorology; on heat, which he made the subject of long research; on steam, in which he discovered many curious optical properties, and showed how they illustrated the phenomena of clouds; on terrestrial magnetism and temperature, &c. He also took great interest in mineralogy. His principal separate works are, *Travels through the Alps of Savoy and other parts of the Pennine Chain*, 8vo, Edinburgh, 1843; *Norway and its Glaciers visited in 1851*, 8vo, 1853; and *Occasional Papers on the Theory of Glaciers*, 8vo, 1859. He died December 31, 1868.

FORBES, SIR JOHN, M.D. [E. C. vol. ii. col. 951]. In 1857 Sir John Forbes published *Nature and Art in the Cure of Disease*, "a legacy," as he wrote, "to his younger brethren,"

intended to guard them against confiding in the curative agency of drugs. He died at the residence of his son, Mr. A. C. Forbes, on the 13th of November, 1861.

FORCADE, EUGÈNE, a distinguished French journalist, was born in 1820 at Marseille, where he founded in 1837 a journal called the *'Sémaphore'*, of which, in spite of his engagement in a banking-house, he held the management until his departure for Paris in 1840. About three years after his arrival in the capital he attracted attention by an article which he contributed to the *'Revue Indépendante'*, upon *'le Droit de Visite'*, and became connected with the *'Revue des Deux Mondes'*, to which he contributed with great regularity, particularly distinguishing himself through a series of years for the calm, intelligent, and philosophical method of his fortnightly summary of affairs, entitled *'Chronique de la Quinzaine'*. In 1845 he founded *'La Revue Nouvelle'*, 8vo, Paris, which extended to sixteen volumes, and to the end of the year 1847. To this review he supplied articles on Political Education, &c., *'De l'Éducation Politique'*, *'La Dotation du Séminaire Catholique de Maynooth'*, *'De l'Esprit Littéraire'*, and many others in literary and artistic criticism, and in general and party politics in England and in France. His next venture was the institution in 1851 of the *'Messager de l'Assemblée'*, which for its plain speaking on the contemplated coup d'état was suppressed on the 2nd of December, and its editor sentenced to three months' imprisonment. Besides the above and other journalistic activity, M. Forcade wrote and published in a separate form *'Études historiques'*, 12mo, Paris, 1853; and *'Histoire des Causes de la Guerre d'Orient d'après des Documents français et anglais'*, 12mo, Paris, 1854, which forms one of the volumes of the second series of the *'Bibliothèque Contemporaine'*. Under the strain of excessive work and continued political excitement, his brain at length gave way; and, after some months of restraint, he died, November 6, 1869.

FORCELLINI, EGIDIO, an Italian scholar and lexicographer, was born on the 26th of August, 1688, at a small village of Treviso, in the Venetian territory; and studied at Padua, under Faccioliati. In due course he was ordained to the priesthood, and in 1724 became director of the seminary at Ceneda, where also he filled the chair of rhetoric. In 1731 he returned to Padua, and remained there till 1765, when he retired to his native place. He died at Padua on the 4th of April, 1768.

Having exhibited rare scholarship and intelligence in some minor philological labours, Forcellini was encouraged by Cardinal Cornaro, Bishop of Padua, to undertake a lexicon which had been projected by his tutor Faccioliati. According to memoranda in the handwriting of Forcellini, it appears that he commenced his work about the end of the year 1718, and finished it on the 21st of February, 1753. From the 4th of June, 1753, to the 9th of April, 1755, he was engaged in revision; and the transcription, which was done by Luigi Violato, was commenced on the 3rd of December, 1753, and completed on the 13th of November, 1761. For ten years the huge MS. lay unpublished, until, three years after the death of Forcellini, the first edition was brought out through the munificence of Cardinal Prioli, to whom it was dedicated. It bore the title of *'Totius Latinitatis Lexicon, Consilio et Cura Jacobi Faccioliati, opera et studio Egidio Forcellini, Seminarii Patavini Alumnii lucubratum'*, 4 vols. 4to, Padua, 1771, second edition, 1805; *'Appendix ad "Totius Latinitatis Lexicon," folio, Padua, 1816; third edition of the entire work, "auctum et emendatum a Josepho Furlanetto," 4 vols. folio, Padua, 1827—31; another edition, "correctum et auctum," 4 vols. folio, Schneeburg, 1831—35, &c.* An edition adapted to English readers appeared under the care of James Bailey, 2 vols. 4to, London, 1826, in which English was substituted for Italian, which incorporated the Paduan Supplement, and exhibited upwards of 20,000 words which had been introduced by the learned editor. In the Appendices occurred the treatise by Horatius Tursellinus, entitled *'De Particulis Romanæ Orationis'*; Gerrard's *'Siglarium Romanum'*; and J. M. Gesner's *'Latinitatis Index Etymologicus'*.

FORCHHAMMER, JOHANN GEORG, chemist and geologist, was born July 26, 1794, at Husum, in Schleswig. He studied at Kiel and Copenhagen. In 1818 he accompanied Professor Oersted on a mineralogical expedition to Bornholm; in the following year he was employed by the State to travel through France, Great Britain, and Denmark; in 1823 he was appointed lecturer on mineralogy in Copenhagen University; and in 1850, professor. He was also employed in teaching at several other educational establishments. He was a member of the Academy of Science at Copenhagen from 1825 onwards, and in 1851 suc-

ceeded Oersted as the secretary to the academy. He also belonged to many other societies. His writings are numerous, and take a high place in scientific literature. They are written chiefly in Danish, partly in German, and partly in English. They are for the most part devoted to the mineralogy and rocks of Denmark. His most important observations are on metamorphism, on the relation between the contour of Denmark and its former geological history and changes of level; and on seawater. Amongst his separate works we may cite 'Danemarks geognostiske Forhold,' 4to, 1835; 'Skandinaviens geognostiske Natur,' 8vo, 1843; and 'Laerobog i Stoffernes almindelige chemie,' 1834-5. He died December 14, 1865.

* FORCHHAMMER, PAUL WILHELM, younger brother of Johann Georg, is an eminent archaeologist. He was born in Husum in 1803, attended the gymnasium in Lübeck, and later studied philology and archaeology in the University of Kiel, where in 1828 he took the degree of doctor of philosophy, and in 1837 was made a professor of archaeology. In 1830 he undertook a journey through Italy and Greece, and again in 1838 travelled in Greece and Asia Minor, Egypt and Rome, for the purpose of investigating the archaeological remains and tracing the history of classic art. Evidence of his laborious researches will be found in most of his works, which have been of especial value in elucidating the topography of ancient Greece, and showing how the art, literature, history, and antiquities mutually illustrate each other. His works include 'Hellenika,' Berlin, 1837; 'Die Athener und Sokrates, oder die Gesetzlichen und der Revolutionär,' Berlin, 1837; 'Apollo's Ankunft in Delphi,' Kiel, 1841; 'Die Geburt der Athene,' Kiel, 1841; 'Topographie von Athen,' Kiel, 1841; 'De ratione quam Aristoteles in dispendiis libris de animalibus secutus sit,' Kiel, 1846; 'De Aristotelis Arte Poetica, ex Platone illustranda,' Kiel, 1847; 'Die cyklopischen Mauern,' Kiel, 1847; 'Achill,' Kiel, 1853; 'Topographia Thebarum heptapylarum,' Kiel, 1854; 'Ueber die Reinheit der Baukunst,' Hamburg, 1856; 'Halkyonia,' Berlin, 1857; 'Ueber den Ursprung der Mythen,' printed in 'Philologus,' Göttingen, 1860. Conjointly with Jahn he founded the Archaeological Museum at Kiel.

FORD, RICHARD [E. C. vol. ii. col. 953]. After an illness of some continuance, Mr. Ford died on the 1st of September, 1858.

FORMAN, SIMON, physician and astrologer, was born near Wilton, Wiltshire, in 1552. After being a short time at the Grammar-School of Salisbury, he was apprenticed to a druggist in that city, and there obtained a little knowledge of medicinal plants and pharmacy, at the same time extending his acquaintance with other subjects. He opened a school in 1570, and then went to Magdalen College, Oxford, as a poor scholar. Here his favourite studies were medicine and astrology, and after pursuing similar studies for a time in Holland, he came to London, and practised medicine in Philpot Lane; but not having a licence or a degree, he was four times prosecuted for practising illegally. He thereupon went to Cambridge, obtained a degree, and settled at Lambeth as a physician and astrologer. In 1601 he was charged before the Archbishop of Canterbury as an empiric or cheat; but nevertheless persons of rank and position, among others the notorious Countess of Essex, consulted him, apparently more for his astrology and alchemy than for his medical knowledge. He died suddenly while crossing the Thames in a boat, September 12th, 1611, having, according to Lilly, prognosticated the exact time of his death on the Sunday before, being then in full health ('Life and Times,' p. 42). His MS. works, relating to the philosopher's stone, magic, astronomy, astrology, natural history, the plague, and other subjects, are partly in the British Museum, partly in the Plymouth Library, but chiefly in the Bodleian Library, Oxford. 'Forman's Autobiography from 1552 to 1602,' has been published, under the editorship of Mr. Halliwell. There has also appeared 'Brief Description of the Forman MSS. in the Public Library, Plymouth,' 1853.

* FORSTER, FRANÇOIS, an eminent French engraver, was born at Locle, in Neuchâtel, then a Prussian province, August 22nd, 1790; entered the atelier of Langlois at Paris in 1805; and at the Ecole des Beaux-Arts carried off the second prize in 1809, and the grand prize in 1814. The King of Prussia, then in Paris with the allies, presented him with a gold medal and an allowance of 60*l.* a year for two years, that he might complete his studies at Rome. There he worked hard at the pictures of Raffaele, but on returning to Paris in 1816, he was compelled for a time to engrave for the booksellers. Gradually he emancipated himself from task-work, and produced some of the best plates of the modern French school of line engraving. Among the first are two portraits of Raffaele, that painter's 'Graces'

(a plate of exquisite delicacy and precision of line and refinement of expression), Titian's 'Mistress,' and the Virgin in bas-relief of Lionardo da Vinci. The 'Marie Antoinette,' and 'St. Cecilia,' after Paul Delaroche, and some others from contemporary French painters, are equally excellent in their way. Among his portraits may be mentioned the Duke of Wellington, after Gerard, one of his earliest prints, and Queen Victoria, after Winterhalter, perhaps his latest. Forster was awarded a medal of the first class in 1855, and was promoted to be officer of the Legion of Honour in 1863. He was elected a member of the Institute (Académie des Beaux-Arts) in 1844.

* FORSTER, RIGHT HON. WILLIAM EDWARD, M.P., the only son of William Forster, Esq., a leading member of the Society of Friends, and for upwards of fifty years a minister in their community, was born at Bradpole, Dorsetshire, on the 11th of July, 1818. He was educated at the Friends' School at Tottenham. His mother was the sister of Sir Thomas Fowell Buxton, and his wife, whom he married in 1850, is the eldest daughter of the late Dr. Arnold, of Rugby. He contested Leeds in the Liberal interest in April, 1859, unsuccessfully; and was first elected to the House of Commons in February, 1861, as one of the members for Bradford, where he carried on business as a worsted manufacturer, which constituency again returned him in July, 1865, and which he continues to represent. He served as Under-Secretary for the Colonies from November, 1865, to July, 1866; and in December, 1868, was appointed to be Vice-President of the Committee of Council on Education, and also at the same time a fourth Charity Commissioner. He is J.P. and D.L. for the West Riding of Yorkshire, a Fellow of the Royal Geographical Society, and a captain in the 23rd West Riding Volunteers. Mr. Forster took part in the furtherance of the measures of the Gladstone administration in 1869; and in particular conducted through the House of Commons a Bill for the Reform of Endowed Schools, for the success of which he professed his gratitude for the co-operation of Earl de Grey and Bishop Temple. Addressing his constituents at Bradford on the evening of January 17, 1870, he announced the chief work of his party to be for the future of a constructive character. They must make, he said, such laws for the punishment of criminals as would tend to prevent crime; must so administer public money as to best promote education; so administer the Poor-laws as in the best way to check pauperism; and to some extent remodel the licensing laws so as in the best way to check drunkenness. All these questions were to be considered, and all these problems to be solved, with the utmost regard to the individual liberties of the subjects and the rights of the citizens, as scientific laws which dictate and regulate the business of society; and with the view of so shaping the necessary action of the government as not to take away the stimulus from the individual to do his duty. Mr. Forster's chief distinction in the session of 1870 lay in his admirable conduct of the Education Bill, the main principle of which was to lay down as a legal enactment that there should be sufficient schools throughout the country; and that wherever there was proved to be educational destitution, the local authorities should be called upon to supply it. It involved also the abolition of denominational inspectors. After the death of Lord Clarendon, Mr. Forster was promoted to a seat in the cabinet.

* FORTUNE, ROBERT, was born about 1813. He was first employed in the Botanical Garden at Edinburgh and at Chiswick, at the same time studying botany under Graham and Lindley; and then went to China as collector of plants on behalf of the Horticultural Society of London. In this capacity he forwarded numerous new and interesting plants to this country, and met with many adventures. His experience was published in 1847, in 'Three Years' Wanderings in the Northern Provinces of China,' which attracted much attention. In 1848 the East India Company sent him out to obtain information respecting tea, and as the result of his investigations he introduced into India many choice varieties of the plant, and improved implements and modes of culture. In 1857 the United States Government employed him to introduce the tea plant into America, and he succeeded in carrying to Washington 50,000 growing plants. He also introduced to Europe a large number of new and valuable flowers and fruits, and formed a rich entomological collection. His frequent visits to the Celestials led to the production of his 'Journey to the Tea Countries of China,' 8vo, 1852; and 'Residence among the Chinese; Inland, on the Coast, and at Sea; being the third visit, from 1853 to 1856.' His long experience constitutes him one of the highest authorities on all matters relating to Chinese tea and Chinese life. He has written

several papers on Chinese plants in the Journal of the Horticultural Society.

* FOSTER, BIRKET, landscape painter and designer, was born at North Shields, February 4, 1825. At the age of 16 he was apprenticed to Mr. Landell, the wood-engraver, by whose advice he, after a time, abandoned engraving for designing on wood. This branch of art he pursued for several years with great success, and many of the best landscape illustrations, both to books and periodicals, were from his pencil. Gradually, however, he gave more and more attention to painting in water-colours, and when, in 1859, he was elected an Associate of the Society of Painters in Water Colours, he gave up his practice on wood. At the exhibitions of the Society his pictures were from the first extremely popular, and their popularity has never abated. But of late he has turned by preference to oil as a vehicle, continuing to represent the simple heath and woodland scenery of Surrey and the home-counties, but adopting a broader manner, and dropping the minute detail of his water-colour drawings.

FOUCAULT, JEAN BERNARD LÉON, was born at Paris, September 18th, 1819. His father, a publisher, had him taught medicine; but evincing a preference for observational and experimental science, the young man devoted himself to those studies. When Daguerre's discovery relating to sun-pictures was published in 1839, Foucault eagerly entered on the matter, studying the optical principles concerned in the phenomena. He next assisted M. Donné in preparing a course of lectures on microscopic anatomy. In conjunction with M. Hippolyte Fizeau he made photometric comparisons of the solar, electric, and lime lights; and with M. Regnault, he experimented on binocular vision. In 1844 he made such improvements in the electric light as to render it available as a substitute for solar light for photographic and optical purposes; and afterwards invented a self-acting regulator for the same light, whereby the carbon points are always kept at the proper distance apart. He experimented on the production of interference-bands, by means of monochrome light and multiple prisms; on the laws of chromatic polarisation; on incandescent foci; on the interference of calorific rays (by the use of very minute thermometers); on the reverse action of the extreme red rays on a daguerreotype picture, in destroying the effect produced by the other rays; on the relation between frictional and voltaic electricity; on the use of the conical pendulum as a time-keeper; on luminous vibrations; and on many other subjects. Some of his researches were made for the Bureau des Longitudes, on the suggestion of F. Arago. Many of his experiments were important for their scientific results. It had been deduced from physical and dynamic laws, that if light travels more rapidly through air than through water, great support would be furnished to the undulatory theory of light; whereas the corpuscular or molecular theory would be strengthened by an opposite result. In 1850, Foucault undertook to examine the question experimentally. It was difficult, and required apparatus of a refined and highly sensitive kind; but he succeeded, and his results were accepted as favouring the undulatory theory. In 1851 he made his celebrated pendulum discovery. Reasoning from dynamic laws, he believed that a pendulum, oscillating freely for a long time, would gradually turn round an axis like the hands of a clock; that the pendulum would oscillate in an invariable plane if the earth were still; but that the diurnal rotation of the earth on its axis would give an apparent revolution to this plane. An experiment on a large scale proved that such is really the case; and it was a brilliant *séance* when he showed the result to the members of the Institute. The gyroscope, invented by him in 1852, not only confirmed this discovery, but demonstrated that the cardinal points of the horizon can be indicated without any observations of the heavenly bodies, and without any appeal to the compass or magnet. These researches obtained for Foucault the office of physical assistant at the Paris Observatory, and the award of the Copley Medal by the Royal Society of London. Another important discovery made by him was, that if a metallic disc be rotated between the poles of a horse-shoe magnet, the disc becomes heated, and the force required to rotate it increased; a result accepted as a valuable confirmation of the mechanical theory of heat. In 1857 he invented the polariser known by his name. In the same year he devised a mode of superseding metallic specula for reflecting telescopes, by precipitating silver from a chemical solution upon a concave glass mirror: (he was not aware at the time that Steinheil had done nearly the same thing in 1856). The Paris Observatory was afterwards supplied with two reflecting telescopes on this principle—one 16 inches

aperture by 8½ feet focal length, and the other 31 inches by 15 feet; and the plan has come largely into use, especially in conjunction with a method, invented by Foucault in 1859, for giving a paraboloidal form to the concave surface of his glass. In 1862 he made some refined experiments to determine the absolute velocity of light in air, in miles per second. Taking Wheatstone's apparatus for measuring the velocity of electricity, and adding exquisitely delicate mechanism to it, he found that the real velocity of light is less than had usually been estimated; a result that confirmed the opinion which had been for some time gaining ground, that the distance from the sun to the earth has been over-estimated. In this year he was elected a member of the Bureau des Longitudes, and decorated with the order of the Legion of Honour. In 1863 he invented a new isochronous governor, to equalise rotary motions. In 1864 he was elected foreign member of the Royal Society; and in 1865 succeeded Clapeyron as member of the Académie des Sciences. In 1866 he devised a new mode of applying an extremely thin film of silver to the surface of the object-glass of a telescope, so as to lessen the painful intensity of light when looking at the sun, and yet admit a sufficient number of rays to pass through. His indefatigable labours were brought to a close by a paralytic stroke in 1867; he died on the 13th of February, 1868. Most of his scientific papers (more than thirty in number) have been published in the 'Comptes Rendus,' the 'Annales de Chimie et de Physique,' and the 'Bulletin de la Société d'Encouragement.' Two were written in conjunction with Belfield-Lefevre, five with Fizeau, and one with Regnault. He contributed a few treatises to the 'Bibliothèque d'Instruction Publique.' During many years, beginning with 1845, he wrote the scientific department of the 'Journal des Débats.'

FOULD, ACHILLE, French statesman and financier, was born at Paris, November 17, 1800. His father, a rich Jewish banker (who died in 1855) initiated him into commercial life; and at one time he carried on, in conjunction with his brother Benoît, the banking firm known as Fould-Oppenheim. After travelling in France, Italy, and the East, he was in 1842 elected a member of the Conseil Général of the Hautes Pyrénées. When elected to the Chamber of Deputies for Tarbes, he joined the moderate party; but, without taking much part in general politics, he discussed the various questions of finance and political economy which arose, such as taxes, budgets, customs' duties, and the like; and became an authority on those subjects. The subvention of railways, the establishment of savings' banks, and the consolidation of government stocks, were measures which he assisted to carry. In 1844 he was reporter of the Commission on Newspaper Stamps. Accepting the Revolution of 1848 as an accomplished fact, he was chosen to represent the department of the Seine in the Constituent Assembly. In refutation of certain prevalent doctrines concerning the currency, he wrote two pamphlets, 'Pas d'Assignats' and 'Opinions de M. A. Fould sur les Assignats.' Having been a valuable member of many commissions, he was appointed Minister of Finance under the Prince-President, Louis Napoleon. A loan being required, he departed from the usual practice of obtaining it from the great bankers, and received deposits in small sums from the people generally, a plan which met with great success. He brought forward numerous measures relating to the income tax, hypothecated credits, octroi duties, register duty, post office, taxes on letters, circulation of bank notes, the Bank of Algeria, the civil pension list, a penitentiary colony at Cayenne, a consolidation of the customs' duties with the indirect taxes, the establishment of reversionary annuities, &c. M. Fould retained his office after the coup d'état in 1851, but resigned in 1852 because he could not assent to the Emperor's resolution to confiscate the Orleans property. Chosen as a senator, he was soon afterwards appointed to the high offices of Minister of State and Minister of the Emperor's Household. He took a leading part in bringing about the Great Exposition of 1855, and in effecting the vast enlargements and improvements of the Louvre. Recalled to the Ministry of Finance in 1861, he addressed a memoir to the Emperor, recommending a more open statement of the financial position of the legislature than had been customary, and a less lavish use of the system of supplementary credits. Many important fiscal reforms were effected under his ministry. In 1865 he published pamphlets on credits and sinking funds. He resigned office in 1867. M. Fould died suddenly of angina pectoris at his villa, Tarbes, on the 5th of October, 1867. The Emperor, who lost in him one of the few judicious ministers he has called to his councils, honoured his memory with a pompous funeral.

FOURNET, VICTOR, was born at Paris, May 15, 1801. He was educated at the École des Mines, and on leaving it became director of the metallurgical works at Katzenthal (Bas Rhin). In 1828 he was put in charge of the mines at Pontgibaud, and in 1834 he was appointed professor of mineralogy and geology at Lyon. He was a member of the Academy of Sciences, and of numerous other scientific bodies, as also an officer of the Legion of Honour. He died Jan. 8, 1869. His life was a very active one, and he made important contributions to several branches of knowledge, more especially metallurgy, mineralogy, geology, meteorology, and physical geography. He was one of the first to show that the coal formations of Western Europe are continued over large areas beneath newer strata in France, Belgium, and Great Britain. He enunciated new and ingenious views on the formation of mineral veins and plutonic rocks. He accounted for many of the phenomena presented by quartz in these places by his theory of *surfusion*. He found by experiment that silica in unison with certain other substances, melted at a temperature lower than silica alone, and that when cooled down slowly it retained its viscosity at a temperature far below that required to soften it in the first instance. This state of viscosity below the fusing point he called *surfusion*. He distinguished two kinds, the igneous and the gelatinous. He applied this fact, or principle as he called it, together with that of the varying mineralogical composition of rocks, according to the rate of cooling, to explain the association of quartz with chlorite, garnet, and felspar. He discovered a large sheet of water beneath Lyon, which is now used as the chief source of supply. When the Geological Society of Paris had an extraordinary session at Lyon, he contributed largely to its success, by acting as the guide to the excursion parties, furnishing subjects for discussion, and facilitating the arrangements. He drew up a report of the meeting, under the title '*Géologie Lyonnaise*,' 8vo, Lyon, 1862. He also wrote '*Études sur les Dépôts Métallifères*,' and contributed 172 papers to scientific journals, of which the majority were published in the '*Annales*,' issued by the Agricultural Society of Lyon; some in the '*Mémoires*' of the Academy of Sciences of that place; some in the '*Comptes Rendus*,' and a few elsewhere. A full list is given in the '*Catalogue of Scientific Papers*,' published by the Royal Society.

FOURNIER, PIERRE SIMON, an eminent typefounder, was born in Paris, September 15th, 1712. He became conversant with typography under his father, who was manager of the printing office of Guillaume Lebé. After studying design under Colson, young Fournier practised for a time as a wood-engraver, but soon turned his attention definitely to the designing and engraving of matrices for printing types. In 1737 he published '*Tables des Proportions qu'il faut observer entre les Caractères*,' with a view to a more symmetrical determination of the sizes of types for printing. In 1742 appeared his '*Modèle des Caractères de l'Imprimerie*, avec un abrégé historique des principaux graveurs Français,' giving examples of many new and beautiful forms of type. This was followed by '*Epreuves de deux petits Caractères nouvellement gravés et exécutés dans toutes les parties typographiques*.' Fournier engaged in a controversy on an interesting point in the history of printing. He disputed the right of Gutenberg to the honour usually paid to him as the inventor of printing, on the ground that Schöffer was the first to use moveable metal types, Gutenberg having only used moveable wooden types, which were but a slight advance on the engraved wood blocks for block books, until then in use. Fournier maintained his opinions in a '*Dissertation sur l'origine et le progrès de l'art de graver en bois*,' 1758; followed by '*De l'origine et des productions de l'imprimerie primitive en taille de bois*,' 1759. Schöpfliin having published a pamphlet, '*Vindictia Typografica*,' in 1760, to support the claims of Gutenberg at Strasbourg against those of Schöffer at Mainz, Fournier replied to him in '*Observations*,' &c., 1760. Another antagonist, M. Baer, published '*Lettre sur l'Origine de l'Imprimerie*,' 1761; to which Fournier soon afterwards responded in '*Remarques*,' &c. and he pursued the subject in '*Lettre à Fréron*,' 1763. These were afterwards printed together in one volume, under the title, '*Traité historique et critiques sur l'origine de l'Imprimerie*.' Another work by Fournier was '*Traité historique et critique sur l'origine et les progrès des caractères de fonte pour l'impression des caractères de la musique*, avec des épreuves de nouveaux caractères de musique,' 1765. His chief work, however, was '*Manuel typographique*,' 2 vols. 4to, 1764—66. The first volume relates to the engraving and founding of types; the second to an engraved collection of alphabets, 101 in number, ancient and modern, oriental and European. There

were to have been two more volumes—one on the art of printing, and the other containing notices of celebrated printers, but he did not live to finish them. He died October 8th, 1768.

FOWKE, CAPTAIN FRANCIS, R. E., was born, in 1823, at Belfast, and after studying at the Military College, Woolwich, obtained a commission in the Royal Engineers, in 1842, and was ordered to Bermuda. Here he gave much attention to constructive science, and obtaining the confidence of his superiors was entrusted to design and erect several works. On his return to England he built the Raglan Barrack, Devonport, which was believed to be a great advance on previous barracks in its sanitary arrangements, convenience, and economy of construction. In 1853 he was appointed Inspector of the Science and Art Department, South Kensington. Like most government appointments of this order it was made without much regard to the special attainments of the person nominated. Captain Fowke knew little of any science except construction, and less of art, but he possessed great energy and powers of application, and these stood him in good stead. He was soon called away from his inspection of science and art, whatever that meant, to take charge (1854—1855) of the machinery department of the Paris International Exhibition, and shortly after became secretary to the English Commissioners, and drew up one or two reports. On the completion of this service he was shifted to the more congenial post of engineer of the South Kensington Museum. In this capacity he made many alterations in the old and temporary buildings, and in 1858 designed the Vernon and Sheepshanks Galleries. In 1860—61 he designed and erected the Industrial Museum, Edinburgh, and later remodelled the Dublin National Gallery. About the same time he erected the great conservatory in the grounds of the Royal Horticultural Society, South Kensington, and soon after was called upon to produce the designs for the International Exhibition building of 1862. In this vast edifice, which covered an area of 25 acres, Captain Fowke had many difficulties to overcome, and was, it must be confessed, not wholly successful in the result; but it is due to him to remember that many alterations were made in the designs from time to time in opposition to his opinions and wishes. This was the last undertaking of importance he lived to complete, but he was busily employed not only in superintending the works at South Kensington and elsewhere, but in preparing some extensive new designs for the government. One of these was for the scheme of National Museums with which it was proposed to cover the ground occupied by the Great Exhibition of 1862. For this a competition was opened in 1864, at which Captain Fowke obtained the first premium of 400*l.* by a very grandiose Italian design—but which it is needless to add has passed to the well-peopled limbo of unaccomplished government schemes. His next great work of this kind was a complete and very elaborate series of designs for an entirely new South Kensington Museum in place of the iron and other temporary sheds that had hitherto borne that name. Particulars and engravings of the new museum were published in government blue-books, and the first section of the work was commenced under Captain Fowke's superintendence. It had not, however, proceeded far, when he died at the Museum suddenly, from the bursting of a blood-vessel, on the 3rd of December, 1865. The new buildings of the South Kensington Museum have since been carried steadily forward, but are still very far from being completed or displaying anything like the magnitude of their proportions, though their architectural character may now be understood. The design of the Royal Albert Hall of Science, which is in course of erection a little north of the Horticultural Gardens, is stated to be "based on ideas originated by the late Captain Fowke, R.E.," but we are not aware that he made any drawings for it. Captain Fowke, though hardly an architect, and certainly not an artist, was a good engineer, an accomplished gentleman, and an eminent and laborious public servant. Besides his engineering and architectural works, he gave great attention to mechanics, made improvements in the fire-engine and in travelling scaffolds, and invented collapsing pontoons and other useful and ingenious contrivances.

FOWLER, CHARLES [E. C. vol. ii. col. 979]. Mr. Fowler died at his residence, Western House, Great Marlow, Bucks, September 2, 1867.

FOWLER, JOHN, inventor of the steam-plough, was born at Melksham, in Wiltshire, July 11th, 1826. In 1847 he was engaged at an engineering factory at Middlesborough-on-Tees. Being in Ireland in 1849, he was struck with the great expanse of waste undrained land, and with the benefit which would accrue from any improved method of sub-soil drainage. In 1850

he joined Mr. Alfred Fry, of Bristol, in a series of experiments on a new draining or drain-tile laying machine, with such a successful result that he was able to bring into use his draining-plough, worked at first by horses, but very soon afterwards by steam-power. The efficacy of this machine in laying down draining-tiles at any depth in the soil brought him large contracts in the south of England. In 1852 he began to attend to the subject of steam-cultivation, especially the application of his steam-plough to arable land. He exhibited some striking results at Ipswich in 1856; read a paper on the subject before the Institution of Mechanical Engineers in 1857; and received the Royal Agricultural Society's prize of 500*l.* at the Chester meeting in 1858. In 1861 he joined with Messrs. Hewitson and Kitson in establishing a steam-plough factory at Leeds. Mr. Fowler died December 4th, 1864.

*FOWLER, JOHN, civil engineer, the eldest son of Mr. John Fowler, of Wadsley Hall, near Sheffield, was born at that place in 1817. He became a pupil of Mr. Leather, of Leeds, at the time when a great reservoir for Sheffield was under construction; and soon afterwards surveyed a line of railway from Birmingham through Dudley and Wolverhampton to Stourbridge. He next acted for a few years as assistant to Mr. Rastrick. In 1844 he became engineer of the Manchester, Sheffield, and Lincolnshire Railway. Settling in London, he was successively engaged on extensive works abroad and at home, chiefly railways and docks. For some years he was consulting engineer to the Department of Woods and Forests, and also to the Great Western Railway Company. As engineer to the Metropolitan and Metropolitan District Railway Companies, he has had very formidable difficulties to contend with in the construction of underground railways in the Metropolis. In encountering the middle and low level sewers of the great main-drainage system, the smaller sewers and drains, the pneumatic tube at the junction of the Euston and Hampstead Roads, the water-pipes and mains, the gas-pipes and mains, and the underground springs, the work has been a struggle against obstacles from beginning to end. In 1870, Mr. Fowler, convinced of the impracticability of a railway bridge twenty miles long over the English Channel, or a railway tunnel of equal length under the Channel, prepared complete plans for a floating ferry or railway ship, to receive a railway train in a specially constructed dock near Dover, to steam with it across the Channel in an hour, to land it in a new harbour to be built between Calais and Boulogne, and there to transfer it to the French railways. Mr. Fowler wrote a paper on the Improvements in the River Tyne, to form part of the 'Industrial Resources of the Tyne, Wear, and Tees,' in 1864. He has also written other scientific and professional papers.

FOX, WILLIAM JOHNSON [E. C. vol. ii. col. 986]. Mr. Fox died on the 3rd of June, 1864, in his 80th year.

FRAGONARD, ALEXANDRE ÉVARISTE, French painter and sculptor, was born at Grasse, in Provence, in 1780, studied under David, and painted such works as 'Maria Theresa presenting her Son to the Hungarian Deputies'; 'Tasso reading his Jerusalem Delivered to the Duke of Ferrara'; 'Female Christian Martyrs thrown to wild beasts in the Amphitheatre,' which were greatly admired. He was, however, even more admired as a sculptor, in which capacity he executed a colossal statue of Pichégu, the Fountain of the Place Maubert at Paris, and the pediment of the Legislative Chamber. He died in November, 1850.

FRAGONARD, JEAN HONORÉ, an eminent French painter, was born at Grasse, in 1732. A pupil of Chardin and Vanloo, he won the grand prize in 1752, and went to Rome, where he modelled his style on that of Pietro da Cortona. Returning to Paris, he painted historical subjects, and acquired distinction. His 'Cérésus et Callirhoé' was honoured with an elaborate descriptive criticism by Diderot, and secured his election into the Academy. His later works were, however, mostly small, brilliantly coloured, and somewhat meretricious amatory pieces, such as 'Le Baiser à la derobée,' 'Le Serment d'Amour,' 'Le Fontaine d'Amour,' and the like, which exactly hit the voluptuous taste of the fashionable society of Paris, and were multiplied by the burins of the best French engravers. But the Revolution of 1789 extinguished the demand for works of this class. Fragonard was appointed by the Assemblée Nationale one of the keepers of the Museum, and had the credit of introducing the arrangement of the pictures by schools. He did not resume his pencils, and died poor, August 22nd, 1806.

FRÄHN, CHRISTIAN MARTIN. German orientalist, was born in Rostock, June 4th, 1782. He studied from 1800 the oriental languages, at his native town and at Göttingen, and he afterwards passed several years in Switzerland as professor of

Latin in the Pestalozzian Institute. In 1806 he returned to Rostock, and in 1807, on the recommendation of Tytchen, was made professor of the oriental languages in Kasan. In 1815 he was named member of the Imperial Academy for Oriental Antiquities, head librarian, director of the Asiatic Museum, and state councillor at St. Petersburg. Frähn was an excellent scholar, and he did much to promote the study of the oriental languages and literature in Russia. He also paid great attention to numismatics, and was commissioned to classify the medals in the Imperial Academy. His numerous papers on oriental coins are among the most valued of his writings. He died in St. Petersburg, August 16th, 1851. His principal works include 'Ibn-Fossilan's und anderer Araber Berichte über die Russen älterer Zeit,' St. Petersburg, 1823; 'De Musei Sprewitziani mosque Numis cuficis nonnullis,' 4to, St. Petersburg, 1825; 'Abu' Yhazi Bahadur Chani Historia Mongolorum et Tatarorum,' fol., 1825; 'Recensio Numorum Muhammedanorum Academiæ Imperialis Scientiarum Petropolitane,' 4to, St. Petersburg, 1826, to which a supplement was added, edited by B. Dorn, 8vo, St. Petersburg, 1855. He also contributed above a hundred and fifty papers to the 'Mémoires de l'Académie des Sciences de Saint-Petersbourg,' 1819-26; 'Mines de l'Orient,' fol., 1816; 'Das Asiatische Museum,' by Dorn, St. Petersburg, 1846; 'Le Bulletin Scientifique, publié par l'Académie des Sciences de Saint-Petersbourg,' 1836-48; 'Journal Asiatique de Paris,' 1823-28; and 'Journal de Saint-Petersbourg,' 1829-39.

*FRAIKIN, CHARLES AUGUSTE, a popular Belgian sculptor, was born in 1816, at Herenthalt, near Antwerp. A pupil in the Antwerp Academy, he exhibited for the first time at the Salon, Brussels, in 1846; in the following year acquired celebrity by his statue of 'Cupid Captive,' and ever since has continued to produce works of a similar character. He has, however, executed many official and other commissions of a more pretentious kind, including the tomb of the Queen of the Belgians; but his nude female statues of Venus, Psyche, Innocence, and such like, have given him his chief celebrity. The softness and delicacy of his finish, and a somewhat extreme sensuousness of style, are doubtless important elements of his popularity. M. Fraikin is a Knight of the Order of Leopold, and a member of the Antwerp Academy.

* FRANCIS JOSEPH CHARLES, Emperor of Austria. [E. C. vol. ii. col. 995.] The events which led to the remarkable changes which have occurred in the Austrian empire, and in the position of the emperor, since 1858, have been related in considerable detail in the GEOGRAPHICAL SUPPLEMENT of the E.C. under the headings of AUSTRIA, ITALY, DENMARK, SCHLESWIG-HOLSTEIN, and PRUSSIA. Here, therefore, a succinct narrative will be sufficient to carry forward the personal history of the emperor. The first great foreign trouble of the Emperor Francis Joseph occurred at a time of grave domestic trial, arising from the dissatisfaction of large sections of his subjects, and especially the Hungarians, at the heavy imposition of new taxes and the refusal of a satisfactory system of representation. It was probably a knowledge of the straitened financial condition of Austria, and the extent of internal dissatisfaction, that emboldened Cavour to force matters to a crisis. In the latter part of 1858 it became known that a treaty had been concluded between France and Sardinia, by which the former bound herself to support Sardinia in case of an invasion of Piedmont by Austria; and this invasion Cavour made it his business to bring on. Affairs had become so threatening by the spring of 1859 that Russia proposed a congress for the settlement of the Italian question, to which the other powers assented with real or seeming readiness. The preliminary negotiations, however, disclosed incompatible claims, and Austria placed herself in the wrong by insisting on Sardinia disarming before the congress met, and requiring her, by a formal and imperious summons, to do so. Against this England, Russia, and Prussia protested, whilst France prepared to march troops to the assistance of Sardinia. The news created a ferment throughout Italy. In Tuscany the people rose in arms; the Grand Dukes of Florence and Modena and the Duchess of Parma were forced to fly, and the King of Sardinia was declared Dictator of Tuscany.

The Austrian army crossed the Ticino in force, April 29, 1859, but a delay of a fortnight followed, and was fatal. Bad weather set in, the rivers were swollen, the fields converted into swamps, the roads became difficult for the movement of infantry, and almost impassable for cavalry. Meanwhile the Piedmontese troops were concentrating, and the French were rapidly pouring soldiers and artillery into Genoa by sea, and to Alessandria by railway, and sending an army across the Alps to Turin. It was

not till the 20th of May that the first serious encounter took place, at Montebello, between the Austrian and combined French and Sardinian armies. The Austrians fought courageously, but were defeated with great loss. Various skirmishes followed with equal ill-success for the Austrians, who were forced back step by step, till, on the 4th of June, they were brought to a stand at Magenta, on the east of the Ticino, and on the direct road from Novara to Milan. Here, after a desperate conflict, which lasted the greater part of the day, the Austrians were repulsed at all points, with a loss of over 8,000 killed and wounded, and 5,000 prisoners. The inhabitants of Milan rose in insurrection, and drove out the garrison; the Austrians were compelled to evacuate successively all their strong positions in Lombardy, and to continue their retreat, though constantly facing their foes, until, on the 22nd of June, they were obliged to cross to the eastern side of the Mincio. Every exertion had been made on each side to bring up their men. The Emperor of Austria joined his army and assumed the command in chief, making Villafranca his head-quarters. At the head of the French and Italian armies were the Emperor of the French and the King of Sardinia, assisted by Marshals Baraguay D'Hilliers, Canrobert, MacMahon, the Duke of Magenta, and General Niel. Each side had over 150,000 men, the Austrians being the stronger in men but weaker in artillery. The Austrians recrossed the Mincio on the night of the 23rd of June, and occupied a line of about twelve miles, extending from Pozzolengo and Solferino to Castel Goffredo, their artillery crowning the heights of Volta. The battle of Solferino lasted from ten o'clock in the morning till nearly eight in the evening of the 24th, but the Austrian army had commenced to retreat as early as four in the afternoon. The allies lost over 18,000 men in killed and wounded; the Austrian loss was estimated at 30,000 in killed and wounded, but in addition 7,000 prisoners and 30 guns fell into the hands of the allies. The Italians were burning for the expulsion of the Austrians from Venice as well as from Lombardy, and appearances boded ill for the fortunes of Austria; but Napoleon III., satisfied with having proved the superiority of his arms, was equally averse to carrying further the humiliation of Austria or the elevation of Sardinia. He accorded, July 7th, an armistice; on the 11th visited the Emperor Francis Joseph at Villafranca, and there agreed to the preliminaries of a peace, the terms of which were comparatively easy, and which the Emperor of Austria, recognizing his defeat, willingly accepted. By the treaty, signed at Zurich, October 17th, 1859, Austria ceded Lombardy, but was to retain Venice and her other Italian possessions. These, however, were to form parts of the Italian Confederation, which, according to the treaty, was to be formed under the presidency of the pope. This portion of the treaty was, however, repudiated by the Italians; provincial governments were established, Tuscany, Modena, and the Roman Legations declared themselves annexed to Sardinia, and the Emperor of Austria, warned by Napoleon III. that he must not interfere with the internal affairs of Italy, could only protest.

He now turned his attention to home affairs; announced his desire to remove the political or social grievances under which any section of his people might be suffering, and appointed a commission to examine and report upon the condition of the finances of the empire, which were in a state of extreme disorder. One of the first important measures which followed was the reconstitution of the Reichsrath, which, by successive enlargements and revision, was at length (July and October, 1860, and February, 1861), changed from a merely consultative body into a deliberative assembly of 343 members assimilating to the English model, the imperial ministers being for the first time declared responsible to the Reichsrath for the maintenance of the constitution and the exact fulfilment of the laws. It was an immense advance, but the division into electoral districts gave a great preponderance to the German element, and Hungary, Transylvania, and Venice, and subsequently Bohemia, refused to send delegates, and neither persuasion nor threats of coercion would induce them to yield. The emperor persisted in a conciliatory course. The dissatisfied provinces maintained a position of passive resistance, till the attention of all was directed to the Germano-Danish quarrel respecting Schleswig-Holstein. Unfortunately for Austria, the emperor felt it to be necessary, in order to maintain his equality with Prussia as a leading German power, to join with Prussia in enforcing the decree of the Frankfurt Diet for the separation of Holstein from Denmark. Against this little power the combined forces of Austria and Prussia were, as was to be expected, successful; and by a treaty signed

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at Vienna, October 30th, 1864, Denmark surrendered Schleswig-Holstein and Lauenburg to the conquerors. Holstein was assigned to Austria, but Prussia was bent on obtaining possession of both the duchies, and when Austria refused to make over her share for a pecuniary compensation, Prussia found matter for complaint in the manner in which Holstein was governed; the armaments of Austria, moreover, were declared to be menacing, and various pretexts were found for increasing the strength of the Prussian troops in Schleswig out of all proportion to those of Austria, and for the mobilisation of her military forces. The time had come for Bismarck to take another step forwards in his great scheme for the aggrandisement of Prussia. In the war with Denmark the measure of Austria's military strength and weakness had been accurately taken. Her inferiority in soldiers, armaments, tactics, and discipline was evident, and Bismarck resolved to strike before these could be amended. He was probably not very careful as to the speciousness of the grounds for declaring war, but those he put forward were marked by even more than his usual audacity. He had, however, carefully prepared the means for giving effect to the blow, and among other things in anticipation of the war he had in the previous April entered into a treaty with Italy by which the two bound themselves to act jointly in the event of a war with Austria, and not to conclude a peace without the cession by Austria of Venice to Italy and the Elbe Duchies to Prussia. Hostilities commenced on the 14th of June, 1865, and the Prussian army at once took the field in a state of complete organisation, every man supplied with a needle-gun of the most improved pattern, the artillery numerous and excellent, and the commissariat perfect. The scheme of the campaign had been studiously worked out by Von Moltke, and everything thoroughly arranged. Austria, on the other hand, was wholly unprepared; her forces were widely scattered, the arms imperfect, and neither plan nor provision made for such a contingency. The Prussians took possession of Cassel, Giessen, and Leipzig on the 15th of June; seized the city of Hanover on the 17th, and Dresden on the 18th; on the 22nd the First Army Corps, under Prince Charles, entered Bohemia; and on the 25th the Second Army, under the Crown Prince, crossed the mountains from Silesia to Nachod and Trantenau. In a series of desperately-contested fights, extending from the 27th of June to the 2nd of July, the Austrians were beaten again and again, but were able to concentrate their forces between the fortresses of Königgrätz and Josephstadt. Here, July the 3rd, took place the battle, variously called Königgrätz and Sadowa, which decided the campaign. Nearly half a million combatants were engaged; the fight lasted from dawn till nearly sunset of that long summer's day, but the superior numbers, better arms, and more masterly strategy of the Prussians prevailed. The Austrians lost 32,000 in killed and wounded, and 18,000 in prisoners, and Marshal Benedik requested a truce, which, after some negotiation, was granted. In Italy, meanwhile, affairs had worn a somewhat different aspect. The King of Italy, assisted by Generals Marmora and Cialdini, took the field at the head of an army of 120,000 men. The Austrian forces were stronger, but large numbers of men were required to garrison the fortresses of the Quadrilateral. The first, and only general, encounter between the two armies was at Custoza on the 24th of June. The battle lasted from seven in the morning till five in the afternoon, when the Italians, who fought with great bravery and held their positions against repeated charges with admirable tenacity, retreated in good order, the Austrians being too much exhausted to pursue them. At sea the Austrian and Italian fleets came into collision off Lissa on the 20th of July, when, after a smart engagement of four hours, both fleets drew off, the Italians having lost a large iron-clad frigate, the *Re d'Italia*, and a gun-boat, both of which were sunk during the fight; whilst the Austrian line-of-battle ship, the *Kaiser*, was so much damaged that she had to be run ashore. After the battle of Sadowa, the Emperor of Austria, having obtained a few days' truce, applied to the Emperor of the French to mediate for an armistice, as preliminary to a treaty of peace, placing at the same time the Venetian territory at the disposal of Napoleon with the understanding that it should be eventually transferred to Italy.

The armistice was obtained; and on the 26th of July a treaty of peace between the belligerents was signed at Prague. By it Austria agreed to transfer the Venetian territory, with the fortresses of the Quadrilateral, to Italy; recognised the dissolution of the late German Bund, and a new formation of Germany in which she should have no part; transferred all her rights in Schleswig and Holstein to Prussia; and undertook to pay an

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indemnity of 40,000,000 Prussian dollars on account of the war, besides abandoning her German allies to the tender mercies of the conqueror. It was a terrible price to pay, but Austria was hopelessly beaten, and Prussia had made the war for a purpose which she was little likely to forego in the hour of victory. Austria would have fared worse but for French intervention. The King of Prussia was not prepared for a war with France in conjunction with Austria. He preferred to deal with each separately. The time for France was not yet.

Rendered by these disasters a sadder but a wiser man, Francis Joseph addressed himself resolutely to the settlement of the internal difficulties of the empire. Taking as chief adviser Count Beust, late minister of Saxony, he announced his determination to adopt to the full the position of a constitutional monarch and to concede as far as practicable self-government to the several provinces, and to carry out such reforms as might appear necessary for the satisfaction of his subjects, the strengthening of the empire, and the consolidation of the several races united under it. The grand difficulty of "Hungarian independence and dynastic union with Austria," on which Hungary, under the leadership of Deak, had persistently insisted, was, after mature deliberation and discussion, now fully conceded, and the dualism of the empire firmly established. Francis Joseph was crowned King of Hungary at Pesth on the 18th of June, 1867, amidst the utmost enthusiasm of the whole Hungarian people, and to the satisfaction of the great bulk of the remainder of the empire, though dualism was, and perhaps still is, far from being universally popular. Francis Joseph has since honestly laboured to fulfil his promises. The finances have been improved, though necessarily they are still in an unsatisfactory condition; economy has been studiously enforced; trade and commerce have been encouraged; education promoted, and released to a great extent from the absolute control of the Roman Catholic clergy; the Concordat was formally abrogated July, 1870, in consequence of the definition of the dogma of papal infallibility; and peace has been firmly maintained. There have been troubles, an insurrection in Dalmatia, and local differences from the perhaps excessive claims of other provinces, but they have been successfully got over; "the empire," as the Reichsrath were told in the speech from the throne at their last meeting, December 13th, 1869, "the empire has undeniably undergone in all directions a progressive development on the basis of constitutional institutions." The emperor, under trying circumstances, has maintained his position as a constitutional monarch, and retains unimpaired his personal popularity.

FRANKLAND, EDWARD, Ph.D., D.C.L., F.R.S., was born at Churchtown, near Lancaster, on the 18th of January, 1825. He studied chemistry under Dr. Playfair, under Liebig, and at Marburg under R. W. Bunsen. On April 19, 1847, Mr. Frankland and Dr. Kolbe, then assistants to Dr. Lyon Playfair, in the Museum of Practical Geology, read a paper at the Chemical Society of London 'On the Chemical Constitution of Metacetic Acid and some other Bodies related to it.' In this they showed that the nitriles obtained from organic acids are the cyanides of the alcohol radicals of the series next below that to which the acid belongs. Thus they considered the benzonitrile of Fehling to be the cyanide of phenyl, and pointed out that by boiling the nitriles with alcoholic potash potassium salts of acids richer in carbon were formed; and they showed that cyanide of ethyl thus treated gave the salt of metacetic acid (or propionic acid, as it is now called), and ammonia. A more complete memoir was subsequently published in the 'Annalen der Chemie und Pharmacie,' in which this reaction was proved to be general, and to take place equally in the methyl and amyl series. At the same meeting Dr. Kolbe read his paper on the decomposition of valeric acid by the voltaic current by which the radical butyl of the then unknown butyl series was produced. The importance of these two communications was very great, for the former described the first instance of the synthesis of organic acids, which has since been so much developed; while the second announced the discovery of the means of separating from these acids the positive radicals which they contain.

Shortly after the publication of these researches, Frankland and Kolbe proceeded to the laboratory of Professor Bunsen, in Marburg, and in the following year, 1848, they published another joint paper on the action of potassium on cyanide of ethyl, by which they obtained a basic substance, cyanethine, of the same composition as the cyanide, and a gas which they then considered to be methyl, but which was afterwards found to be hydride of ethyl. By the action of chlorine on this gas a body isomeric with chloride of ethyl was produced.

Mr. Frankland was the first Englishman who took the degree of Ph.D. at the University of Marburg, for which he was admitted to examination in 1849, on the production of his dissertation on one of his most important works, viz., the Isolation of the Alcohol Radicals. He found that by heating the iodide of ethyl with zinc to a temperature of 150° C. the radical ethyl was liberated. This is the basis of the series of which ordinary alcohol is a member. At the same time two other gases were formed by the destruction of a portion of the ethyl; one was olefiant gas, and the other was found to be identical with that obtained by Frankland and Kolbe in the previous year from the cyanide of ethyl. This gas, hydride of ethyl, was prepared in the pure state by digesting water, zinc, and iodide of ethyl.

In the same year Dr. Frankland published in the 'Journal of the Chemical Society' and in the 'Annalen' an account of some experiments on the action of zinc on iodide of methyl. This also produced gaseous products, and the residue by the action of water generated pure marsh gas. If, instead of adding water, the contents of the digestion tube were distilled, a volatile spontaneously inflammable liquid, zinc methyl, consisting of the radical methyl united with zinc, passed over. He also found that a corresponding ethyl compound might be obtained in a similar manner. These experiments were continued, and in 1850 he published in the same periodicals his further results, and his reasons for considering that the gas, which he first took to be methyl, was in reality the hydride of ethyl. In the same paper he describes the amyl derivatives, and in a subsequent communication the action of light on iodide of ethyl, which in the presence of mercury yields ethyl gas and its products of decomposition.

In 1851 he communicated to the Literary and Philosophical Society of Manchester the results of some experiments on gas-lighting, during which he examined White's process, which consists of making water gas by passing steam over heated coke, and transmitting the products thus obtained through a gas retort, in which coal or resin is being distilled. This was found to diminish the amount of tarry matters produced, and to increase the quantity of illuminating hydrocarbons, thus generating a larger quantity of a richer gas. This paper was printed in the 'Transactions of the Literary and Philosophical Society of Manchester,' and in the 'Annalen,' and an abstract appeared in the 'Journal of the Chemical Society.'

The 'Philosophical Transactions' for 1852 contain a long memoir by Dr. Frankland, entitled, 'On a New Series of Organic Bodies containing Metals.' In this are described some of the compounds containing tin, which were obtained from the product of the action of iodide of ethyl on tin in sunlight at ordinary temperatures, or by digestion at 180° C. in sealed tubes. An iodide of stannethyl was thus formed (together with ethyl and olefiant gas) which by treatment with reagents gave a corresponding oxide, sulphide, and chloride. The radical itself was liberated by subjecting the iodide to the action of zinc. In this memoir further experiments on zinc methyl are detailed, and also the behaviour of iodide of methyl with mercury under the influence of sunlight, which yielded results differing from those obtained with the ethyl compound, the iodide of mercury methyl being generated. This important communication concludes with some theoretical considerations, in which the analogy of these organo-metallic bodies with cacodyl is pointed out, and in which that character of elements which has since been termed "atomicity" was first described.

In conjunction with Mr. W. J. Ward, Dr. Frankland published in 1853 a description of an improved form of apparatus for the analyses of gases, by the use of which these processes were very much facilitated, and the time required for their performance diminished to a very considerable extent.

In 1855 another paper on the organometallic bodies was published in the 'Proceedings of the Royal Society' and in the 'Annales de Chimie et de Physique,' describing the method of preparing zinc ethyl in considerable quantities; its properties and compounds were also carefully studied, and an account given of an apparatus for performing digestions at a high temperature and under pressure. The sealed tubes containing the bodies to be heated were enclosed in a strong wrought-iron steam-boiler, in which they might be heated to temperatures as high as 250° C., the pressure of the steam on the exterior of the tubes counterbalancing the internal pressure, and thus preventing the destruction of the glass vessels. This apparatus is now extensively employed by chemists.

The action of nitric oxide on the zinc compounds of ethyl and methyl was studied in 1856, and resulted in the discovery of two

new acids, the dinitromethylic and dinitroethyl acids. These results appear in the 'Transactions of the Royal Soc.' and in the 'Annalen der Chemie und Pharmacie'; and in 1857 the investigation of the compounds produced by the union of zinc ethyl with ammonia, aniline, diethylamine, oxamide, and acetamide was published.

In 1858 Dr. Frankland was engaged in determining the rate of combustion of candles at different altitudes from the level of the sea; the first observations were published in the commencement of 1859, and the subject has since been continued with very interesting results. It was found that candles burnt at Chamouni and on the summit of Mont Blanc consumed the same quantity of material in equal times, though the amount of light produced at the greater altitude was very much less. These experiments were subsequently continued at St. Bartholomew's Hospital, and extended to the rate of combustion of time fuses used in artillery. They led to the establishment of the law:—"The increments in time are proportional to the decrements in pressure," and to the following practical rule: "Each diminution of atmospheric pressure to the extent of one mercurial inch increases the time of burning by one-thirtieth." From the researches upon the effect of atmospheric pressure on the light of combustion, Dr. Frankland deduced the following law: "The diminution in the illuminating power of candle and gas flames is directly proportional to the diminution in atmospheric pressure." In the same year (1859) additional experiments were made on the organo-tin compounds, and another compound containing twice as much ethyl as the original stannethyl was prepared, as well as a body in which both methyl and ethyl were in combination with the metal. Some experiments on the mercury compounds and on the preparation of zinc methyl were also described. At the commencement of 1860 Dr. Frankland published the numbers obtained in the analysis of air which he collected at Chamouni, at the Grands Mulets, and on the summit of Mont Blanc. On June 7 of the same year he delivered a lecture to the Chemical Society on organometallic bodies, and which is printed in the *Journal*. This contains all that was then known of this class of compounds. In conjunction with Mr. Duppa, he published another paper on boric ethide, which was prepared by the action of zinc ethyl on boric ether. This was printed in the 'Proceedings of the Royal Society.'

In 1861, Dr. Frankland sent to the 'Philosophical Magazine' a note on the blue line in the spectrum of lithium which is observed when the temperature of the flame containing the lithium compound is very high. In 1862, another paper on boron compounds was read at the Chemical Society, in which boric methide was described; and some experiments were made on the temperature necessary to inflame hydrogen, carbonic oxide, marsh-gas, and bisulphide of carbon, and mixtures of these bodies.

Dr. Frankland published, in the 'Proceedings of the Royal Society' for 1863, a paper on the synthesis of leucic ether by acting on zinc ethyl with oxalic ether, and treating the product with water; and, in conjunction with Mr. Duppa, a paper was read at the Chemical Society on the formation of mercuric ethyl by the action of sodium amalgam on iodide of ethyl in the presence of acetic ether. The methyl and amyl compounds were obtained in the same way. In another communication they describe the formation of the zinc compounds by digesting the corresponding bodies containing mercury with zinc.

In 1864, Dr. Frankland delivered a Friday evening lecture, and communicated a paper to the 'Philosophical Magazine' on the physical cause of the glacial epoch. A curious accident is described in the *Journal of the Chemical Society* for 1864. While compressing oxygen by Natterer's pump, the connecting piece of the receiver burst, and filled the laboratory with a shower of brilliant sparks; this was found to be due to the ignition of the oil of the piston in the compressed gas, and this had set fire to the interior of the metal receiver.

Dr. Frankland and Mr. Duppa described in the proceedings of the Royal Society for 1864, another mode of preparing leucic ether by digesting iodide of ethyl, oxalic ether, and zinc amalgam together, and treating the product with water. By substituting iodide of methyl for the ethyl compound, the analogous compound of dimethoxalic acid was generated. In the following year these investigations were continued, and resulted in the discovery of ethomethoxalic, amyldioxalic, ethylamyldioxalic, and diamyloxalic acids. In 1865, Dr. Frankland and Mr. Duppa published two more papers in the Proceedings of the Royal Society, on the action of sodium on acetic ether, and the subsequent treatment of the product by the iodides of ethyl, methyl, and amyl; they thus obtained several new ketones, as

diethylacetone, ethylacetone, methylacetone, and dimethylacetone, and some acids, viz., ethacetic, identical with butyric acid; diethacetic acid, isomeric with caproic acid; dimethylacetic acid, isomeric with butyric acid; and amylic acid, identical with cenanthylic acid. In this paper (which is also printed in the 'Annalen') an improved method for preparing acetic ether was given. The other paper, on the action of perchloride of phosphorus on leucic ether, was read before the Chemical Society. By this process they obtained ethylcrotonic acid, isomeric with pyrotrebic acid; and from ethomethoxalic ether, methylcrotonic acid was prepared; while dimethoxalic ether gave methacrylic ether; and lactic ether yielded chloropropionic ether.

Dr. Frankland published, in the *Journal of the Chemical Society* for 1866, his system of notation, by which the formulae of bodies are made to represent the mode in which the atoms composing them are arranged in accordance with their atomicity. This system has already proved of great service in elucidating the causes of isomerism in organic compounds. This volume of the 'Journal' contains another of Dr. Frankland's contributions on the determination of organic matter in water by the addition of carbonate of soda to the water before evaporation and the ignition of the solid residue. The use of a solution of permanganate of potash for the same purpose is also described.

Dr. Frankland delivered a lecture at the Royal Institution in this year on the origin of muscular force, which he attributes to the combustion within the body of the food, and not the decomposition of the muscular fibre, as previously believed. This opinion was supported by numerous determinations of the heat evolved on the combustion of muscle, urea, and various articles of food.

In 1867, a continuation of the previous experiments on the synthesis of the ethers was communicated to the Chemical Society. In this paper, isopropacetone and isopropacetic acid, one of the isomers of valeric acid, are described. In 1868, Dr. Frankland published, in conjunction with Mr. Armstrong, a paper in the 'Journal of the Chemical Society,' on the analysis of potable waters, in which they describe a method of determining the carbon and nitrogen of the organic matter present, by a modification of the process of combustion, as used in the analysis of organic compounds, and also other processes for the estimation of the constituents of water. This paper is followed by one by Dr. Frankland, on a simple form of apparatus for gas analysis, which was used in the examination of the gaseous products obtained in the combustion of the water residues.

In 1868 and 1869 Dr. Frankland was occupied in a series of investigations into the cause of luminosity of flames, in continuation of his earlier work on this subject. He attributes the production of light to the density of the gaseous substances undergoing combustion, and not to the presence of solid matter in the flame. Thus hydrogen and carbonic oxide, burnt in oxygen under the pressure of twelve atmospheres produced luminous flames, though in the absence of all solid matter. In 1869 and 1870, Dr. Frankland, in conjunction with Mr. Lockyer, published several notes on the spectra of gases under different pressures, and on the density of the hydrogen of the solar atmosphere.

The whole of the chemical articles in the Arts and Sciences division of the English Cyclopædia were written by Dr. Frankland, or under his immediate supervision.

Dr. Frankland is a member of many learned societies, and has received numerous honorary distinctions. He was elected Fellow of the Royal Society in 1853, and in 1857 was awarded the Society's royal medal, for his 'Researches on Organic Radicals and Organometallic Bodies.' In 1866 he was elected corresponding member of the Institute of France; in 1868 an honorary member of the Literary and Philosophical Society of Manchester; in 1869 an honorary member of the Royal Academy of Munich; at the installation of the Chancellor of Oxford, in 1870, he received the honorary degree of D.C.L.; he is also an honorary member of the Pharmaceutical Society of Great Britain; and was for some years foreign secretary of the Chemical Society. Dr. Frankland was elected professor of chemistry at the College of Civil Engineers, Putney, in 1850; professor at Owens College, Manchester, in 1851; professor of chemistry at St. Bartholomew's Hospital in 1857; professor of chemistry at the Royal Institution in 1864.

In 1865 he succeeded Dr. Hofman as professor of chemistry to the Royal School of Mines, which important post he still holds. In 1863 Dr. Frankland was appointed one of her Majesty's commissioners to inquire into the means to be adopted for the prevention of the pollution of rivers.

FRANKLIN, SIR JOHN [E. C. vol. ii. col. 1002.] Franklin's
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last expedition left the English shores in May, 1851. His prolonged absence and silence led to a series of searches for him by Sir James Ross, Dr. Rae, Sir Robert M'Clure, Sir F. Leopold M'Clintock, Dr. E. Kent Kane, and Captain Hall. M'Clintock's expedition was fitted out at the expense of Lady Franklin. In M'Clintock's search a cairn was found containing a record of Franklin's expedition. It is dated May 28, 1847, lat. 70° 5' N.; long. 98° 23' W.; and states that the Erebus and Terror ascended the Wellington Channel in 1845 as far N. as 77°, returned southward round Cornwallis Island, and wintered in Beechy Island in 1846—1847, according to a facsimile of the papers, but 1845—1846 seems to be meant. On the 12th September, 1846, the ships were beset by ice near King William Island. Another record was found under a cairn at Gore Point, a little farther south, similar to the foregoing, which, however, had marginal additions to the effect that Franklin died June 11, 1847, and that the ships were abandoned April 22, 1848, by 105 survivors, commanded by Captain Crozier. The Esquimaux unanimously reported that all the crew had died. The remains of three bodies and a number of relics were found near Cape Crozier, and other relics have been obtained by Captain Hall. A statue was erected as a memorial of Franklin near the Duke of York's column, London, at the national expense, in 1866.

FREDERICK WILLIAM IV., King of Prussia [E. C. vol. ii. col. 1031]. Before the close of 1856 it had become known that the health of the King of Prussia was in an unsatisfactory state, and it was rumoured that his mind was failing. One of his latest public acts of importance was to affix his signature, May 26, 1857, to the treaty by which, for an indemnity, he formally abandoned his claim to Neufchâtel. In October of the same year a royal decree, in consideration of the King's health, nominated his brother Regent of the Kingdom for the term of three months. The term was renewed again and again, but the King never rallied. He spent the winter of 1858—59 at Rome, without benefit to either his mental or physical condition. He died at Sanssouci on the 2nd of January, 1861, and was succeeded by the Regent, who assumed the title of WILLIAM I.

* FREEMAN, EDWARD AUGUSTUS, English historian, was born in 1823, at Harborne-by-Birmingham, and completed his education at Trinity College, Oxford, of which he was elected scholar in 1841 and fellow in 1845, in which last year he graduated, taking second class in *litoris humanioribus*. Whilst resident in Oxford Mr. Freeman shared in the prevalent enthusiasm for the study of Gothic ecclesiastical architecture; was an active member, and for some years secretary, of the Oxford Architectural Society, and read before it several papers which were afterwards published, sometimes in an expanded or modified shape. His first independent publication was a 'History of Architecture,' 8vo, London, 1849, of which the best portion is that devoted to Gothic architecture. His next work was a minute treatise 'On the Tracery of Windows in Gothic Architecture,' 8vo, 1850, the substance of several papers read before the Oxford Architectural Society. Mr. Freeman has continued to write and lecture on architectural subjects down to the present time, but, whilst his later writings show, as might be expected, a constantly widening acquaintance with the subject, they have become less detailed and technical, and are illustrated with riper thought and richer historical knowledge. Among other essays and papers of this class published separately are—'The Architecture of Llandaff Cathedral,' 1851; 'St. David's Cathedral,' 1860; 'Church and Priory of Leominster,' 1863; and 'Wells Cathedral,' 1870. Mr. Freeman also wrote many papers for the 'Archæological Journal,' 'The Gentleman's Magazine,' and other antiquarian organs, and among them were some on Waltham Abbey Church, which led to a lively controversy with Mr. Parker respecting the date of that building.

His earliest work in general history was the 'History and Conquests of the Saracens,' 8vo, London and Oxford, 1856, which consists of a course of six lectures delivered at the Edinburgh Philosophical Institution, and is interesting and occasionally brilliant, but adds little to what was already known on the subject. His 'History of Federal Government from the foundation of the Achaian League,' vol. i., 8vo, 1863, is a work of wider research and more independent criticism, and will when completed be a valuable addition to our historical literature; but Mr. Freeman's claim to permanent remembrance is as a writer on early English history. His 'History of the Norman Conquest of England, its causes and its results,' 8vo, London and Oxford: vol. i. to the Election of Edward the

Confessor, 8vo, 1867; vol. ii. the Reign of Edward, 1868; vol. iii. to the death of Harold, 1869, is beyond question the most thorough, the most original, and the most masterly investigation of English history prior to the reign of William which we possess: the fault of the work is its diffuseness and tendency to repetition and dissertation. Mr. Freeman has since published a sort of summary of his great work under the title of 'Old English History for Children,' 12mo, 1869, which, though perhaps beyond the grasp of ordinary children, especially in its later chapters, is an invaluable book for youths and persons who do not make a special study of early English history. He is stated to be now occupied in writing a series of histories for young people, which is to be regretted if it diverts him from the completion of his great work. Mr. Freeman is understood to have been a frequent contributor to the 'Saturday Review,' and he has made some unsuccessful attempts to engage in political life, having been a candidate in the Liberal interest for the representation of Wallingford in 1859, and for Mid Somersetshire in 1868.

* FRÈRE, PIERRE ÉDOUARD, an eminent French painter, was born at Paris on the 10th of January, 1819; became in 1836 a pupil of Paul Delaroche, and afterwards entered the École des Beaux-Arts. From his début at the Salon in 1843, Édouard Frère has pursued steadily the same branch of art, that, namely, of representing incidents in the daily life of children of humble and ordinarily of rustic parentage. Painting such subjects as 'The Little Gourmand,' 'The Cut Finger,' 'The Lesson,' 'The Sunday Toilet,' 'Going to School,' 'Grandmother,' 'A Snowy Morning,' and the like, for over a quarter of a century, might be expected to lead to monotony and mannerism; but though M. Frère has an unmistakeable manner, his pictures are always fresh and always attractive. In the atelier of Delaroche he acquired a breadth and solidity of style which has preserved his works from any approach to insipidity or feebleness, whilst constant study of unsophisticated rural life far away from the capital has enabled him to retain truth and character, and his own genius and sympathy have imparted to his pictures a refinement, grace, and sincerity of purpose which probably no other painter has attained in the representations of the same class of subjects. His pictures are usually small, subdued in colour, and singularly free from all attempts to attract by minute or deceptive imitation. In England his pictures are at least as popular as in France, and it is a noteworthy proof of the general favour in which he is held that a special order has been issued to the Prussian soldiers to spare his villa at Ecouen as well as that of Rosa Bonheur.

* FREYTAG, GUSTAV, a celebrated German writer, was born July 13th, 1816, in Kreuzburg, Silesia. He studied at the gymnasium at Oels and afterwards at the Universities of Breslau and Berlin, at which latter he graduated doctor in philosophy in 1838. He then returned to Breslau as tutor (privat docent) of the German language and literature. He afterwards resided for some years in Dresden, and then removed to Leipzig, where from 1848 to 1861 he conducted the 'Grenzboten' (Border Messenger) journal, in conjunction with Julian Schmidt. Freytag has written in many styles, but his great success has been as a novelist and describer of German social life and customs. Besides the early thesis, 'De Hroswitha poetria,' and 'De initiis poeseos scenicae apud Germanos,' he has written 'In Breslau,' 1845; 'Die Brautfahrt, oder Kunz von Rosen,' a historical comedy, Breslau, 1844; two dramas, 'Valentine,' Leipzig, 1847; and 'Graf Waldemar,' Leipzig, 1850; 'Die Journalisten,' a comedy, 1854; 'Soll und Haben,' a romance, 3 vols. Leipzig, 1855, which met with remarkable success, the eleventh edition having been issued in 1865, and of which, under the title of 'Debit and Credit,' two English versions were published in 1857—one by L. C. C., with a preface by Baron Bunsen; the other by Mrs. Malcolm; 'Der Fabier,' a semi-classical tragedy, 1859; 'Bilder aus der deutschen Vergangenheit,' 2 vols. Leipzig, 1859, 4th edition, 1863, English translation, 'Pictures from Past Ages in Germany,' 1860; and 'Neu Bilder aus dem Leben des deutschen Volks,' 1862; on dramatic composition, 'Die Technik des Dramas,' 1863; and 'Die verlorene Handschrift,' a romance in 3 vols., Leipzig, translated into English as 'The Lost Manuscript,' 1865. His dramatic works were published in 3 vols. 8vo., Leipzig, 1848—50.

* FRIES, ELIAS MAGNUS, Swedish botanist, was born Aug. 15, 1794, at Femsjo, in the province of Wexio. Educated at Lund University, he became a teacher in the same, and ultimately professor of botany in 1828. In 1834 he also held the

chair of practical economy ; in 1851 that of botany ; and in 1853 the rectorship in the University of Upsala. He is a member of the Academy of Science at Stockholm, and of other learned bodies. He has written nearly a hundred papers, and numerous books, mostly upon botanical subjects. His reputation is mainly based on his works on fungi, of which the most noteworthy are 'Systema Mycologicum,' 3 vols. Griefswald, 1821—1830 ; 'Monographia Hymenomycetum Suecicae ;' and 'Icones selectae Hymenomycetum nondum delineatorum,' 1868, 1869. He followed up Persoon's researches on fungi, and did much towards reducing the heterogeneous masses and establishing the true affinity of doubtful forms in Persoon's arrangement. In his earlier studies he could derive but little assistance from microscopic observation, but his extraordinary tact enabled him to arrive at the truth where materials for fair logical deduction were but scanty. He abolished a whole host of genera founded on immature or abnormal forms, detected the relationship of numerous genera which from their appearance were usually considered to be widely separated, and discovered that fungi have more than one form of fructification. In many respects he was a master thinker of the day, and in advance of his time ; but owing to popular theological prejudices he often contented himself with purposely expressing his views obscurely. Hence his facts and opinions demonstrating the reproduction and sexuality of these plants were neglected, but have again acquired prominence owing to the more complete elucidation of the subject by Pringsheim, the Tulasnes, and others. His 'Systema Mycologicum' has been the foundation of all subsequent works of the same kind. Another work should be mentioned here, viz., the 'Summa Vegetabilium Scandinavia,' 2 vols. 1846—48, as it was the first Swedish work in which the natural system of classification was adopted.

FRIES, JAKOB FRIEDRICH, a distinguished German metaphysician, was born August 23rd, 1773, at Barby in Prussian Saxony, studied theology in the seminary of that town, and completed his education at Leipzig and Jena. In 1797 he went to Zofingen as private teacher, but returned in 1800 to Jena, and the next year was permitted to give lectures at the university. In 1803—4 he travelled through Germany, Switzerland, Italy, and France, and on his return was nominated professor of philosophy at Heidelberg, where he remained till 1816, when he accepted the chair of theoretical philosophy at Jena. From this he was removed in 1824 on account of his advocacy of democratical principles, but some time after was appointed professor of mathematics, which post he retained till his death, August 10th, 1843.

Fries was during his life looked up to as the head of the Jena school of philosophy, an offset from that of Kant, from which it differed chiefly in holding as its basis the doctrine of a pure subjective certainty, and in the adoption of what he called an anthropological system of psychology, an approximate union or connection of physiology with metaphysical reasoning. His terminology is peculiar and unattractive, and his system is now perhaps little studied even in Germany, but it defines a line of thought which is now being successfully prosecuted. It is set forth at length, and its divergence from the Critic of Kant explained, in his New or Anthropological Examen of the Understanding, 'Neuen oder anthropologischen Kritik der Vernunft,' 3 vols. Heidelberg, 1807, 2nd edition, 1828—31. The different stages and various bearings of his philosophy are more fully shown in his Philosophical Jurisprudence or examen of all positive legislation, 'Philosophische Rechtslehre, oder Kritik aller positiven Gesetzgebung,' Jena, 1803 ; System of Philosophy as a certain science, 'System der Philosophie als evidente Wissenschaft,' Leipzig, 1804 ; 'System der Logik,' Heidelberg, 1811 ; Manual of Practical Philosophy, 'Handbuch der praktischen Philosophie,' 2 vols. Leipzig, 1817—32 ; Manual of Psychical Anthropology, 'Handbuch der psychischen Anthropologie,' 2 vols. Jena, 1820—21 ; 'Mathematischen Naturphilosophie,' Heidelberg, 1822 ; 'System der Metaphysik,' Heidelberg, 1824 ; History of Philosophy, 'Geschichte der Philosophie, dargestellt nach den Fortschritten ihrer Entwicklung,' 2 vols. Halle, 1837—40. Fries also wrote on the German Bund, 'Vom Deutschen Bund und deutscher Staatsverfassung ; allgemeine staatsrechtliche Ansichten,' Heidelberg, 1816 ; an attempt to define the principles of the theory of probabilities, 'Versuch einer Kritik der Principien der Wahrscheinlichkeitsrechnung,' Brunswick, 1842, and a theological romance, 'Julius und Evagoras,' 2 vols. Heidelberg, 1822.

FRITH, or FRYTH, JOHN, a martyr and divine of the Anglican church, was born in the year 1503 at Westerham, in

Kent, where his father, who subsequently removed to Sevenoaks kept an inn. He was educated at King's College, Cambridge, and graduated as B.D. in 1525 ; immediately after which, on the invitation of Wolsey, he migrated to Oxford, in order to become one of the junior canons of Cardinal College, now Christ Church, in that university. He imbibed from Tindal the principles of the Reformation ; and on making a public profession of the same, was imprisoned in Cardinal College on the charge of heresy. At his enlargement he retired from the university, and at length, in September, 1528, took refuge in Holland, where he married and continued for several years. Returning to England, he found his opinions in so evil an odour that he was reduced to a state of destitution ; and on one occasion, on his attempting to pass through Reading, he was put into the stocks as a vagabond, but released through the intervention of Leonard Cox, the famous schoolmaster of that town. From Reading he proceeded to London, where he was engaged in controversy with Sir Thomas More. At length his zeal in the expression of his opinions led to his apprehension. After an imprisonment of some duration in the Tower, he was examined before Archbishop Cranmer ; Lord Chancellor Audley ; Brandon, Duke of Suffolk ; Boleyn, Earl of Wiltshire ; Stokesley, Bishop of London ; and Gardiner, Bishop of Winchester. At his adjourned and final examination before an episcopal commission at St. Paul's Cathedral, on the 20th of June, 1533, he persisted in his denial of the doctrines of Purgatory and Transubstantiation, and was condemned to be burnt as an obstinate heretic. This sentence, which was carried out at Smithfield on the 4th of July, was endured with heroic fortitude.

Frith was an able disputant and an eminent scholar. His works comprise, 'A Disputacyon of Purgatorye devided in to three Bokes ; the fyrst is an Answer unto Rastell ; the seconde unto St. T. More ; the thyrd unto my Lorde of Rochestre,' 8vo ; 'An other Boke against Rastell, named the Subsedye or Bulwarke to his fyrst Boke,' 8vo ; 'The Testament of Master Wylliam Tracie esquier, expounded both by William Tindal and John Frith. Wherein thou shalt perceyve with what charitie y^e Chaunceler of Worcester burned whan he toke up the deyd carkas and made ashes of hit after hit was buried,' 8vo, Antwerp (?), 1535 ; 'A Boke made by Johan Fryth, prysoner in the Tower of London, answering unto M. More's Letter, which he wrote against the fyrst litle Treatyse that Johan Fryth made concerning the Sacrament of the Body and Bloude of Christ. Unto which Boke are added in the ende the Artycles of his Examination before the Byshoppes of London, Winchester, and Lincolne, in Paules Church at London, for which John Fryth was condempned and after brente in Smytfeelde without Newgate the forth day of July, Anno 1533,' 16mo, 1533, 8vo, London, 1546, 1548, &c. ; 'Letter unto the faithful Followers of Christ's Gospel,' written in the Tower in 1532 ; 'A Mirror, or Glass to know thyself,' likewise written in the Tower in 1532, and published in 12mo, London, 1627 ; 'A Mirrour or Lokyng Glasse wherein you may beholde the Sacramente of Baptisme described,' 8vo, London ; 'A Pistle to the Christen Reader, wherein are compared togeder Christes Actes and oure holie Father the Popes,' 8vo, Malborow in the Lande of Hesse, 1529, written under the pseudonym of Richard Brightwell ; and various translations. Most of the foregoing treatises were collected by John Fox, and published, along with those of Tindal and Barnes, in folio, London, 1573. Amongst the modern investigations into Frith's history and times may be mentioned his 'Life, with a Selection from his Writings,' which occurs in the first volume of the 'Fathers of the English Church,' &c., 8 vols. 8vo. London, 1807—12 ; and 'The Life and Martyrdom of the Rev. John Frith,' 8vo, Bristol, 1827, published by the 'Church of England Tract Society,' instituted at Bristol, 1811.

* FROUDE, JAMES ANTHONY, an English historian, youngest son of the late Venerable R. H. Froude, Archdeacon of Totness and rector of Dartington, Devonshire, was born on the 23rd of April, 1818. He was educated at Westminster and at Oriel College, Oxford, and took his B.A. degree in second class classical honours in 1840, proceeding M.A. in due course. In 1842 he carried off the Chancellor's Prize for an English essay on 'The Influence of the Science of Political Economy upon the Moral and Social Welfare of a Nation ;' and in the same year became fellow of Exeter College. He was ordained deacon in 1844 ; and a few years afterwards, under the pseudonym of "Zeta," published a volume entitled 'Shadows of the Clouds,' 12mo, London, 1847, which comprised two stories, 'The Spirit's Trials,' and 'The Lieutenant's Daughter.' To this succeeded 'The Nemesis of Faith,' 8vo, London, 1848, second edition,

1849, which being professedly "a Tragedy," was supposed to have been written as a "Confession of Faith," an autobiographic view of the work which the author, in the Preface to the second edition, repudiated. Yet the "Nemesis" marked his defection from the teaching of the Church, against whose reverence for what he called the "Hebrew mythology," it is, *inter alia*, a protest. Naturally Mr. Froude did not proceed to priest's orders; and when he subsequently returned, after his estrangement, to the Anglican communion, it was not as a cleric, but as a layman.

Mr. Froude's great work is his 'History of England from the Fall of Wolsey to the Death of Elizabeth,' 10 vols. 8vo, 1856-69, second edition, vols. I. and II. 1858, fourth edition, 1870, &c., of which the last four volumes were devoted to the reign of Elizabeth. Since the year 1850 he has been a frequent contributor to the 'Westminster Review,' and to 'Frazer's Magazine,' of which he is now the editor. From these he has reproduced an article on 'The Book of Job,' 8vo, London, 1854; and 'Short Studies on Great Subjects,' 2 vols. 8vo, London, 1867. He has likewise published an 'Inaugural Address delivered to the University of St. Andrew's, March 19, 1869,' 8vo, London, 1869, which was given in his capacity of Rector of the University; and has "edited, with notes from the archives at Paris and Brussels," a work by William Thomas, Clerk of the Council to Edward VI., entitled 'The Pilgrim: a Dialogue on the Life and Actions of King Henry the Eighth,' 8vo, London, 1861. Besides this, he has, along with Dr. W. Maziere Brady, been involved in some little controversy about an Irish church question, upon which his views, as propounded in his History, were attacked by the Rev. Dr. Alfred T. Lee, in a brochure entitled 'The Irish Episcopal Succession. The Recent Statements of Mr. Froude and Dr. Brady, respecting the Irish Bishops in the Reign of Elizabeth, examined,' &c., 8vo, London, Oxford, Cambridge, and Dublin, 1867; to which Mr. Froude replied in a 'Letter' contained in the fifth edition of Dr. Brady's 'Irish Reformation, or the alleged Conversion of the Irish Bishops at the Accession of Queen Elizabeth,' &c., 8vo, London, 1867.

FROUDE, RICHARD HURRELL, eldest brother of the foregoing, was born on the 25th of March, 1803, and was educated at Eton and at Oriel College, Oxford, which he entered in 1821. He took his B.A. degree in 1824, and proceeded M.A. in 1827; was elected fellow in 1826, and acted as tutor from 1827 to 1830. He was ordained deacon and priest respectively in 1828 and 1829. Symptoms of consumption began to show themselves in the summer of 1831; and he passed the winter of 1832 and the following spring in the south of Europe. The two next winters and the year between them, 1834, were spent in the West Indies. He died at his father's rectory of Dartington, Devonshire, on the 28th of February, 1836. He was a prominent member of the Oxford movement; and wrote two numbers, 9 and 63, of the 'Tracts for the Times, by Members of the University of Oxford,' 8vo, London and Oxford, 1833-34, &c., and contributed various poems, with the signature of *B.* to 'Lyra Apostolica,' 12mo, 1836, and often reprinted. His 'Remains,' 4 vols. 8vo, London, 1838-39, which were published after his death, include his Journal; Occasional Thoughts; an Essay on Fiction; Sermons, and Letters. From this work a tract on Church and State was reprinted with the title of 'State Interference in Matters Spiritual; with a Preface by William J. E. Bennett, Vicar of Frome-Selwood,' 8vo, London, 1869.

FUAD MEHMED PASHA, Turkish statesman and minister, was born at Constantinople in 1814. The son of a poet, Izzet Effendi Kischedji Zadeh (better known as Izzet Mollah), and the nephew of a poetess, Leila Hanym, he imbibed in early life a taste for refined studies; but he received in addition an education unusually good among his countrymen. His father having fallen under the disfavour of the Sultan, and his estates being forfeited, the young Fuad was thrown on his own resources for a living. Between 1828 and 1832 he studied medicine at Galata Serai; and in 1834, as physician to the Admiralty under Tahir Pasha, he accompanied the Grand Admiral in an expedition to Tripoli. On his return to Constantinople, Fuad quitted the medical profession and entered the bureau or department of interpreters, qualifying himself for future diplomatic employment by studying history, languages, international law, and political economy. In 1840 he was appointed first secretary to Gheikib Effendi, on an embassy to London to negotiate important political arrangements. In 1843 he was raised to the post of second interpreter to the Porte, to which was added that of director of the bureau of translation. When sent to Spain to congratulate Queen Isabella, and to

Portugal to congratulate Donna Maria, on their respective accessions to the throne, Fuad's polished manners and familiarity with the languages and usages of western nations attracted much attention. He was decorated with the Order of Isabella, and that of the Tower and Sword. Among the results of these missions were several well-written diplomatic reports to the Sultan, and a poem on the subject of the Alhambra. In 1845 he became chief interpreter to the Porte. In 1848, as grand referendary of the imperial divan, he was named commissioner-general to the Principalities of Wallachia and Moldavia, to reorganise matters after the turbulent proceedings at Bucharest and Jassy. In 1850 he went on a mission to St. Petersburg to settle a disputed question relating to political refugees; and in the following year became minister of the interior under the grand vizier. After a mission to Egypt in 1853, he became minister of foreign affairs, and adopted a resolute attitude towards Russia on the question of the Holy Places, concerning which he wrote a pamphlet, 'La Vérité sur la Question des Lieux Saints.' Feeling insulted by the overbearing conduct of Prince Menchikoff, the Russian ambassador, and not well supported by the Sultan, he resigned. In 1854 he went as commissary with Omar Pasha to quell an insurrection in Epirus; and on his return was appointed member of the Council of the Tanzimat, then first instituted. Restored to the post of minister of foreign affairs in 1855, with the grade of *mukhi* and the title of *pasha*, he engaged actively in the preparation of the Hatti Scheriff or constitution of 1856, the improvement of the diplomatic relations of Turkey with foreign governments, and the encouragement of railways and telegraphs. In 1857 he became president of the Council of the Tanzimat. In 1860 he took part in an expedition with the French to suppress the violent proceedings of Mohammedan fanatics against the Christians in Syria. Between that year and 1866 he filled in succession many important offices—president of the council of justice, grand vizier, minister of finance, and seraskier or minister of war. He accompanied the Sultan to France and England in 1867. He died at Nice, February 11th, 1869, and was buried with much state ceremonial. Besides the works noticed above, he published in 1852 a 'Grammaire Ottomane.' In 1851 he was elected member of the Imperial Academy of Sciences and Belles-Lettres.

FUCHS, JOHANN NEPOMUK, VON, chemist and mineralogist, was born at Mattenzell, Bavaria, May 15, 1774. He studied, and graduated in medicine, at Heidelberg. He then studied at Vienna, where Jaquin taught him chemistry; next moved to Freiberg, where he heard the prelections of Lampadius and Werner; to Berlin, where he studied under Karsten, Klapproth, and Valentine Rose; and lastly stayed in Paris for a short time, and established a friendship with Haüy. In 1805 he began teaching others. For a few months he was at Landsbut in a subordinate capacity, but in 1807 he became professor of chemistry and mineralogy at that place. In 1823 he went to Munich, and in 1826 was made professor of mineralogy. To this post several state appointments were added, which left him little leisure for investigations, and in acknowledgment of this and his unusual abilities he was pensioned as chief mining counsellor, which allowed him time for his scientific pursuits. He died March 5, 1856. One of his earliest researches was on some zeolites, in conjunction with Gehlen, which led him into a controversy with Haüy. This ended by the confirmation of his own results, and the consequent establishment of his reputation. In his paper on arragonite and strontianite he very nearly discovered the principle of isomorphism which was subsequently announced by Mitscherlich. His researches on lasionite and wavellite, published in 1817, indicated his powers as an analyst. From the composition and characters of lasionite he inferred that wavellite must closely resemble it, although the testimony of previous chemists was opposed to the idea, and he himself had never seen wavellite. His inquiry proved that the two were identical. In 1825 appeared his first paper on water-glass, or soluble silicate of potash, which he recommended as suitable for rendering buildings and fabrics waterproof, for preparing artificial stone, and for cementing broken china, &c. He subsequently advocated its use for a kind of fresco-painting which he invented, and called stereochromy. Kaulbach, Echter, Machie, Herbert, and other artists have adopted it. In 1829 he published a paper on lime and mortar, and in 1832 a prize essay on hydraulic cements, in which he threw much light on their properties, and pointed out the conditions required for making good hydraulic mortar; the hardening of the cement he showed to be due to the formation of a hydrated silicate of lime. In 1834 he published a paper on opal, in which he fully discussed

the amorphous condition of silica, sulphur, carbon, and other substances; he endeavoured to show that all crystalline minerals require to be amorphous or gelatinous before they can be serviceable in the nutrition of plants and animals. In his paper on theories of the earth, published in 1837, he enunciated views which are antagonistic to the plutonic doctrine, and very boldly imaginative. Many of his positions find little favour now. He was a member of numerous societies, and many honours were conferred upon him by the Bavarian state.

FUGA, FERDINANDO, a distinguished Italian architect, born at Florence in 1699, was a pupil of Foggini, but owed more to a diligent study of the great architectural remains at Rome and Naples. Having designed some buildings at Naples, and a bridge over the Mincio at Palermo, he was appointed by Clement XII., in 1730, pontifical architect, an office he retained under Benedict XIV. His chief works in Rome were the completion of the Quirinal, the erection of the palaces of the Petronij, the Corsini, and the Consulta on Monte Cavallo, now a barrack; the churches of S. Apollinare; della Morte, in the Via Giulia, in the form of an ellipse; the little church of Gesù Bambino, commenced by Carlo Buratti, and a new façade to Santa Maria Maggiore. Returning to Naples about 1750, he was appointed principal architect to the king, who in 1751 created him a knight. Here he built the Caramica palace, and commenced the vast Granili and the Albergo reale dei Povero, the largest hospital in Europe, both of which, however, remained unfinished at his death, which occurred in 1780. Fuga was one of the ablest architects of the eighteenth century, and though his works exhibit the faults of the age, they are marked by invention, originality, dignity, and propriety.

* FÜRST, JULIUS, an eminent German orientalist, was born May 12, 1805, at Zerkowo, in Posen. Of a good Jewish family, he was educated for the priestly office, and had already studied the Hebrew Bible, and much of the Mishna, the Talmud, and rabbinic comment, when, in his 15th year, he entered the Berlin Gymnasium, where he remained till 1825, when he for a short time followed the courses of philosophy and languages at the Berlin University. He then went to the

Rabbinical school at Posen, but here his studies eventuated in his adoption of views adverse to rabbinical orthodoxy, and the consequent abandonment of his intended profession. He now (1827) proceeded to the University of Breslau, where he devoted himself to theology, the oriental languages, and archaeology, and in 1831 went to Halle. Having graduated doctor in philosophy, and acted for a time as private teacher at Leipzig, he was appointed lecturer at the university in 1839, an office he retained till 1864, when on occasion of the celebration of his 25th year there he was nominated professor. Fürst's writings on the Aramaic and Hebrew languages and literature are numerous and of great value, their distinctive feature as contrasted with the writings of Gesenius and Ewald being their greater fullness of Jewish lore and tradition. The following are his principal works:—*Principles of Aramaic Idioms*, 'Lehrgebäude der aramäischen Idiome,' Leipzig, 1835; *The String of Pearls*, a selection of fairy tales and poems, 'Perlenschnüre aramäischer Gnomon und Lieder,' Leipzig, 1836; *Concordantiæ librorum sacrorum Veteris Testamenti hebraicæ et chaldaicæ*, Leipzig, 1837—40; *'Pesach-Haggada*,' Leipzig, 1838; *Sentences from the Fathers*, 'Sprüche der Väter,' Leipzig, 1838; on the authenticity of Sohar, 'Ari Nohem oder Streitschrift über die Echtheit des Sohar,' Leipzig, 1840; *the Religious Philosophy of the Jews in the Middle Ages*, 'Die jüdischen Religionsphilosophen des Mittelalters,' Leipzig, 1845; *'Bibliotheca judaica*,' 3 vols. Leipzig, 1849—63; *'Das Buch Jozerot*,' Leipzig, 1852; *Hebrew and Chaldean Lexicon*, 'Hebräisches und Chaldäisches Wörterbuch,' Leipzig, 1851, &c., and a school dictionary, 'Hebräisches und Chaldäisches Schulwörterbuch,' Leipzig, 1857—61, translated into English by Davidson, 1864; *History of the Learning and Literature of the Jews in Asia*, 'Cultur und Literaturgeschichte der Juden in Asien,' first volume, Leipzig, 1849; *'Geschichte des Kariethums*,' vols. i. and ii. Leipzig, 1862—65. Fürst also brought out a new edition of Winer's *Chaldean reading-book*, Leipzig, 1864, and contributed a great many papers to 'Der Orient,' a journal devoted to the language, literature, history, and antiquities of the Jews, which he edited from 1840 to 1851.

END OF PART I.

BIOGRAPHY.

SUPPLEMENT: PART II.

The abbreviations E.C. and E.C.S. signify the English Cyclopædia and the English Cyclopædia Supplement.

The asterisk * prefixed to the name indicates that the subject of the memoir is still living.

561

GABBIANI, ANTON DOMENICO.

GAERTNER, JOSEPH.

562

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GABBIANI, ANTON DOMENICO, a distinguished Italian painter, was born in 1652, at Florence; studied painting there under Vincenzo Dandini and the Flemish painter, Just Sustermans; then entered the school of Ciro Ferri at Rome, and completed his education at Venice. On his return to Florence he opened an academy, which he conducted with much success till his death, which occurred in 1726, through a fall from a scaffold at the Incontri palace. Gabbiani was one of the most distinguished artists of his age. He painted much both in oil and fresco, and several of his pupils rose to eminence. He designed cleverly, but without much vigour, and his colouring is pale and feeble. Several of his easel pictures are in the Public Gallery and the Pitti Palace, Florence. His chief frescoes are the cupola of Cestello and in the Corsini palace; he also executed various altar-pieces for churches in Florence and Pisa.

(Lanzi, *Storia Pittorica*; J. E. Hugford, *Vita di A. D. Gabbiani*, Florence, 1762, in which are several etchings by him and engravings from his designs.)

GABLER, JOHANN PHILIPP, a German critic and theologian, was born at Frankfurt-am-Main, on the 4th of June, 1753. In 1772 he repaired to the University of Jena, where he became the pupil of Griesbach and Eichhorn, who admitted him to their friendship. In 1780 he was appointed a repetent, or tutor, in theology at the University of Göttingen; became professor of philosophy at Dortmund in 1783, and in 1785 entered upon the same function at Altdorf, with which he combined the office of deacon of the church of that town. He took his degree of D.D. in 1787, and in 1793 was admitted archdeacon, and appointed to the second chair of theology. In 1804 he was called to fill the same office at Jena, succeeding to the position of first professor of theology on the death of Griesbach in 1812. He was honoured with several marks of confidence and distinction from the state, and died on the 17th of February, 1827. His works, which are remarkable for the freedom of their criticism and speculation, include 'Dissertatio critica de capitibus IX.—XIII. Epistolæ Pauli ad Corinthios ab eadem haud separandis,' 8vo, Göttingen, 1782; Review of Campe's Proof of the Immortality of the Soul, 'Revision des Campischen neuen Beweises für die Unsterblichkeit der Seele,' 2 parts, 4to, Dortmund, 1785; 'Dissertatio de Jacobo Epistolæ eidem adscriptæ Auctore,' 4to, Altdorf, 1789; Historical and Critical Introduction to the Study of the New Testament, 'Entwurf,' &c., 4to, Nürnberg, 1789; New Essay on the Mosaic History of Creation, designed as a supplement to Eichhorn's 'Urgeschichte,' of which Gabler published an edition in 1790, and entitled 'Neuer Versuch über die Mosaische Schöpfungsgeschichte aus der

höhern Kritik. Ein Nachtrag zum erster Theil seiner Ausgabe der Eichhorn'scher "Urgeschichte," 8vo, Altdorf and Nürnberg, 1795. Dr. Gabler conducted, at first jointly with Ammon and Paulus, and afterwards alone, the New Theological Journal, 'Neustes Theologisches Journal,' 8vo, Leipzig, 1796—1811; and also edited Griesbach's 'Opuscula Academica,' 8vo, 1824, &c. His own minor theological works were edited by his sons, with the title of 'Kleinere Theologische Schriften,' 2 vols. 8vo, Ulm, 1831.

***GADE, NIELS WILHELM**, a Danish musical composer, was born at Copenhagen, October 22, 1817. The son of a musical-instrument maker, he displayed a strong taste for music in early years; learned the violin, pianoforte, and guitar, and took lessons in harmony under Weyse. For a time he was first violinist at the Royal Chapel. In 1841 he won the prize in a competition among amateurs at Copenhagen for the best overture, the judges being Spohr and Schneider. This composition, entitled 'Ossian,' has been much played in Germany and Denmark. His next work, a symphony for full orchestra, was sent to Leipzig, where Mendelssohn conducted it at the Gewandhaus Concerts. It was so much admired as to obtain for Gade the patronage of the King of Denmark, who provided the means for a foreign tour. He stayed in Italy till the end of 1843, and after a short sojourn in his native country, accepted an invitation to Leipzig, to succeed Mendelssohn as conductor of the Gewandhaus Concerts. During the four or five years in which he occupied this post he composed and produced two symphonies; two overtures; a festival cantata; a lyrical drama, 'Comolo,' a sonata for pianoforte and violin; quintettes and ottetts for stringed instruments; piano pieces; vocal pieces, &c. Returning to Copenhagen in 1848, he became court organist and orchestral director to the Concert Society. Amongst numerous compositions of his, in which the influence of Mendelssohn's style is very evident, are a Scotch overture, 'Im Hochlande;' the music to a dramatic poem by Andersen, 'Sange af Agnete og Havemanden;' a song and chorus, 'Erlkönigs Tochter;' two series of 'Danske Sange;' pianoforte accompaniments to 'Skandinaviske Folkesange;' and an opera, 'Die Niebelungen.'

GAERTNER, JOSEPH, a German botanist, was born March 22, 1739, at Calw, in the Black Forest. After receiving his earliest tuition from his uncle, he proceeded to Tübingen and Göttingen, and took his degree in medicine. He then travelled for a while through Italy, France, and England, and returned to Tübingen as professor of anatomy. In 1768 he went to St. Petersburg as professor of botany and director of the botanic gardens and of the natural history museum; but finding the climate prejudicial to his health, he again returned to Germany,

and revisited England. Here he saw Sir Joseph Banks, and at Amsterdam Thunberg, both of whom gave him large collections of exotic seeds and fruits. While at St. Petersburg he first conceived the idea of his most important work, 'De fructibus et seminibus Plantarum,' 2 vols. 4to, Stuttgart and Tübingen, to which a supplementary volume was added by his son, Karl Friedrich. The complete work is illustrated by 225 copperplate engravings illustrating the structure of the fruits of 1200 genera of plants. Each genera has numerous figures, most of which were from his own drawings. The first volume appeared in 1788, the second in 1791, and the two parts of the supplement in 1805 and 1807. While Cæsalpinus was one of the earliest botanists to classify fruits, and Linnæus helped the study forward by his admirably methodical mind, Gaertner may claim to have laid the foundations of carpology as developed by Mirbel, Decandolle, Lindley, and other modern students of the same branch of study. He demonstrated that the spores of cryptogams are essentially distinct from the seed of flowering plants. Gaertner died July 13, 1791.

GAETANO, CESARE, CONTE DELLA TORRE, a learned Sicilian archæologist, was born at Syracuse in 1718. On the completion of his studies under the Jesuits at Naples, he devoted his attention to investigating the antiquities of his native city. As the result of numerous carefully conducted excavations, he discovered the remains of the ancient arsenal, theatre, baths, and other buildings, and exhumed a vast number of vases and coins, and several statuettes, diptychs, and inscriptions. These served as the basis of a museum of Sicilian antiquities which he founded, and of an important work in two folio volumes, 'Vestigi di Siracusi illustrati.' For several years he published a volume annually of 'Collezione di Opuscoli di Autori Siciliani,' to which he contributed memoirs on the theatre, the aqueducts, and other remains of the ancient city. His researches on the municipality he embodied in a work entitled 'Privilegi di Siracusa, tratti da antiche pergamene,' which remains in MS. in the public library. He also wrote a valuable treatise on the antiquities of the cathedral, 'Dissertazione Istoric-apologetico-critico intorno all' origine e fondazione della chiesa di Siracusa,' 8vo, Rome, 1748; a poem, 'I Doveri dell Uomo,' 8vo, 1787, and various tracts and translations. He was appointed keeper of the Museum of Antiquities, and professor of moral philosophy in the University of Syracuse. He died in 1808.

GAGE, THOMAS, a clergyman and traveller of the 17th century, was born at Hayling, in Hampshire, about the year 1597. For the purpose of receiving his education amongst the Jesuits, he was sent to Spain, where he became a member of the Dominican order, and was selected to proceed as a missionary to the Philippine Islands. He settled, however, in Mexico, where he continued for many years. His stay, indeed, was so protracted, and his isolation so complete, that on his return to England in 1637, after an absence of twenty-four years, he had forgotten his native language, and had been forgotten by his relatives. For the purpose of resolving doubts which had for some time been agitating his mind with reference to the claims of the papacy, he proceeded to Italy, to "try what better satisfaction he could find for his conscience at Rome in that religion." His conversion to Protestantism was assured by his detection of the fallacy of the miracles attributed to the picture of our Lady at Loretto; and, returning to England, he made a public recantation at Paul's Cross, in a sermon on Luke xxii. 31, 32, which he published under the title of 'The Tyranny of Satan,' &c., 8vo, London, 1642. After a short time he joined the Parliamentary party, from whom he received the benefice of Deal, in Kent. His death took place in some unascertained year just anterior to the restoration of Charles II.

His principal work, and one which had a great effect in stirring up a spirit of adventure on the part of his countrymen, was entitled 'The English-American his Travail by Sea and Land; or, a New Survey of the West Indies, with a Grammar or some few Rudiments of the Indian Tongue called Poconchi or Pocoman,' folio, London, 1648, second edition, enlarged by the Author, and beautified with Maps, folio, London, 1655, another edition, 8vo, London, 1677, &c., French translation, made by Beaulieu, by order of Colbert, 8vo, Paris, 1676, and 2 vols. 12mo, Amsterdam, 1695, German translation, 4to, Leipzig, 1693. He also published 'A Duel between a Jesuit and a Dominican; begun at Paris, fought at Madrid, and ended at London,' 4to, 1641; and 'A full Survey of Sion and Babylon, and a Vindication of the Churches and Ministers of England from the injurious nickname of Babylonish,' 4to, London, 1654.

GAGNIER, JEAN, a French orientalist, was born in Paris about 1670, and was educated at the Collège de Navarre, where he devoted himself to the study of the classical and oriental languages. He received ordination, and became a canon-regular of the Abbey of Sainte-Geneviève, but left that society from unsettlement of religious and ecclesiastical opinion, which induced him to visit England, where he became a professed member of the Anglican Church, and received the honorary degree of M.A. from both universities. He established himself at Oxford, where he acted for many years as a professor of the oriental languages. He died on the 2nd of March, 1740. His principal works are, 'L'Eglise Romaine convaincue de Depravation, d'Idolatrie, et d'Antichristianisme,' 8vo, The Hague, 1706; 'Vindiciæ Kircherianæ: sive Animadversiones in novas Abr. Trommii Concordantias Græcas Versionis vulgo dictæ LXX Interpretum,' 8vo, Oxford, 1718; 'Carolina: Ecloga in diem natalem Willielmæ Carolinæ, Principis Walliæ,' 8vo, London, 1719; 'Liber Petra Scandali de Principio et Causa Schismatis duarum Ecclesiarum Orientalis et Occidentalis, ex Græco Arabice redditus,' 8vo, Oxford, 1721; an edition of the Arabic text, with a Latin translation, preface, and notes, of 'Ismâil Abû l-feda de Vita et Rebus gestis Mohammedis,' &c., folio, Oxford, 1723; and 'La Vie de Mahomet: traduite et compilée de l'Alcoran, des Traductions authentiques de la Sonna, et les meilleurs Auteurs Arabes,' 2 vols. 8vo, Amsterdam, 1732, German translation, by C. F. R. Vetterlein, entitled 'Leben Mohammeds des Propheten,' &c., 2 vols. 8vo, Köthen, 1802—4.

GAIMARD, GEOFFREY, an Anglo-Norman poet, of whom nothing is known beyond what he relates incidentally in his poem or chronicle, 'The History of the English,' from which it appears that he composed it in Yorkshire or Lincolnshire near the middle of the 12th century, probably between 1140 and 1147, at the instance of a Lady Constance, wife of Raoul Fitz Gilbert, to whose household he seems to have been attached. He is supposed to have died about 1151. 'Lestorie des Engles' consists of 6532 lines, of which 1088 lines relate to the British kings, 5346 to Anglo-Saxon history from the arrival of Cerdic, and the last 98 to the Norman Conquest. The early portion is mainly founded on Geoffrey of Monmouth and the Anglo-Saxon Chronicle, the later on Florence of Worcester and various monastic writings. Its historic value is small, and it has little independent poetic merit, but it preserves several local legends and traditions, and is of considerable philological value. 'L'Estorie des Engles solum la Translation maistre Geoffrei Gaimar' was first published by Mr. Petrie in the 'Monumenta Historica Britannica,' pp. 764—829, and again by Mr. T. Wright for the Caxton Society, 1850, Mr. Wright's edition containing all that is extant of the poem, whilst Mr. Petrie's is confined to the Anglo-Saxon and Norman periods.

(T. Duffus Hardy, *Descriptive Cat. of Materials relating to the Hist. of Great Britain*, vol. ii. pp. 85, 245; Wright, *Biog. Brit. Lit.* vol. ii. pp. 151—4; Frère, *Manuel du Bibl. Normand*, vol. ii. p. 5).

GAIMARD, JOSEPH PAUL, French geologist and explorer, was born about 1790. In association with M. Quoy, he was attached to Freycinet's exploring expedition round the world as surgeon-naturalist. On returning home, the two observers recorded their discoveries in the 'Annales des Sciences Naturelles' for 1824 and following years, and in a special volume forming the zoological portion of Freycinet's 'Voyage autour du Monde,' tome iv. 4to, Paris, 1824, with an atlas. In 1826 M.M. Gaimard and Quoy joined Dumont d'Urville's expedition as naturalists on board the *Astrolabe*, and in the course of that and the three following years large portions of the Pacific area were explored. The new results were given in the 'Annales des Sciences Naturelles,' and in the volumes descriptive of the voyage, entitled 'Zoologie de Voyage de la Corvette l'*Astrolabe*,' tome i. (1830), ii. (1832), iii. (1834), iv. (1833), 8vo, and an atlas of numerous plates in large folio. These zoological reports are valuable on account of the numerous new species described and figured. The drawings were made either by themselves or under their superintendence from the living animals wherever possible. The specimens belong to nearly all classes, but a large proportion belong to the molluscs; the species appertaining to this last class are illustrated by descriptions and drawings of the soft parts, and in some instances by a more or less detailed account of their anatomy. About the end of 1834 Gaimard was appointed president of the scientific commission for investigating the northern regions of Europe. In this capacity he visited Iceland and Greenland in 1835—36, and Lapland, Spitzbergen, and the Faroe Islands in 1838—40. His attention was chiefly

occupied with the natural history branches of the investigation, and with drawing up the official reports. The volumes are entitled 'Voyages de la Commission Scientifique du Nord, en Scandinavie, en Laponie, en Spitzberg, et aux Féroë Îles pendant les années 1838, 1839, 1840, &c.,' 8vo, Paris, 1842, &c., and folio atlas; and 'Voyage en Islande et au Greenland, &c.,' 5 vols. 8vo, Paris, 1838—40, and folio atlas, of which the first volume only, comprising the history of the voyage, is by Gaimard. The remainder of his life was occupied in zoological pursuits at Paris, where he died in December, 1858.

GALE, THEOPHILUS, a nonconformist scholar and divine, son of Dr. Theophilus Gale, vicar of Teington Regis, Devonshire, was born at that place in the year 1628. He was entered a commoner of Magdalen College, Oxford, in 1647; took his B.A. degree on the 17th of December, 1649, and proceeded M.A. on the 18th of June, 1652, having been elected to a fellowship in his college in 1650. He attained considerable reputation for his success as a tutor, and for his zeal and eloquence as a preacher, in which latter capacity he removed in 1657 to Winchester. Being unable to comply with the terms prescribed by law after the Restoration of King Charles II., he was excluded from the public exercise of his function, and deprived of his fellowship. In September, 1662, he went abroad as tutor to the two sons of Philip, Lord Wharton, whom he attended during their studies at the University of Caen, and with whom he returned to England in 1665. He now became assistant to Mr. John Rowe, at that time pastor of a private congregation in Holborn. Upon Mr. Rowe's death he succeeded on the 12th of October, 1677, to the joint pastorate of his congregation. He died late in February or early in March, 1678, and was buried in Bunhill Fields Cemetery, leaving all his real and personal property in trust for the encouragement and assistance of necessitous and deserving students. His principal works are 'The Court of the Gentiles: or, a Discourse touching the Original of human Literature, both of Philology and Philosophy, from the Scriptures and Jewish Church, in order to a Demonstration of (I.) the Perfection of God's Word and Church Light; (II.) the Imperfection of Nature's Light, and Mischief of vain Philosophy; and (III.) the right Use of human Learning and especially of sound Philosophy,' in four Parts:—(I.) 'Of Philology,' 4to, Oxford, 1669 and 1672; (II.) 'Of Philosophy,' 4to, Oxford, 1670, and London, 1676; (III.) 'Of the Vanity of Pagan Philosophy,' 4to, London, 1677; and (IV.) 'Of Reformed Philosophy,' 4to, London, 1677, in which he deduces all the heathen mythology, philology, and philosophy from the Scriptures, and maintains that true philosophy was contained originally in the Word of God addressed to his people, and since then revealed to other nations at different epochs and in various ways; 'The true Idea of Jansenism, both historic and dogmatic,' 8vo, London, 1669, to which John Owen contributed a lengthy Preface; 'Theophilie: or, a Discourse of the Saints' Amity with God in Christ,' 8vo, London, 1671; 'The Life and Death of Thomas Tregosse, &c.,' 8vo, London, 1671; 'The Anatomy of Infidelity: or, an Explication of the Nature, Causes, Aggravations, and Punishment of Unbelief,' 8vo, London, 1672; 'Discourse of Christ's Coming,' &c., 8vo, London, 1673; 'Idea Theologiæ tam Contemplatiivæ quam Activæ, ad formam S. Scripturæ delineatæ,' 12mo, London, 1673; 'Philosophia Generalis in duas partes determinata,' &c., 8vo, London, 1676; and a few Sermons. Mr. Gale also left several works in MS. which he designed for the press, the chief of which was a Greek Lexicon of the New Testament, 'Lexicon Græci Testamenti etymologicum Synonymum, sive Glossarium Homonymum,' for the publication of which he had issued proposals just before his death, and which he had finished down to the letter *Iota*, and arranged the most considerable words under the remaining letters. The work was intended to be at once a Lexicon and a Concordance.

GALIANO, ANTONIO ALCALA [E. C. vol. iii. col. 12]. In September, 1864, Galiano entered the cabinet of Narvaez as minister of public works, but his position was little more than nominal. His health was failing, and he died in April, 1865.

*GALLAIT, LOUIS, an eminent Belgian painter, was born at Tournay on the 10th of May, 1810. Having acquired the rudiments of art in his native city, he studied at Antwerp, and afterwards at Paris, where he resided several years, and took a high position among the artists of that city. His picture of 'Christ giving Sight to the Blind,' exhibited at Brussels in 1833, was greatly admired, and the impression was renewed and deepened by the works which he exhibited in the following years, all, like that, important in subject, grave and elevated in

conception and treatment, and exhibiting unusual manipulative skill. His works are for the most part historical, and by preference he paints events or incidents connected with the great struggles for Flemish independence: many of his works have, however, been commissions from royal and noble personages who have imposed the themes. Some of his pictures have found a place in the palace of Versailles, and these of course have been battle-pieces; others are at the Luxembourg; the late King of the Belgians commissioned a 'Temptation of St. Anthony,' and 'Montaigne Visiting Tasso;' the municipalities of Tournay and Brussels would only have patriotic subjects. To the International Exhibition of 1862 nine paintings by M. Gallait were sent, which admirably illustrated the range and character of his art. They were—'Crazy Jane,' the property of the Queen of Holland; 'The Last Moments of Count Egmont,' belonging to the Royal Museum, Berlin; 'The Abdication of Charles V.,' from the Musée Royal, Brussels; 'The Last Honours paid to Counts Egmont and Horn,' lent by the town of Tournay; 'The Taking of Antioch;' 'Montaigne Visiting Tasso;' 'The Prisoner;' 'Portrait of Pius IX.;' and 'Dililah.' Among these the Egmont pictures held the chief place; it may indeed be doubted whether they did not produce a deeper impression than any other historical paintings in the exhibition. There was generally recognised in them a breadth and grandeur of style, depth of feeling, and power of expression rare in modern art. Generally his pictures are large in manner and handling, dealing with colour, light, and shadow in broad masses; are painted with a full sweeping pencil; and have the fewest possible figures, but these are of the size of life, and upon them the interest is concentrated: a manner formed apparently on the study of Rubens and one or two of the great Italian masters, but modified by French culture. M. Gallait is a member of the Antwerp Academy, but is generally regarded as the head of the school of Brussels (where he resides) in contradistinction to that of Antwerp.

GALLATIN, ABRAHAM ALBERT ALPHONSE, financier, was born at Geneva, Jan. 29, 1761. His parents died while he was young, but some relative secured him a good education at the University of Geneva, where he graduated in 1779. Fired with republican sentiments, he joined the Americans in their war for independence, and embarked for Boston early in 1780. He offered his services to Captain John Allen at Machian, and was soon appointed by him commandant of the fort of Passamaquoddy, in which post he displayed much enthusiasm. On the restoration of peace in 1782 he engaged himself as teacher of French in Harvard College, but retained the position for a short time only, as he received his patrimonial property in 1784. He purchased a large tract of land in Virginia, and occupied himself in surveying it. While so engaged he met with Washington, who was so struck with his readiness of perception in reference to a road which he was planning, that he asked Gallatin to become his land agent, but the offer was declined. A few years were spent quietly in agricultural pursuits; but in 1789 he entered the political arena by being elected a member of the convention to revise the constitution of the State of Pennsylvania. In 1793 he was elected member of the Senate of the United States, but decided to be ineligible on account of his not having been a naturalised subject for the period required by law. Soon after this he played a prominent part in suppressing a local but serious uprising known as the "whiskey insurrection." In 1795 he entered Congress, and was soon recognised as the leader of the republican or democratic party, as well as a valuable adviser on all financial matters. In May, 1801, he was appointed the secretary of the treasury, which post he held till 1813. During his term of office the treasury affairs were very successfully managed, and he won for himself a high reputation as a financier. He was one of the negotiators and signatories of the peace of Ghent in 1814. From 1815 to 1823 he was the United States minister in France. In 1826 he represented his government at London. The latter years of his life were devoted to historical and ethnological researches. From 1831 to 1839 he was president of the National Bank in New York. From 1843 to his death, Aug. 12, 1849, he was president of the New York Historical Society. In 1843 he aided in founding and was appointed president of the Ethnological Society of America. He wrote numerous financial papers and reports; some political pamphlets, such as 'The Oregon Question,' 8vo, New York, 1845; and a few lengthy ethnological papers. The most important of the last-mentioned are 'Notes on the semi-civilised Nations of Mexico, Yucatan, and Central America,' in 'Trans. Amer. Ethno. Soc.,' i. pp. 1—352 (1845); and 'Hale's Indians of

North-West America and Vocabularies of North America, with an Introduction,' in vol. ii. (1848) of the same 'Transactions,' pp. i.—xxiii. and 1—130.

GALLEGOS, FERDINANDO, an eminent Spanish painter, was born at Salamanca towards the close of the 15th century. From his manner he has been called a pupil of Albert Durer or Van der Weyden: it is probable from the close connection of Spain with the Netherlands that his master was a Fleming. His chief works are a Virgin and Child with St. John and other saints, the altarpiece in the chapel of San Clemente in the old cathedral of Salamanca, and St. John Beheaded, in the same cathedral, but as Ford notices, "though among the earliest of Spanish pictures, they have been scandalously neglected." In a chapel of the cathedral of Granada is a Descent from the Cross attributed to Gallegos, but it has been "mutilated by barbarians, who have driven nails in it to support a crucifix." Gallegos died at Salamanca in or about 1550.

GAMBA, JACQUES FRANÇOIS, French traveller, was born at Dunkerque, Dec. 26, 1763. He was educated at Paris and Leipzig, and on the death of his father he succeeded to the management of his business. The revolution, however, entailed such losses on him that he relinquished it, and took to travelling. On returning to Paris he occupied himself in making French translations of numerous works written in other European languages. He also advocated the desirability of extending the commerce of France in the East. His views coinciding with those of Richelieu, he was induced to make a tour of investigation through Southern Russia. In 1818 he returned to Paris; and in 1819 he visited Georgia, which country he thoroughly examined. He procured from the Russian government some privileges for the foreigners settling in Georgia, and was appointed French consul at Tiflis. In 1824 he was recalled to Paris for a short period, and there published his '*Voyage dans la Russie méridionale et particulièrement dans les provinces au delà du Caucase fait depuis 1820 jusqu'en 1824*,' 2 vols. 8vo, 1826. He returned to Tiflis, and died in Georgia, May 27, 1833. His book is a valuable authority on Georgia.

GARDAR, SVAFARSON, the rediscoverer of Iceland in the 9th century. His discovery happened accidentally, he having been driven on the shores of Iceland by a tempest while making for the Hebrides. He built a small residence and lived there for several months.

* **GARIBALDI, GIUSEPPE**, an Italian general and patriot, was born at Nice, on the 22nd of July, 1807, and, early embracing his ancestral calling of a sailor, was for several years engaged in the coasting trade in various parts of the Mediterranean. In 1833, having made the acquaintance of Mazzini at Marseille, he became a member of the Society of "Young Italy," and entered himself on board the Sardinian frigate *Eurydice*, for the purpose of making proselytes for the Revolution then planned by the republicans. The hopes of the latter being frustrated, Garibaldi deserted his ship at Genoa, which he left for the sake of his personal safety on the 5th of February, 1834. He escaped to France, and landed at Marseille about the 25th of February; and, having been condemned to death in his absence, changed his name for that of Pane, under which he made several voyages from the port, and at length volunteered as a hospital assistant during an alarming outbreak of cholera. This service lasted for a fortnight, at the end of which he shipped as mate in a brig bound for Rio Janiero, and presently after his arrival engaged in the privateer service of the revolted Republic of Rio Grande against Brazil, and experienced the various vicissitudes of victory, defeat, imprisonment, shipwreck, and escape, in the revolutionary war. Amidst his troubles and dangers by land and sea, he found comfort in his marriage with a Brazilian lady named Anita, to whom he was devotedly attached, and who fully reciprocated his affection. From his bravery and conduct the name of Garibaldi became a terror to the enemy; and his military fame extended even to Europe, especially for the battle he fought at Salto Sant' Antonio, on the 8th of February, 1846.

When the news reached South America of the election of Pío Nono to the chair of St. Peter, and of the liberal sentiments of the new pope, Garibaldi wrote to him, October 12th, 1847, making an offer of his services; but having vainly waited for a reply to his letter until the 27th of March, 1848, he embarked for Italy, with eighty-five of the Italian legionaries under his command, on board a French brig bound for Nice, off which they arrived on the 24th of June. Finding Charles Albert, King of Sardinia, in the field, Garibaldi offered his sword to that monarch, by whom, however, it was declined. He there-

upon repaired to Milan, where he was gladly commissioned by the provisional government to organise battalions of Lombard volunteers, with which to oppose the forces of Austria. After the flight of the pope to Gaeta, November 24th, 1848, Garibaldi resolved to visit Rome, where he found the people rejoicing over the proclamation of a Republic, under which he was elected to the Constituent Assembly, for Macerata, and took his seat at the opening of the assembly, on the 9th of February, 1849. He received orders to watch with his troops the movements of the King of Naples, who from the south threatened the Republic; but was called from this duty in order to resist the French army, which was then proceeding to invest the Roman territory. A battle took place on the 30th of April, in which Garibaldi, after a hard struggle against the discipline of the French soldiers, drove them from the field; and he followed up this victory by another, over the Neapolitan army, on the 9th of May. Rome, however, after an attack which raged without intermission from the 23rd to the 28th of June, fell into the hands of the French, who had been reinforced; and Garibaldi, and 5,000 of his volunteers took their departure on the 2nd of July, to carry on war against the Austrians, the King of Naples, and the Pope, turning his steps towards Venice, where Manin still held out for the freedom of Italy. But misfortunes overpowered him: many of his troops surrendered to the enemy, and his faithful wife, the too sanguine sharer of his disasters, yielded up her life a victim to anxiety and fatigue.

In despair of being able to make head against his adverse circumstances, Garibaldi passed over, in the first instance, to Algeria, whence in a few months he made his way to America, landing at New York in the summer of 1850. Here he declined the public reception which was offered to him; and in the pride of his independence, engaged in business as a soap and candle manufacturer, on Staten Island, which after some time he left to open a sugar store at Cincinnati. Here he stayed several months, and then determined to push for California, the "land of gold." Disappointed in finding suitable employment on shore, he reverted to his sailor life, and became captain of a Peruvian vessel, first in a voyage to China, and afterwards as a trader to the Atlantic ports.

In 1854 he returned to Genoa, and became the commander of a small merchant steamer, which plied between Nice and Marseille, until, having amassed sufficient capital for the purpose, he purchased the little island of Caprera, off the coast of Sardinia, where he settled down in the combined character of an agriculturalist, and of a patriot on the watch for opportunity. This arrived in April, 1859, when he had learned to perceive that a united Italy was possible only under a constitutional monarchy, and he obeyed the summons of Victor Emmanuel which called him to Turin to concert the plan he was to play against the Austrians, then menacing Sardinia. He received a commission as lieutenant-general, and found himself at the head of a choice band of 3,000 volunteers, with whom he left Turin on the 20th of May, and with whom he carried on a guerilla warfare which harassed the Austrians in every possible direction. His followers, who, by rapid increase, soon numbered 17,000 men, took Varese, Camerlata, and Como; and were successful at Bergamo, Brescia, and Rezzato. A month after the hasty conclusion of the war by the treaty of Villafranca, July 11th, which, to the confusion of Italy left Venice in the hands of the Austrians, he retired from his command, and was gazetted to the rank of general in the army of Central Italy. This promotion also he resigned—retaining his honorary rank—in order that he might be free for his meditated expedition for the deliverance of the two Sicilies from the mis-rule of Francis II. Being assisted with money, muskets, and men from Sardinia, France, Great Britain, and America, he embarked at Genoa for Sicily on the 5th of May, 1860; landed on the 10th at Marsala, where he proclaimed himself dictator of Sicily in the name of Victor Emmanuel, King of Italy; and proceeded to take Palermo and Messina. This done, he crossed the straits, landed in Calabria, and possessed himself of Naples, which he entered on the 9th of September, and proclaimed Victor Emmanuel, amidst general enthusiasm. The Neapolitan army made a stand on the right bank of the Volturno, which was carried by Garibaldi on the 1st of October; on the 21st the people of Naples voted in favour of the annexation of their country to the Sardinian States; on the 7th of November Victor Emmanuel entered Naples; and on the 27th the army of Garibaldi was disbanded.

The General now retired to his estate at Caprera, where, however, his stay was not of long continuance. On the 9th of

March, 1862, a meeting of 300 delegates assembled at Genoa under his presidency; and on the 27th the Government issued an order for the amalgamation of his volunteers with the regular army. On the 2nd of August he put forth a proclamation calling upon the people to resist "arrogant foreign oppressors," which was met by a counter proclamation from the king. Garibaldi nevertheless followed up his address by proceeding to Melito, a small port on the coast of Calabria, and took possession of Catania, where he raised the war-cry "Rome or Death." It was his object to avoid collision with the royal troops which had been sent to arrest his progress; and for this purpose he led his small band of 2,000 men up the goat-paths of Aspromonte. Through the activity of Pellavicini it was impossible to avoid a meeting, and on the 29th of August, whilst exhorting his men not to fire upon their brethren, subjects of the same sovereign, Garibaldi was shot down by a bullet in the foot, and, being carried to the sea-coast, was conveyed on board a royal frigate to Spezzia. Here the ball was extracted, and after he had undergone an imprisonment for four or five weeks, an amnesty was granted to his followers and himself, on account of his former services in the cause of Italian unity.

With shattered health, and with spirits dashed, though unbroken, he retired to Caprera. On the 7th of January, 1864, he resigned his seat in the Chamber of Deputies, and in the spring of the same year paid a visit to England, where he landed on the 3rd of April, at Southampton, and became the guest of Mr. C. Seely, M.P., at Brook House, Isle of Wight. His reception everywhere was to the last degree enthusiastic, and his public entry into London, on the 11th of April, was all but overwhelming in the vastness of the popular demonstrations of delight and admiration. Whilst in London, he was the guest of the Duke of Sutherland, at Stafford House; and he paid and received visits from numerous persons of the highest distinction in London. He was admitted to the freedom of the city, and a banquet was given in his honour by the Lord Mayor. In the midst of attentions and marks of affection of every kind, and in spite of several unfulfilled engagements to visit the provinces, he suddenly announced his determination to return to Italy, which he did in the Duke of Sutherland's yacht—the duke and duchess accompanying him—having first dictated at Penquite, Par, Cornwall, April 26, 1864, a farewell address to the people of England, exhibiting deep earnestness and emotion.

He emerged from Caprera to take part in the campaign of 1866, which at length gave Venice to Italy; but, still uneasy at the continued exclusion of Rome from regenerated Italy, commenced in 1867 an agitation for the recovery of the Papal States to the United kingdom. Towards the end of September he was arrested by order of the Rattazzi ministry, at Asinalunga, and conveyed to Caprera, where he was guarded by a ship of war. He eluded the watch set over him, and repaired successively to Florence and to the Pontifical States. From Foligno, in Umbria, he issued, October 20th, a proclamation against France, which had deeply wounded him by the annexation of Nice and Savoy, and the continued protection of the temporal power of the Pope. He gained at first some advantage over the Papal troops at Monte Rotondo; but on the 4th of November was conquered by the combined French and Pontifical forces at Mentana, and the same evening was arrested, and conducted to the fort of Varignano, in the neighbourhood of Spezzia. An attack of sickness, which rendered it expedient to transport him to Caprera in the end of November, relieved the Menabrea ministry from the unwilling odium of a Government prosecution. The island-home of Garibaldi has been elevated into a place of pilgrimage; and many persons have, in the shape of articles contributed to newspapers and other periodical literature, or in that of substantive volumes, given descriptions of the General's life at Caprera; whilst his entire career, exploits, and adventures, have been discussed in an immense number of 'Biographies,' 'Lives,' 'Notices,' 'Studies,' &c., in every European language. His own compositions, addresses, speeches, letters, and proclamations, are monuments of his simplicity, fervour, and earnestness. He has lately published a work, of which the English translation bears the title of 'The Rule of the Monk; or, Rome in the nineteenth Century,' 2 vols, 8vo, London and New York, 1870, the Italian manuscript of which was mainly produced during his imprisonment at Varignano. It is just to believe that General Garibaldi has favoured the Italian monarchy chiefly as offering a unique solution of the problem of Italian unity; and that his ultimate aspirations are not only for a united, but for a republican, Italy. In this spirit, in spite of advancing age and frailty of bodily health, he has responded to the call of the provisional Government of

France to give her cause against Germany the prestige of his countenance and assistance. He arrived at Marseille on the 7th of October, 1870, and on the morning of the 9th at Tours, where he was forthwith invested with the command of the irregular forces in the Vosges, having also under him one brigade of the Garde Mobile.

GARNIERIN, ANDRÉ JAKUES, a celebrated aéronaut, was born at Paris, January 31, 1769. In 1790 he ascended in a Montgolfier balloon from the garden of Ruggieri. In 1793, during the war with the German princes, he proposed to the Revolutionary Government the employment of a captive balloon filled with hydrogen, instead of the fire balloons inflated with heated air, for reconnoitring the enemy's position. The plan was not adopted at the time, but it led to the establishment of an Aéronautic School of Instruction at Meudon, after a successful trial in the Luxembourg Gardens. Garnerin was sent as a Civil Commissioner to the army of the North; but being taken prisoner by the English, he was handed over to the Austrians, who subjected him to a harsh imprisonment at Buda for eighteen months. Released on an exchange of prisoners, he returned to France. He and his elder brother, Jean Baptiste Olivier (who was also an aéronaut, and who had assisted him in his early experiments on the Montgolfier balloon), commenced a regular system of public ascents, which he spared no means of rendering attractive. He made upwards of sixty ascents, one of which involved a night's voyage in the air. He made the first parachute descent at the park of Monceaux, on the 22nd of October, 1799, after narrowly escaping violent usage from a mob enraged by the failure of a proposed ascent in June. In 1800, after some successful ascents at St. Petersburg, he assumed the title of "Premier Aéronaut du Nord." On September 21st, 1802, he descended safely in a parachute from a balloon near London. In 1804, to celebrate the coronation of Napoleon, he sent up a gigantic balloon, from which was suspended a crown, illuminated with 3,000 coloured lamps. Some mishap on this occasion having offended the emperor, Garnerin was superseded by M^{de}. Blanchard as "Court balloonist." In 1815 he wrote a pamphlet against his brother, with whom he had quarrelled. Garnerin, who died August 18th, 1823, was a bold and skilful aéronaut, but he added little to our knowledge of aéronautics.

* GARNIER, MARIE JOSEPH FRANÇOIS, a French naval officer and traveller, was born at St. Etienne, Loire department, July 25, 1839. He received his education at Montpellier, and in 1857 he joined the navy. In 1860 he was attached to Admiral Charner's staff, and was engaged in the campaign in China and Cochin China. In 1863 he was entrusted with the management of Cholen, and while so engaged he advocated a general exploration of Cochin China and adjoining provinces, with a view to opening up commercial relations with China. In 1866 M. de Chasseloup de Laubat appointed a scientific exploring expedition, which was placed under the commandship of M. Doudart de Lagrée, with M. Garnier for second officer. The party left Saigon June 5, 1866, and proceeded up the Meh Kong, or Cambodia river, nearly as far as its entrance into the Chinese province of Yunnan. It then proceeded eastward and northward, through Esmok and Yuen Kiang to Lin-gan-fu, Yunnanfu, and Tung-chuan, which last place was reached January 18, 1868. For some time previous M. Lagrée had been seriously ill, and the doctors urged him not to journey any farther. The conduct of the expedition was accordingly transferred to M. Garnier. The task that lay before him was one of considerable difficulty and risk. The object was to reach Tali, but the intervening country was in a state of great disturbance, owing to the existence of war between the Chinese authorities and the Mohammedan rebels, who had declared their independence under their leader, Sultan Suleiman. There was also much hostile religious feeling against the Roman Catholics. M. Garnier conducted his party by a roundabout route through the gorges of the upper Yang-tse river, and succeeded in entering Tali from the north. The party only stopped there a single day, as danger threatened them from several quarters, and it was only by keeping a bold front, and by insisting upon having his movements uncontrolled by the native rulers, that M. Garnier succeeded in getting his followers safely back to Tung-chuan. During his absence M. Lagrée had died. M. Garnier proceeded down the Yang-tse river as far as Suchen, where the navigable portion of the stream commences. He there embarked, and reached Shanghai June 12, 1868. This journey is one of the most important performed in the present century. A large portion of it was through a country scarcely, or not at all, known to European geographers. The highest point up the Cambodia river, the position of which

had previously been fixed by the French, was Cratieh, in 12° 28' N. A Dutch party, under Wusthof had explored the river as far as the cataract about 125 miles above Cratieh, in 1641. Macleod had touched at one point in 1837, viz., Kiang-Hung, the latitude of which he correctly determined. The lower portion of the river had been explored by Henry Mouhot, but his latitudes were mostly a degree out. And the Roman Catholics probably knew something of the country, but their knowledge has not been communicated to the public. With these exceptions, the whole route from Cratieh to Shanghai on the Yang-tse was entirely new ground. The distance travelled over from Cratieh to Shanghai was 5,392 miles, of which 3,625 miles were carefully surveyed, and the position of places fixed by astronomical observations. Upwards of 2,000 miles were performed on foot. Hundreds of sketches were made, and much knowledge was collected respecting the language, plants, animals, and geology of the districts passed through. In 1869 the gold medal of the French Geographical Society was awarded to him and M. Lagrèe, and in 1870 the Patron gold medal of the Royal Geographical Society of London was given to M. Garnier. Besides two or three pamphlets on Cochin China, he has written 'Episode de voyage d'exploration dans l'Indo-China,' in 'Bull. Soc. Géogr.,' 5th series, xvii. pp. 360-383 (1869). This was a preliminary account only, to a much larger and important work, which he was to bring out under the auspices of the French Government. Probably the recent war will interfere with its publication.

* GARNIER-PAGÈS, LOUIS ANTOINE, younger brother of Garnier-Pagès, the distinguished French orator, was born at Marseille, July 18th, 1803. His mother had married in succession M. Garnier and M. Pagès; hence the two surnames assumed by the sons. The family having been much impoverished by political events, he was brought up to commercial life as a means of reviving their fortunes; but his inclination led him to engage in political affairs. He took part in the street fighting during the Revolution of 1830, having organised a band of workmen in the Quartier St. Avoys. After the death of his brother in 1841, he sold his share of the business (that of a commission-agent or commercial broker), and thenceforward devoted almost his whole attention to political life. In 1842 he was elected a Member of the Chamber of Deputies for Verneuil, and took an active share in the discussion of commercial and financial subjects—such as the equalisation of the sugar duties, converting or consolidating the Government rentes, &c.; in more political questions he allied himself with the extreme left, or ultra-radical party. A visit to Spain in 1844 enabled him, on his return, to render good service in the debates on Spanish affairs. He next went to Algiers to study the Colonial system. He took an active part in developing the construction of railways, and succeeded in lessening the long term of years proposed for concessions to the companies. In 1847 he joined the democratic meetings held in Paris; raised the cry of "Rien pour soi, tout pour la patrie"; and attended the banquets which led to the unsuccessful attempt at repression by the Government. The Revolution of 1848 followed, and Louis Philippe escaped to England. Garnier-Pagès was appointed Mayor of Paris, and member of the Provisional Government. Soon afterwards he succeeded M. Goudchaux as Minister of Finance. The chief bankers having advised that the State should be declared bankrupt, or at least that there should be a temporary suspension of payments, Garnier-Pagès resolutely opposed the idea; and the fiscal arrangements which he made to avert the evil were a fertile subject of controversy for many years afterwards. He rearranged the systems of taxes, bank notes, discount banks, salt duties, octroi duties, &c. One proposal of his, to alienate the Crown diamonds, and the pensions on the old Civil List, for the use of the nation, was not adopted; but a national loan was contracted on his suggestion, with great success. He was elected Professor of Economy, Statistics, Finance, and Commerce in a new School of Administration founded at the College of France; but this school was suppressed in the course of a few months. When the Constituent Assembly was formed, he was elected to it by the two departments of the Seine and the Eure; he selected the former, where he had defeated thirty-three other candidates. As a member, he drew up reports on the financial and economical position of France. He was afterwards elected to the Executive Commission of Government; but on the fall of this short-lived body, he quitted public life for a time, and resumed his mercantile pursuits. Some time afterwards he published 'Episode de la Revolution de 1848,' relating to his financial policy. In 1857 he was defeated by Emile Ollivier as a candidate for the 1st Circum-

scription of Paris; his finance plans went against him, and this led him to publish another pamphlet on the subject. In 1864 he was elected member of the Corps Législatif for the 5th Circumscription of the city; but was soon afterwards tried and fined as one of thirteen persons who had organised a Democratic Electoral Committee. This prosecution became known as the "Procès des Treize"—the trial of the thirteen; among the number were Carnot, Héroult, Hérisson, and Ferry. At the election in 1869, he was defeated by Raspail, the Socialist Republican, on a first scrutiny, but regained his position as one of the members for Paris on a second. In this year he brought to a conclusion a large work on which he had been engaged, 'Histoire de la Revolution de 1848,' 8 vols. 8vo, 1860-69; and a Supplement to it, 'Histoire de la Commission Executive,' 8vo, 1869.

During the extraordinary events at Paris on Sunday, September 4th, 1870, consequent on the surrender of the Emperor and a large French army to the Germans at Sedan, several members of the extreme left, in the Corps Législatif, announced to an assembled crowd that the Emperor was deposed. They then went to the Hôtel de Ville, and formed themselves into a Provisional Government under the designation of the Government of National Defence. M. Garnier-Pagès was one of the number; and he remained in Paris in the exercise of ministerial functions during the investment of the city from September in that year.

* GARRISON, WILLIAM LLOYD, one of the most prominent members of the Abolitionist or Anti-Slavery party in the United States, was born at Newburyport, Massachusetts, December 10th, 1805. His early years were marked by some privation. First he learned shoemaking as a boy; then he went to school at Newburyport, paying for his board and schooling by domestic service; and then he tried cabinetmaking for a time. His apprenticeship to the printer of the 'Newburyport Herald,' in 1818, gave a definite turn to his career; he wrote a short article, which was inserted; and he became gradually acquainted with newspaper editors and writers. In 1824 he became editor of the 'Newburyport Herald'; in 1826 proprietor and editor of the 'Free Press,' in which he was accustomed, as compositor, to set up his own editorial articles without writing them out—composing in his mind and composing with his types at the same time. In 1827 he engaged with others at Boston in advocacy of peace, temperance, and anti-slavery; and in three successive years was concerned in the 'National Philanthropist,' the 'Genius of Universal Emancipation,' and the 'Journal of the Times.' At length, in 1831, he began a newspaper which he conducted uninterruptedly for 35 years, and which he only brought to a close when the object for which it was established had been attained—the emancipation of all negro slaves in the United States. This newspaper was the 'Liberator.' He was the proprietor, editor, printer, and publisher; and the fierceness of his articles as the chief writer brought him sometimes into peril. On one occasion he was fined and imprisoned for slander on a Boston owner of slave ships; in 1835 he was stripped, and nearly tarred and feathered, by a Boston mob; while on another occasion the Governor of Georgia offered 500 dollars to any one who would "bring into Georgia the person of William Lloyd Garrison, to answer to the laws of Georgia for the conduct of an incendiary sheet, the 'Liberator.'" He organised an 'American Anti-Slavery Society,' and a 'New England Non-Resistance Society,' in the interests of peace. When Mr. Garrison visited England, in 1866, after the cessation alike of slavery and of the 'Liberator' newspaper, he was entertained at a public breakfast at St. James's Hall, on which occasion the Duke of Argyll and Mr. Bright complimented him on his public services. A small volume of 'Sonnets and other Poems' by him was published in 1847; and a selection from his writings and speeches in 1852.

GASKELL, ELIZABETH CLEGHORN. [E. C. vol. iii. col. 36]. The memoir of Charlotte Brontë referred to in the above notice appeared in two volumes 8vo, in 1857; some remarks in it led to a controversy not wholly free from acrimony, and to the modification of subsequent editions. Under the title 'Round the Sofa,' 2 vols. 8vo, 1859, Mrs. Gaskell collected various papers which she had contributed to periodicals, and in the following year published another volume called, 'Right at Last.' Of a higher order was 'Sylvia's Lovers,' 3 vols. 8vo, 1863, the best and most touching of all her later stories. She died at Alton, Hampshire, on the 12th of November, 1863; she was born in 1811. A novel, called 'Wives and Daughters,' which was in course of publication in the 'Cornhill Magazine,' was left unfinished at her death.

GASPARIN, ADRIEN ÉTIENNE PIERRE, COMTE DE, was born at Orange, June 29, 1783. By his father's side he was connected with the Corsican family of Gaspari; and by his mother's side he was related to Olivier de Serres, the founder of French agriculture. He was educated first at Metz, then at the college of Juilly, and finally at the Lemoine institution at Paris. In 1801 he entered the army as a sub-lieutenant of Dragoons, and served in the German and Polish campaigns of 1805. In 1806 he left the service, owing to ill health, and devoted himself to agricultural pursuits, and more particularly to the improvement of farm animals and plants. In 1817 appeared his 'Mémoire sur la culture du blé dans le département de Vaucluse.' In it he showed that by the method of cultivation in use wheat cost more than the price obtained for it, and indicated the course which would remedy this state of things. His advice was adopted, with the best results. He drew up similar reports on the cultivation of the other principal plant growths of the district, such as the madder, the olive, and the mulberry-tree. In 1828 appeared his 'Guide du propriétaire de biens ruraux'; and in 1857 the first part of his 'Guide du propriétaire de biens soumis au metayage,' in the 'Bibliothèque Universelle de Geneva,' which was subsequently republished in a complete form in 1832. These works attracted attention, and added much to his influence. In 1830 he entered upon a political career, by being elected to represent his native place; and in 1831 he was appointed Prefect of the Rhône department. He was active in suppressing an insurrection amongst the workmen of Lyons, in April, 1834, which involved a severe struggle. For this service the Government raised him to the peerage. In 1835 he gave up his Prefecture and became Under-Secretary of State to the Minister of the Interior. In 1836 he was himself appointed Minister of the Interior, which post he exchanged for that of Minister of Agriculture and Public Works in 1839; but he held it for a short period only. He then gave his attention to writing his principal work, 'Cours d'Agriculture,' 6 vols. 8vo, 1843—1860. After the Revolution of 1848, he was occupied in organising the 'Institut Agronomique' at Versailles, but after a few years' existence the Government suppressed it. He served on the jury for agriculture at the Exposition of 1855. He died at Orange, September 7, 1862. In addition to his above works he wrote on several other subjects, such as the multiplication of races, the contagious diseases of sheep, and the raising of merino sheep. He made long researches on the distribution of rain, and on solar radiation. His great merit is that he saw, and endeavoured to impress upon others, the importance of regulating agricultural affairs by constant attention to the laws established in the sciences which bear upon them. His meteorological investigations, and his experiments on soils were undertaken with this end. In his contribution to the 'Comptes Rendus,' xi. p. 1089 (1855), on the 'Influence de la chaleur sur la Végétation,' he pointed out that the rate of growth and development of plants do not depend upon any single element of climate, such as mean temperature, but that it is necessary to take each element into account separately.

* GASSIES, JEAN BAPTISTE, malacologist, was born at Agen, January 11, 1816. In his earlier years he drew up a catalogue of the *Lepidoptera* of his native district; but in his maturer years his attention has been almost exclusively given to molluscs. His occupation is that of a merchant tailor at Bordeaux, but his spare time is devoted to scientific pursuits. His first paper, an 'Essai sur le Bulime tronqué,' in 'Actes Soc. Linn. Bordeaux,' xv. 5—22 (1847), has been followed by several papers in the publications of the same Society, of which the most important are—a 'Monographie du genre Testacelle,' in the 'Actes,' i. pp. 195—248 (1866), written in conjunction with P. Fischer; and a 'Catalogue raisonné des mollusques terrestres et de l'eau douce de la Gironde,' in the 'Actes,' ii. pp. 233—306 (1858). He has also been a constant contributor to the 'Journal de Conchyliologie' since 1852, and amongst other things has described a large number of shells from New Caledonia. In vol. xvi. (for 1868) he gives details relative to the gradual introduction of *Dreissena polymorpha* into the fresh waters of the south-west of France. Amongst his separate works, which are few in number, may be mentioned the 'Tableau méthodique et descriptif des mollusques terrestres et d'eau douce de l'Agenais,' 8vo, Paris, 1849, which was published under the auspices of the Minister of Public Instruction; and 'Faits biologiques de l'Aquarium d'eau douce de l'Exposition Universelle de 1867,' Paris, 1868. He is said to be preparing a work on the palæontology of the Agen district.

* GASSIOT, JOHN PETER, vice-president of the Royal

Society, was born April 2nd, 1797. In connection with a commercial firm in which he is partner, he has been engaged in trade with Spain and Portugal; but his taste has led him to experimental research in natural philosophy; and he has embodied the results of his investigations in numerous memoirs, published between the years 1837 and 1870. They have appeared chiefly in the 'Philosophical Transactions,' the 'Proceedings of the Royal Society,' the 'Electrical Society's Transactions,' the 'Electrical Magazine,' and the 'Reports of the British Association for the Advancement of Science.' The greater number relate to electricity and the allied sciences, which subjects Mr. Gassiot has enriched with papers on experiments on voltmeters having electrodes exposing different surfaces; on the possibility of obtaining the electric spark before the circuit of the voltaic arc is completed; on Nobili's plate of colours; on large voltmeters of a new construction; on the polarity of the voltaic battery; on the means of producing electrical tension without metallic contact; on a water battery for voltaic purposes; on the relations between the electrical and chemical actions before and after the completion of the circuit; on measuring the resistance of wires interposed in the circuit; on the electro-magnetic properties of different batteries; on the electricity of tension in the voltaic battery; on the diamond under the influence of the voltaic arc; on the decomposition of water under pressure by the galvanic battery; on the heating effects of secondary currents; on Ruhmkorff's induction coil; on induced electrical discharges in aqueous vapour; on the phosphorescence, dark bands, and stratification of electrical discharges; on the interruption of the discharge in vacuo by the magnetic force; on relative tests for vacua; on the electric light produced from the induction coil; on the heat of the voltaic poles during luminous discharges; on metallic depositions from the negative terminal of the induction coil; on a similar deposition in vacuum tubes; on the varying forms and colours of the stratified voltaic discharges, &c. His papers on other scientific subjects are relatively few in number. Among them are those on tidal observations; on the use of bisulphide of carbon prisms and telescopes of long focal distance in examining solar spectra; on the mode of producing carbonic acid vacua; on the meteorological and physical observations made during three balloon ascents in 1865 and 1866, &c. Mr. Gassiot was elected Fellow of the Royal Society in 1840, and delivered the Bakerian Lecture in 1858. The gold medal of the society was awarded to him in 1863 for his 'Researches on the Voltaic Battery and Circuit,' and on the 'Discharge of Electricity through Attenuated Media,' researches conducted on an unusual scale of power and magnitude. The president on this occasion said, "Mr. Gassiot has had executed a grand spectroscope, furnished with no less than nine faultless prisms: a design in which he has been ably seconded by the skill of the optician, Mr. Browning, to whom the construction was entrusted. This magnificent instrument he has placed at the disposal of any fellow of the society who may happen to be engaged in researches requiring the use of such powerful apparatus."

GATTEAUX, NICOLAS MARIE, a celebrated French medallist, was born at Paris on the 2nd of August, 1751. He was educated as a gem engraver, but having obtained an appointment in the royal medal office, devoted himself entirely to medal engraving. The first medal which he engraved on his own account, a portrait of Louis XIV., executed for the series of royal medals, 1773, secured his position. From that time he was called to engrave a medal on the occasion of almost every important dynastic incident or public event, and also when it was thought necessary or becoming to do honour to a distinguished personage or celebrate any passing circumstance. On resigning the graver at the age of 68, he had produced 289 medals, seals, and dies, besides various other works. Gatteaux was perhaps the neatest and most ingenious medallist of his time. His strength was in portraiture and execution. His symbolical designs are neither very apt nor profound, but they are praised by his countrymen as brilliant. Many of the processes of medal engraving were improved by him; he invented means of registering bank notes, and increasing the difficulties of forgery; and also produced an improved copying machine for the use of sculptors. Nicolas Gatteaux died of cholera, June 24th, 1832. His son

* JACQUES EDOUARD GATTEAUX, born November 4th, 1788, is equally celebrated as a medallist and a sculptor. His medals comprise portraits of a very large number of the most eminent of his contemporaries, and several of the more distinguished Frenchmen of earlier date executed for the Galerie Numismatique des Grands Hommes Français, of which he was one of the founders,

His sculpture includes many busts and portrait statues, some of colossal size, executed for different cities and public buildings. With M. V. Baltard he has published 'La Galerie de la Reine, dite de Diane, à Fontainebleau,' folio, 1858. M. Gatteaux was elected member of the Académie des Beaux-Arts in 1845, and in 1861 was promoted to be officer of the Legion of Honour.

GAU, FRANÇOIS CHRÉTIEN, architect and archaeologist, was born at Cologne, June 14th, 1790. At the age of 18, being permitted to follow his bent for art, he went to Paris; studied under Debret and Lebas, and entered the École des Beaux-Arts. In 1815 he went to Italy, and studied with care the works of classical antiquity. In 1817 he proceeded to Egypt, and examined, measured, and drew the more remarkable monuments, making his way up the Nile through Nubia as far as the second cataract. On his return to Paris in 1823, he set about preparing his drawings for publication, and they appeared, with descriptions by Niebuhr and Letronne, under the title 'Antiquités de la Nubie, ou monuments inédits des bords du Nil, situés entre la première et la seconde cataracte, dessinés et mesurés en 1819,' with 78 plates, large folio, Paris, 1822—28. An edition with the text in German was published simultaneously at Stuttgart. The admirable manner in which he executed this splendid work led to his being invited to complete Mazois's 'Ruines des Pompéi,' the last two volumes of which are by him. Upon the completion of this task Gau commenced the practice of architecture, and executed some important works, among them being the restoration of St. Julian-le-pauvre, and the erection of the prison of Roquette and the presbytery of Saint-Séverin. The work on which he based his anticipations of eminence as an architect was the church of Sainte Clotilde, by which, as the first Gothic church erected in Paris since the middle ages, Gau hoped to effect a revolution in Parisian ideas of ecclesiastical architecture. The church was commenced about the end of 1846, but before it was carried far, Gau fell ill, its continuance was confided to M. Ballu, and the design was mutilated. Gau died at Paris, December 31st, 1853.

GAUDICHAUD-BEAUPRÉ, CHARLES, botanist, was born at Angoulême, Sept. 4, 1780, and educated at Paris. In 1810 he entered the navy as a druggist, and was ordered to serve at Antwerp. While here he got engaged in a duel, and was severely wounded in the lungs by a sword thrust. In 1816 he was allowed to join Freycinet's ship, 'Uranie,' in a voyage round the world as botanical druggist. He made large collections of plants, and wrote the report on botany in Freycinet's 'Voyage autour du Monde.' In 1830 he took part in Villeneuve Bargemont's expedition to South America, and some years subsequently he went round the world in the 'Bonite.' He died January 16, 1854. He wrote numerous papers, chiefly on the organography and physiology of plants, the potato disease and on the movements of the sap in trees. He was much engaged in controversy with M. Mirbel on the subject of a theory which he proposed. He maintained that a plant is a compound mass, of which the leaves are the individual portions; each leaf he called a *phyton*, which consists of the primary ascending vessels forming the medullary canal; of tubular vessels, or wood; and of fibrous vessels, or bark; the last two portions are formed from above to below; the first is formed from below upwards. The leaves are connected to the stem by radicular processes, which form the annual layers. These ideas are somewhat similar to those which had been previously enunciated by Dupetit-Thouars, and Agardh. His notions as to the root-like prolongation of the leaves have been disproved by the recent investigations of Trecul.

* GAUDIN, MARC ANTOINE AUGUSTIN, chemist, was born at Saintes (Charente Inférieure), April 5, 1804. In 1827 he invented an air-pump in which the air could be rarefied or compressed as desired by means of an arrangement in the valves. He gave considerable attention to the probable molecular structure of minerals and other chemical compounds, to the production of artificial gems, to improvements of the microscope as regards portability and cheapness, and to photography. He has written several books and papers; amongst the former may be noticed his works on photography and epidemics; and amongst the latter those on the preparation of artificial corundum, quartz, sapphire, and ruby; on the molecular phenomena regulating the forms of crystals; on the properties of silica; and on feldspar. Nearly all his papers occur in the 'Comptes Rendus.' His views on the grouping of molecules in crystals are purely hypothetical, and have not received much support. He was one of the first to produce minerals artificially, and most of his efforts in this line were made before Ebelmen's successes. He

was the first to make artificial rubies. His process was to expose ammonia alum to the oxyhydrogen flame, thereby volatilising all the constituents but alumina. This was melted; a little yellow chromate of potash added to it, and the whole allowed to cool and crystallise. He thus obtained small crystals, which Malaguti analysed and found to have the same composition as the natural rubies. Since then he has succeeded in producing them by another method. Gaudin usually resorted to high temperatures, while Ebelmen obtained most of his results at moderate degrees of heat. In 1869 the Academy of Sciences awarded him the Trémont prize.

* GAUDRY, ALBERT, palæontologist, was born at St. Germain-en-Laye in 1827. His first important contribution to science was 'Mémoire sur les pièces solides chez les Stellérides' in 'Annales des Sciences Naturelles' for 1851, vol. xvi. pp. 339—379. In 1853 he began his investigations in the East of Europe, and soon drew up some short papers on the geology of Cyprus, and of various parts of Greece. These were followed by others on the extinct animals found in a rich deposit at Pikermi, mostly in the 'Comptes Rendus' for 1856 and subsequent years. His principal separate works relate to the same subjects as his papers, and are entitled 'Géologie de l'île de Chypre,' 4to, Paris, 1862, and 'Animaux fossiles et Géologie de l'Attique d'après les recherches faites en 1855—6 et en 1860,' 4to, 1862—67, with an atlas of 75 plates and a map. The diggings at Pikermi were made under his personal superintendence, he himself living in a tent while they were going on. He thus collected a series of mammalian remains, probably of upper miocene age which surpasses in completeness and in interest any other collection from a single spot, not even excepting those of the Sewalik hills. The mammalian fauna comprises 43 species; as a group they are remarkable for their large size, for their relationship with the African fauna, and for many of the genera being extinct, and intermediate in character between different living genera, and for connecting the faunas of anterior periods with those which existed in postmiocene times.

GAUERMANN, FRIEDRICH, an eminent Austrian animal painter, the son of Jakob Gauermann, was born at Miesenbach September 20, 1807; and studied under his father at the art-academy and the Imperial Library, Vienna, but learned most from a laborious series of sketching tours in Styria, the Tyrol, and Salzburg. From the appearance of his 'Ploughman' at the Vienna Exhibition in 1834, Friedrich Gauermann took a foremost place among Austrian painters, and his reputation extended with the gathering years. His best works are his rocky mountains with animals. His wild animals fighting or hunted were very popular. Many of his pictures have been lithographed, and he executed some good etchings. In his later years he was court landscape and animal painter, a member of the Vienna Academy, and a Knight of the Royal Netherland Order of the Oak Crown. His residence was at Vienna, but his summers were spent among the mountains, or at Miesenbach, where he died July 7, 1865. In the Sheepshanks Collection, South Kensington, are two of Gauermann's pictures, No. 77, 'Wolves and Deer,' and No. 78, 'Wild Boar and Wolf.'

GAUERMANN, JAKOB, landscape painter and engraver, was born in 1773, at Oeffingen, near Stuttgart, and brought up as a carver in stone. He was, however, able to study in the Stuttgart art-academy, and as soon as possible released himself from his manual calling. In 1802 he made a tour in the Tyrol, and from this time obtained recognition as a landscape painter. His water-colour drawings of the scenery of Salzburg and the Tyrol were exceedingly popular. His oil-paintings are less numerous and less successful. As an engraver, his chief work is a series of 36 landscapes with figures. Jakob Gauermann was court landscape painter to the Archduke John, who formed a collection of his pictures. He died March 27, 1843.

GAVARNI. [SULPICE PAUL CHEVALIER, E. C. vol. iii. col. 42]. The last few years of the life of Paul Chevalier were unproductive for art. He lived at Paris a recluse, occupied, it was said, in aeronautic experiments. In reality his health was failing; a cough became increasingly troublesome; he removed to Auteuil for purer air, and there, at his villa, La Réunion, he died on the 23rd of November, 1866.

* GAY, CLAUDE, traveller and naturalist, was born at Draguignan, March 18, 1800. He was educated at Paris, where Desfontaines and Jussieu recommended him to study the flora of Chile. In order the better to carry out his object, he worked hard at geology, zoology, and meteorology, and in 1829 reached Chile. He showed such aptitude for his task in his early explorations of Chile, that the government of that country resolved to

supply him with every facility for carrying out his plans. This encouragement induced him to return to France in 1832 for the purpose of organising a party of scientific men to help him, and procuring the best observing instruments. Thus equipped, he returned to Chile, and spent ten years in thoroughly exploring the country. Having collected an immense mass of materials, he returned to Europe in 1842. For the next ten or twelve years he was engaged in drawing up and superintending the publication of his report. It is entitled 'Historia Física y Política de Chile, según Documentos adquiridos en esta República durante doce Años de Residencia en ella; y publicada bajo los auspicios del Supremo Gobierno,' 23 vols. 8vo, and a quarto atlas of 3 vols. Paris, 1844-54. The separate portions consist of 'Historia,' 5 vols. 1844-49; 'Documentos sobre la Historia, la Estadística y la Geografía,' 2 vols. 1846-52; 'Botánica,' 8 vols. 1845-52; 'Zoología,' 8 vols. 1847-54; and the Atlas of 315 plates, 4to, 1854. Much of the natural history was written by MM. Blanchard, Richard, Hupé, Nicolet, and other naturalists; and a large proportion of the drawings were made by A. Riocreux and others. Gay himself drew many of the original sketches, including a large number of maps, plants, and fishes, and superintended the execution of the others. The scientific portion is almost entirely confined to natural history, and is mainly descriptive, but there is one general chapter on botanical geography. Some of his observations on terrestrial magnetism and on the meteorology of Chile are given in the 'Comptes Rendus,' and in a local journal entitled 'Araucano.' Since his return to Europe he has spent much time in exploring various portions of it, such as Russia, Poland, Greece, and some of the neighbouring portions of Asia and Africa. In 1856 he was elected a member of the Academy of Science in succession to Mirbel.

GAY, JACQUES ÉTIENNE, botanist, was born in Switzerland, about 1785, and was a pupil of Gaudin, who bequeathed to him his herbarium. He took an office in the French chamber of peers in 1814, and after awhile was appointed the secretary to the committee of petitions, which he retained till 1848. He died Jan. 17, 1864. He wrote a large number of botanical papers, chiefly of a monographic character. Amongst the more important may be mentioned the following:—'Monographie des cinq genres de plantes (*Seringia*, *Lasiopetalum*, *Guichenotia*, *Thomasia*, *Keraudrenia*) que comprend la tribu des Lasiopetalées dans la famille des Bättneriacées' in 'Mém. Mus. d'Histoire Naturelle,' vii. pp. 431-468 (1821); 'Histoire de l'*Arenaria tetraquetra*' in 'Ann. des Sci. Nat.' iii. pp. 27-46 (1824), iv. pp. 88-90 (1825); 'Monographie des genres *Xeranthemum* et *Chardinia*' in 'Mém. Mus. d'Histoire Naturelle,' iii. pp. 325-371 (1827); 'Corona Endresiana pyrenaica' in 'Ann. des Sci. Nat.' xxvi. pp. 209-254 (1832); 'Duria iter Asturicum botanicum' in 'Ann. des Sci. Nat.' vi. pp. 113-137, 213-225, 340-355 (1836); 'De Caricibus quibusdam minus cognitis vel novis, &c.' in 'Ann. des Sci. Nat.' x. pp. 279-307, 355-365, (1838), xi. pp. 177-179; 'Eryngiorum novorum vel minus cognitorum heptas, &c.' in 'Ann. des Sci. Nat.' ix. pp. 148-185 (1848); 'Notice sur une nouvelle espèce de chêne Française, sur les caractères qui la distinguent, et sur la classification des chênes en général' in 'Ann. des Sci. Nat.' vi. pp. 223-246 (1856); 'Recherches sur la famille des Amaryllidacées' in 'Ann. des Sci. Nat.' x. pp. 75-109 (1858); 'Le *Chamaerops excelsa*, Thunberg, &c.' in 'Bull. Soc. Bot. Fr.' viii. pp. 410-430 (1861); 'Voyage botanique au Caernarvonshire, &c.' in 'Bull. Soc. Bot. Fr.' x. pp. 270-278, 319-329, 382-392, 409-414, 420-431, 462-468, 485-492 (1863). The object of the journey to Wales was in the main to study the species of *Isotles* there found, and to compare them with those he had previously met with on the central plateau of France.

*GAYANGOS, PASCUEL DE [E. C. vol. vi. col. 994].

GED, WILLIAM, the inventor, or one of the inventors, of stereotyping, was born at Edinburgh about 1690. While carrying on the trade of a jeweller, circumstances drew his attention to the state of printing; he was struck with the loss of time and money involved in the re-composing of a book whenever a new edition was required. The best type was at that period obtained from Holland, while the coarser varieties were cast in London: it was important, therefore, for printers in Scotland to economise their type-work as much as possible. In 1725 a printer asked his opinion about the feasibility of establishing a type foundry at Edinburgh; they agreed that if a cast could be taken from a made-up page, the invention would make their fortunes. Ged pondered long on the kind of metal best suited for the purpose, and at length decided on using the same alloy as is

selected for type. He succeeded in taking a fair cast of a page of type, and thus producing a stereotype plate, but did not succeed in getting the Edinburgh printers to enter into the matter with him. Coming to London, he made an arrangement with William Fenner, a stationer: this speedily came to a close. Ged then accepted a challenge from a typesetter as to which of them should produce the best stereotype or block page in eight days from a page of Bible type; Ged gained the victory, but at the same time set all the typesetters against him, they viewing the new comer with distrust. The Earl of Macclesfield, obtaining a sight of his plate, procured for him a contract for printing Bibles and Prayerbooks for the University of Cambridge. Ged, however, with a partner who cheated him, a conspiracy in the trade to defeat him, and unbusinesslike habits, entirely failed, and went back to Scotland impoverished. Struggling to establish his invention, he produced in 1736 a stereotyped edition of Sallust in Latin. As the compositors purposely introduced errors in their work to spoil his plates, his edition fell into disrepute, and he died poor in 1749. The chief particulars of his career are given in 'Biographical Memoir of William Ged,' by John Nichols, 1781; and 'Supplementary Narrative of Ged,' written by his daughter, 1819.

GEEFS, GUILLAUME [E. C. vol. iii. col. 47] died on the 10th of May, 1860.

GEER, KARL DE, Baron of Leutsta, a Swedish naturalist, was born at Finspang in 1720. From his fourth to his eighteenth year he resided in Holland, to which country his family originally belonged. His intimacy with Muschenbroek gave him a taste for natural history. He studied first at Utrecht, and afterwards at Upsala, at which latter place he had Linnæus for a master. On the death of his uncle he inherited a large fortune, including the iron mines of Dannemora. In 1752 appeared the first volume of his most important work, 'Mémoires pour servir à l'Histoire Naturelle des Insectes,' 4to, Stockholm. As little attention was given to the subject at that time, the book did not excite the attention which Baron de Geer expected, and he accordingly burnt a large proportion of the impression. However, he resumed his labours with his usual zeal, and six more volumes were issued, the last in 1778, soon after his death, which occurred on March 8, 1778. The work contains descriptions of 1500 species of insects, illustrated by 238 plates. His collection of natural history objects was left to the Academy of Science at Stockholm, of which he was a member. The 'Genera et Species Insectorum,' by Retzius, 8vo, Leipzig, 1783, is to a certain extent supplementary to De Geer's work.

*GEIGER, ABRAHAM, a distinguished German Hebraist, and a leader of modern Jewish literature, was born on the 24th of May, 1810, at Frankfurt-am-Main; and after receiving his early education under the care of his father, became in 1829 a student at the University of Heidelberg, and afterwards at that of Bonn, where he devoted himself chiefly to philosophy and oriental languages. In November, 1832, he became a rabbi at Wiesbaden, and next year published a Prize Essay on the Jewish Sources of the Koran, 'Was hat Mohammed aus dem Judenthum aufgenommen?' 8vo, Bonn, 1833. He took a prominent place amongst the revivers and reformers of Jewish science and theology, and commenced, jointly with other Israelites of distinction, the publication of the Journal of Jewish Theology, 'Zeitschrift für jüdische Theologie,' 1835-47, which, running counter to the prejudices of the Jewish Conservative party, was provocative of much discussion and partizanship. In 1838 he was appointed rabbi at Breslau; and, for the wider dissemination of his principles, instituted an Assembly of the Rabbis, which, since 1844, has met respectively at Brunswick, Frankfurt, and Breslau,—at the last place under Geiger's presidency. As a reformer, Geiger endeavours to avoid the impolicy of extreme action; and in 1846, and again in 1860, he declined the office of Preacher to the Reformed Association at Berlin. In 1863 he became rabbi at Frankfurt, where he has since continued. His works comprise an Essay on the direction of a Hebrew Theological Faculty, 'Ueber die Einrichtung einer Jüdisch-theologische Facultät,' 12mo, Wiesbaden, 1838; Manual and Reading Book of the Language of the Mishna, 'Lehr- und Lesebuch zur Sprache der Mischna,' 8vo, Breslau, 1845; The Third Assembly of the German Rabbis: a Preliminary Word of Explanation, 'Die Dritte Versammlung deutscher Rabbiner: Ein vorläufiges Wort zur Verständigung,' 8vo, Breslau, 1846; Preliminary Advice on the Action of the Third Assembly, &c., 'Vorläufiger Bericht, über die Thätigkeit der dritten Versammlung deutscher Rabbiner,' 8vo, Breslau, 1846; Text and Trans-

lations of the Bible in their Dependence on the Inner Development of Judaism, 'Urschrift und Uebersetzungen der Bibel in ihrer Abhängigkeit von der innern Entwicklung des Judenthums,' 8vo, Breslau, 1857; Judaism and its History, 'Das Judenthum und seine Geschichte,' 2 vols. 8vo, Breslau, 1864—65, a historical work remarkable for the liberality of its spirit; 'Sadducäer und Phariseer,' 8vo, Breslau, 1863; a Treatise on the Divine Service of the Jews, entitled 'Unser Gottesdienst. Eine Frage, die dringend Lösung verlangt,' 8vo, Leipzig and Breslau, 1868. Geiger is also the author of Sermons, occasional Essays, and contributions to periodicals, all calculated directly or indirectly for the advancement of his views; and in 1862 he became the editor of the Jewish Journal of Science and Life, 'Jüdische Zeitschrift für Wissenschaft und Leben,' published at Breslau.

* GEIKIE, ARCHIBALD, geologist, was born in Edinburgh in 1835. He was educated in the High School and the University of that city, and in 1855 joined the Geological Survey, of which he is now director for Scotland. One of his earliest books was 'The Story of a Boulder,' 8vo, Edinburgh, 1858. He assisted in the preparation of 'A Descriptive Catalogue of the Rock Specimens in the Museum of Practical Geology,' 8vo, London, 1859. In conjunction with Dr. G. Wilson, he wrote a 'Memoir of E. Forbes,' 8vo, 1861; and, in conjunction with Sir R. I. Murchison, prepared a new Geological Map of Scotland, published in the same year. He and Howell wrote the Geological Survey memoir on the 'Geology of the Neighbourhood of Edinburgh,' 8vo, 1861; and in 1863 was published his Survey memoir on the 'Geology of Eastern Berwickshire.' He has contributed some papers to the publications of the Geological Societies of London and Glasgow; one of these is 'On the Phenomena of the Glacial Drift of Scotland,' in the 'Transactions of the Geological Society of Glasgow,' vol. ii. pp. 1—190. In 1865 appeared his work on 'The Scenery of Scotland viewed in connection with its Physical Geology,' 8vo, London and Cambridge. In 1867, as President of the Geological Section of the British Association, he delivered an address on the proofs of volcanic activity in Scotland during past geological times as far back as the lower Silurian period. He is now, 1870, President of the Geological Society of Edinburgh. Mr. Geikie has contributed numerous papers on denudation, volcanoes, and other subjects in physical geography, past and present, to the 'North British Review,' the 'Geological Magazine,' 'Nature,' and other periodicals. He also contributed to the third edition of Kitto's 'Cyclopædia of Biblical Literature.'

* GEINITZ, HANS BRUNO, palæontologist, was born at Altenburg, October 16, 1814. He was educated at that town, at Berlin, and at Jena, at which last place he received his doctorate of philosophy. In 1837 he was appointed assistant professor of chemistry and physics at the Polytechnic School at Dresden, and in 1850 he was transferred to the chair of mineralogy and geology. Since 1846 he has had the charge of the Royal Mineralogical Museum. He has written a great number of works and papers, chiefly illustrative of the palæontology and geology of Saxony. He is one of the editors of the 'Neues Jahrbuch für Mineralogie, etc.' His principal works are: 'Charakteristik der Schichten und Petrefacten des Sächsischen Kreidegebirgs,' fol. Dresden, 1839—1843; 'Grundriss der Versteinerungskunde,' 8vo, Dresden and Leipzig, 1846; 'Das Quadersandsteingebirge oder die Kreidegebirge in Deutschland,' 8vo, Freiberg, 1849—50; 'Die Versteinerungen der Grauwacken Formation in Sachsen und der angrenzenden Länder,' fol. 1852—1853; 'Die Leitpflanzen des Rothliegenden und des Zechsteingebirges oder der Permischen Formation in Sachsen,' 8vo, Leipzig, 1858. He is a joint author in various works, such as 'Gaa von Sachsen,' 8vo, 1843; 'Dyas oder die Zechstein-formation und das Rothliegende,' 4to, Leipzig, 1861—62; with Fleck and Hartig in 'Die Steinkohlen Deutschlands und anderer Ländes Europas, etc.,' 3 vols. 4to, 1865; and with Sorge in 'Uebersicht der im Königreiche Sachsen zur Chausseeunterhaltung verwendeten Steinarten,' 4to, Dresden, 1870. He has also contributed upwards of fifty papers, which have appeared in Leonhard and Bronn's 'Neues Jahrbuch für Mineralogie,' 'Mittheilungen aus dem Osterlande,' 'Allgemeine Deutsche naturhistorische Zeitung,' 'Zeitschrift der Deutschen Geologischen Gesellschaft,' 'Sitzungsberichte naturwissenschaftlichen Gesellschaft Isis zu Dresden,' and a few other scientific journals.

GELLIBRAND, HENRY, an eminent mathematician, was born in Aldgate, London, November 17th, 1597; completed his education at Trinity College, Oxford, and graduated B.A. in

1619, and M.A. in 1623. Having taken holy orders, he became curate of Chiddingstone, in Kent, an office he filled with great credit, but having on his father's death succeeded to a moderate patrimony, he resigned his cure in order to devote himself wholly to mathematical studies. His attainments becoming known, his acquaintance was cultivated by the most eminent professors of the science, and in January, 1627, he was elected to succeed Gunter as professor of astronomy at Gresham College, mainly through the recommendation of Henry Briggs, then Savilian professor of geometry at Oxford. Briggs died in 1630, having only written the first part of his 'Trigonometria Britannica,' and he left an earnest request that Gellibrand would complete the work. Gellibrand readily undertook the task; wrote the second book and edited the whole, proceeding to Holland to superintend its passage through the press; it appeared under the title 'De Trigonometria Britannica, sive de doctrina triangulorum libri duo,' folio, Gouda, 1633; English translation, folio, London, 1658. Whilst preparing this work Gellibrand got into a curious difficulty. His servant, William Beale, published with his assistance an almanac for the year 1631, in which, being puritanically disposed, in place of 'Ann. B. V. M.' and the names of Roman Catholic saints, he substituted the saints and martyrs recorded by Foxe. For this offence both master and man were cited by Laud, then Bishop of London, before the High Commission Court, but being able to show that the same thing had been done in other almanacs, they were acquitted to the great annoyance of Laud, who pressed hard for a conviction, and whose conduct on this occasion formed the subject of one of the articles of accusation against him at his trial. Gellibrand gave great attention to the variation of the magnet and the improvement of navigation, in which he was followed with so much success by Halley. In 1633 he wrote an 'Appendix concerning Longitude' for Captain Thomas James's account of his voyage in the South Sea; and the following year appeared his 'Institution Trigonometrical; explaining the dimensions of plane and spherical triangles by sines, tangents, secants, and logarithms. With an appendix concerning the use of the forestaff, quadrant, and nocturnal in navigation,' 8vo, London, 1634; reprinted, with additions, by W. Leybourn, 1652. Soon after this he made the prime discovery of the secular variations of the magnetic declination, of which he published an account in 'A Discourse Mathematical of the Variation of the Magnetic Needle; together with the admirable Diminution lately discovered,' 4to, London, 1635. Much more in this line was anticipated from Gellibrand, but he died prematurely from an attack of fever in his 40th year, February 9th, 1637.

GENTILESCHI. ORAZIO LOMI, called Gentileschi after an uncle, was born at Pisa, July 9, 1563. He learned painting under his half-brother, Aurelio Lomi, and his uncle, but went to Rome, where he formed his style on the study of the works of the great masters, under the guidance of Agostino Tassi. Gentileschi's pencil was in much request for mural decoration. Among other Roman palaces, he painted the saloon of the Quirinal and the Loggia Rospigliosi. He also executed many easel pictures and portraits, among which the finest are in the royal palace at Turin and the Borghese palace. Like many other painters of the time, he travelled widely in the practice of his profession, visiting, besides various Italian cities, Savoy and France. In 1632 he settled in England at the instance, as is said, of Charles I. Here he was much patronised by the king and chief nobility, painting for the former the ceilings of Greenwich Palace and various easel pictures; York House for Villiers, Duke of Buckingham; and for Sheffield, Duke of Buckingham, the ceiling of his house in St. James's Park. He lived on terms of intimacy with Vandyck, who painted his portrait. Gentileschi died in London in 1646, and was buried in the Queen's Chapel, Somerset House. Gentileschi's style partook of that of the so-called Tenebrosi, combining, however, their strong effects of light and shadow with greater richness of colour. Some of the pictures he painted for Greenwich Palace are now in Marlborough House, and a good many are in private collections. One of the best of his pictures in England is in the King's Drawing Room at Hampton Court, No. 176, 'Joseph and Potiphar's Wife.' His daughter,

ARTEMISA GENTILESCHI, born at Pisa in 1593, learned painting from her father, but under the advice of Guido formed her style on that of Domenichino. She became very celebrated, especially for her portraits, which greatly excelled those of her father. Lanzi, however, praises her religious and historical pieces, particularly a 'Judith Slaying Holofernes,' in the Ducal

Palace, and a 'Susannah and the Elders,' also at Florence. She resided in splendour in Naples, where she married one P. Schiattesi, but soon separated from him, and never assumed his name. Graham in his 'Short Account of the Most Eminent Painters,' appended to Dryden's Translation of Du Fresnoy, says that she "was as famous all over Europe for her gallantry and love intrigues as for her talent in painting," and the statement has been copied by Walpole and all subsequent English writers. But Graham appears to be the only authority for the scandal, which is not referred to by the early Italian biographers, and may fairly be doubted. Artemisia visited England during her father's lifetime, and by some writers is said to have died here in 1646. She appears, however, to have been living in Naples in 1652. There is a 'Sibyl' (No. 226) of her painting at Hampton Court, but her own portrait appears to have been removed.

GENTILIS, ALBERICUS, a renowned Italian civilian, was born in 1551 at Castello di San Genesio, in the Marca d'Ancona, and was educated chiefly at the University of Perugia, where, in 1572, he took the degree of Doctor of the Civil Law. For the safer exercise of their religious freedom, several members of his family left their native country; and whilst his father and brother settled in Germany, Gentilis himself came over to England, where he obtained the patronage of the Earl of Leicester, at that time Chancellor of the University of Oxford. He became a member of New Inn; on the 6th of March, 1581, was incorporated in his degree of D.C.L.; and on the 8th of June, 1587, received from the Queen the appointment of Regius Professor of Civil Law, which he held until his death in the latter end of March or the beginning of April, 1611. It is probable that he was buried in Christ Church. His works, which were all produced during his residence at Oxford, comprise, 'De Juris Interpretibus Dialogi sex,' 4to, London, 1582; 'Lectionum et Epistolarum quæ ad Jus Civile pertinent, Libri duo,' 8vo, London, 1583; 'Legalium Comitiorum Oxoniensium Actio,' 8vo, London, 1585; 'De Legationibus Libri tres,' 4to, London, 1585; 8vo, Hanover, 1607; 'De Nascendi Tempore Disputatio,' 8vo, Wittenberg, 1586; 'De diversis Temporum Appellationibus Liber,' 8vo, Wittenberg, 1586 and 1646; 'Condicionum Liber Primus,' 8vo, Wittenberg, 1586, and 8vo, London, 1587; 'De Jure Belli Commentatio Prima,' 4to, Leyden, 1588; 'Commentatio Secunda,' 4to, London, 1588; 'Tertia,' 4to, London, 1589, issued collectively in 4to, Leyden, 1589, 8vo, Hanover, 1598 and 1612, a work to which Grotius acknowledges his obligations; 'Disputationes duæ: De Actoribus et Spectatoribus Fabularum non notandis et de Abusu Mendacii,' 8vo, Hanover, 1599; 'De Armis Romanis Libri duo,' &c., 8vo, Hanover, 1599 and 1612; 'Disputationum de Nuptiis Libri septem,' 8vo, Hanover, 1601 and 1614; 'Lectionis Virgilianæ variæ Liber,' 8vo, Hanover, 1603; 'Laudes Academiæ Perusinæ et Oxoniensis,' 8vo, Hanover, 1605; 'Disputationes tres: (1) De Libris Juris canonici; (2) De Libris Juris civilis; (3) De Latinitate veteris Bibliorum Versionis male accusata,' 8vo, Hanover, 1605; 'Disputationes tres: (1) De Potestate Regis absoluta; (2) De Unione Regnorum Britannicæ; (3) De Vi Civium in Regem semper injusta,' 4to, London, 1605; 'Disputationes decem in Titulos Codicis, Si quis Imperatori maledixerit, ad Legem Juliam Majestatis,' 8vo, Hanover, 1607; 'Hispanicæ Advocacionis Libri duo in quibus illustres Quæstiones Maritimæ, secundum Jus Gentium et hodiernam Praxim nitide perlustrantur,' 4to, Hanover, 1613, and 8vo, Amsterdam, 1661; 'In Titulum Digestorum de Verborum Significatione Commentarius,' 4to, Hanover, 1614; and a 'Discourse of Marriages by Proxy.'

GENTILIS, JOANNES VALENTINUS, was a native of Cosenza, in Calabria, where he was born about the beginning of the 16th century. Having made himself obnoxious to the Neapolitan Government by the freedom of his theological speculations, he took refuge at Geneva, where he and other Italian exiles, who had renounced the Catholic doctrine of the Trinity, formed themselves into a separate church. When their opinions became known to the public authorities of the city, they were cited to appear before the Senators, Ministers, and Elders, and required to subscribe to the orthodox faith. Gentilis, amongst others, refused; and, as he still continued to disseminate his sentiments, he was thrown into prison in July, 1558, on a charge of heresy, which was preferred or instigated by John Calvin. A fear of the fate of Servetus compelled Gentilis to a recantation, dated August 29th, 1558, which is still extant, and in which he makes confession of the orthodox faith. The sentence pronounced against him contained an article to the effect that he should publicly throw into the flames his "lying and blasphemous

writings," and another that he should not leave the city without permission. The last stipulation he not unnaturally evaded; and for some time he led a wandering life in Savoy, France, and Germany, actively employed in making converts to his opinions, and undergoing arrest and imprisonment on more occasions than one. At length about the year 1561 he went to Poland, where he joined his friends Blandrata and Alciati, and where he acquired so much influence that the Genevese clergy thought it necessary to write a letter to Prince Nicholas Radzivil, accompanied by the signed and sworn Recantation of Gentilis, by which, it was said, "he became reconciled, for a time, to the Church of Geneva, in all things, but especially in the article concerning the Mystery of the Most Holy Trinity." An edict was issued which had the effect of driving Gentilis from Poland; and having withdrawn successively into Moravia and Austria, he went, in 1566, to Gex, a prefecture of the Canton of Berne, where he was again taken. Upon requisition to that effect, he was delivered up to the authorities of the city of Berne, by whom, after various ineffectual attempts, made between the 5th of August and the 9th of September, 1566, to wring from him another recantation, he was condemned to be beheaded. As he was led out to execution, and just before he laid his head upon the block, he said, "Many have suffered for the glory of the Son; but none, so far as I know, have died for the glory and superiority of the Father." Benedict Aretius, a divine of the Protestant Reformed Church of Berne, professed to extract from the writings of Gentilis the following propositions:—(1) The Trinity is a mere human invention, unknown to the Catholic Creeds, and diametrically opposed to evangelical truth. (2) The Father alone is that God, who in Scripture is called the One, and the Only God. (3) The Son is not of himself, but of the Father, to whom, as deriving his essence from Him, he is subordinate. (4) The Father, Son, and Holy Spirit are distinct, not only as regards their persons, but their essence. (5) The Son was begotten of the Father, according to his essence, as a subordinate Spirit, different from the Father. (6) There are three Eternal Spirits, each of whom is a God of himself. (7) These three Spirits are distinct in order, degree, and essential properties.

The year after the death of Gentilis, Beza published a short account of him, entitled 'Valentini Gentilis, teterrimi Hæretici Impietatum ac triplicis Perfidie et Perjurii brevis Explicatio, ex Actis Publicis Senatus Genevensis, optima Fide descripta. Earundem Refutationes a doctissimis Ætatis nostræ Theologis,' &c., 2 parts, 4to, Geneva, 1567. Benedict Aretius also published 'Valentini Gentilis justo Capitis Supplicio Bernæ adfecti brevis Historia, et contra ejusdem Blasphemias orthodoxa Defensio Articuli de S. Trinitate,' &c., Geneva, 1567, of which an English translation, attributed to South, was published in the year 1606, with the title of 'A Short History of Valentinus Gentilis the Tritheist, tried, condemned, and put to Death by the Protestant Reformed City and Church of Berne, in Switzerland, for asserting the Three Divine Persons of the Trinity to be [Three Distinct, Eternal Spirits, &c.], translated into English for the use of Dr. Sherlock,' &c., 12mo, London, 1696.

Besides the Confessions which he wrote during his imprisonment at Geneva, and some manuscript verses on the Trinity, Sandius attributes to Gentilis 'A Book dedicated to the King of Poland; 'Antidotes to the Reply of the Genevese Clergy; 'A Refutation of the 13th Chapter of the First Book of 'Calvin's Institutions,' in which he wholly condemns the doctrine of the Trinity, as received by all Christian Churches down to his own time; 'Protheses from Augustine's Fifteen Books on the Trinity; 'Extracts from the Scriptures, the Fathers, and the Koran,' in defence of his own opinion; 'Annotations on Athanasius.' A manuscript treatise, in Italian and Latin, 'On the Incarnation of Christ,' was also found amongst the papers of Gentilis, but without sufficient evidence of its authenticity to justify its unqualified reference to him.

GENTZ, FRIEDRICH VON, a German statesman and political writer, was born on the 2nd of May, or, as alternatively stated, on the 8th of September, 1764, at Breslau, and studied jurisprudence at the Universities of Frankfurt and Königsberg. In 1786 he was appointed private secretary to the Directory-general of Finances at Berlin, and in 1793 to the Ministry of War. He opposed himself heartily to the doctrines of the French revolution, and published an annotated translation of Burke's 'Reflections on the Revolution in France,' with the title of 'Betrachtungen über die französische Revolution, nach dem

Englischen des Herrn Burke,' &c., 2 vols. 8vo, Berlin, 1793, continuing his attacks in the 'Historisches Journal,' 8vo, Berlin, 1799, &c. When Prussia showed signs of favouring a French alliance, Gentz repaired to Vienna, from which he was commissioned to England in order to accomplish an alliance between Austria and this country. He distinguished himself by the warmth with which he wrote against Napoleon and the French domination in Germany, and drew up the Austrian manifesto of 1805. After the Treaty of Presburg, December 26th, 1805, he returned to Berlin, and drew up the Prussian manifesto against France, October, 1806, returning, after the battle of Jena, on the 14th of that month, to Austria, whose manifestoes against France in 1809 and 1813 were from his pen. In 1814 and 1815 he took part in the Congress of Vienna, as well as those of Aix-la-Chapelle, in 1818; of Laybach, in 1821; and of Verona, in 1822, where he prepared the protocols of the diplomatic conferences. He died on the 9th of June, 1832. Gentz wrote on the Principles of the actual French Constitution, &c., 'Ueber die Grundprincipien der jetzigen französischen Verfassung nach Robespierres und Saint-Just's Darstellung derselben,' 1794; Mounier's Development of the Causes which have hindered the French from achieving Liberty, &c., 'Mounier's Entwicklung der Ursachen welche Frankreich gehindert haben zur Freiheit zu gelangen, mit Anmerkungen und Zusätzen,' 1st part, Berlin, 1795; Letter to Frederick William III., on his Accession, 'Sendschreiben an Friedrich Wilhelm III., bei seiner Thronbesteigung überreicht,' 8vo, Berlin, 1798; On the last French Constitution, 'Ueber die neuste französische Constitution,' 1800, published in the 'Historisches Journal'; On the Origin and Character of the War against the French Revolution, 'Ueber den Ursprung und Charakter des Krieges gegen die französische Revolution,' 8vo, Berlin, 1801; 'Essai sur l'Etat actuel de l'Administration des Finances et de la Richesse nationale de la Grande Bretagne,' 8vo, Hamburg, 1801; 'De l'Etat de l'Europe avant et après la Révolution Française,' 8vo, Hamburg, 1802, English translation, second edition, 8vo, London, 1803, fifth edition, 8vo, London, 1804; 'Fragments aus der Geschichte des politischen Gleichgewichts in Europa,' 8vo, Leipzig, 1804, second edition, 1806, English translation, 'Fragments upon the Balance of Power in Europe,' 8vo, London, 1806, &c.; and 'Reflections on the Liberty of the Press in Great Britain,' which, translated from the German, appeared in vol. xv. of the 'Pamphleteer.' Most of the works of Gentz find a place in the collective edition of his writings, 'Schriften: herausgegeben von Gustav Schlesier,' 5 parts, 8vo, Mannheim, 1838—40. The same editor likewise published 'Mémoires et Lettres inédits du Chevalier de Gentz,' 8vo, Stuttgart, 1841.

GEOFFROY SAINT-HILAIRE [SAINT-HILAIRE, GEOFFROY, E. C. vol. v. col. 242].

GERARD, surnamed THOM, TENQUE, or TUNG, the founder and first Grand-Master of the order of St. John of Jerusalem, was born about the year 1040, either in the Isle of Martigues, on the coast of Provence, or, according to other authorities, at Amalfi, in the kingdom of Naples. The merchants of Amalfi, having in 1050 obtained permission to that effect from the Sultan of Egypt and Syria, in whose hands the city of Jerusalem at that time was, founded a Benedictine—or, as is variously said, an Augustinian—monastery near the Holy Sepulchre, for the convenience of the numerous pilgrims who resorted thither. The monastery was dedicated to the Virgin, by the name of *Sainte Marie la Latine*, because the offices were celebrated in Latin, and in order to distinguish it from the Greek Church; whilst another religious house, dedicated to St. Mary Magdalene, was built for the accommodation of the female pilgrims. The increasing revenues of his monastery made it possible for the abbot in 1080 to erect a hospital for the reception of the poorer pilgrims, and for the care of the sick, of which the management was entrusted to Gerard. The chapel of this hospital was consecrated to St. John the Baptist, on account of a tradition that on its site had stood the house of his father, Zacharias. Gerard suffered imprisonment at the hands of the Saracens on account of the assistance he rendered to the Christian soldiers; but was rescued, on the taking of Jerusalem, by Godefroy de Bouillon, in 1099. In the following year, Gerard projected the institution of a new religious order, in which the ecclesiastical and military characters should be blended. This was the order of St. John of Jerusalem, the members of which were bound by a particular rule, in addition to the three vows of chastity, poverty, and obedience, which pledged them to devote themselves to the relief of all Christians in distress. The order was approved and confirmed in 1113 by Pope Paschal II., who in a

bull dated the 15th of February, and addressed to Gerard as Grand-Master, conferred several important privileges, which were renewed in May, 1120, by Calixtus II., and confirmed in 1154 by Anastasius IV., who divided the members of the order into the three classes of knights companions, clerks, and serving brothers. After successfully administering the affairs of the order—whose members became so celebrated in succeeding times as Knights of Rhodes and Knights of Malta—for about twenty years, Gerard died probably in the year 1121, and was succeeded by Raimond du Puy. The Ritter Johanniter, or Knight of St. John, of the present day is the creature of the philanthropic Congress of Geneva, in 1867, and is to be found pursuing his beneficent mission on the battle-fields, and in the ambulances of the French and German armies. The Abbé Vertot wrote a History of the order founded by Gerard, whose life, 'Vie de Gerard,' 12mo, Aix, 1730, was written by Dr. Haitze.

GERBER, ERNST LUDWIG, a German musical writer, was born at Sondershausen, September 29, 1746. He was the son of an organist, who wished to bring him up to the church; but, the youth evincing no tendency in that direction, the profession of the bar was selected instead. While studying at the University of Leipzig, Gerber indulged a natural taste for music; learned the pianoforte and violoncello, and played for a time as violoncellist at the theatre and at concerts. Finding the practice of the law irksome, he resolved to adopt music as his means of living. He taught music to the sons of Prince Schwartzburg; and in 1775 succeeded his father as Court organist. He composed and published many pieces of music; but finding the executive means in a small town too limited for their due performance, he turned his attention to musical literature. He began additions to the biographical part of Walther's Musical Lexicon; but at the suggestion of Breitkopf, the Leipzig publisher, he resolved to write an original work which should include the lives of celebrated musical instrument makers, as well as composers and performers. This appeared under the title 'Historisch-Biographisches Lexicon der Tonkünstler, welches Nachrichten von dem Leben und Werken musikalischer Schriftsteller, berühmter Componisten, Sänger, Meister auf Instrumenten, Dilettanten, Orgel und Instrumenten Macher,' 2 vols. 8vo, Leipzig, 1790—92. Forkel about that time published his 'Allgemeine Geschichte der Musik;' and on comparing them, Gerber became conscious of many errors and imperfections in his own work. He therefore devoted many years of close study to Forkel, Burney, Hawkins, Martini, and other writers, and produced a much larger work, 'Neues Historisch-Biographisches Lexicon,' &c., 4 vols. large 8vo, 1810—14, in some respects superseding his former work, in others supplementary to it. This work is of exceeding value as an authority on German musicians, but not to be relied on when treating on those of other countries. Gerber also wrote largely in the Leipzig Musical Gazette. A fine library of music and musical portraits which he had collected was published by a Musical Society, and presented to the Vienna Conservatorium in 1815. He died at Sondershausen, July 30th, 1819.

GERHARD, EDUARD, a distinguished German archaeologist, was born November 29, 1795, at Posen, and studied at Breslau and Berlin. In 1816 he was attached as professor to the former university; but, owing to failure of sight, he resigned his appointment and proceeded to Italy. At Rome he joined the circle of Niebuhr, Bunsen, and other eminent fellow countrymen, then zealously occupied in investigating the antiquities of ancient Rome; and from that time devoted himself with untiring diligence to the study of Greek and Roman archaeology. His primary object was to bring together and render generally available the archaeological knowledge scattered widely over books and among living archaeologists. With this view he founded, or induced Frederic William of Prussia to found, the *Istituto di Correspondenza Archaeologica*, of which he was the director as long as he remained in Rome; contributed much to the annals of the Archaeological Society of Rome; and after his return to Germany in 1837, established and edited the 'Archäologische Zeitung' (1843—48), after 1850 continued by him with a change of title. Herr Gerhard's earlier writings were his contributions on the antiquities of Rome to the great work of Bunsen and Plattner, 'Beschreibung der Stadt Rom,' and its continuation by Ulrichs; and one or two separate publications and contributions to the journals on the same subject. The other works which have proceeded from his prolific pen may be arranged under three or four heads—those on Greek art and mythology generally, including his 'Antike Bildwerke,' with 140 copperplate engravings, fol. Stuttgart, 1827—44; his valuable 'Griechische Mythologie,' 2 vols. 8vo,

Berlin, 1855; and 'Griechische Mysterienbilder,' fol. Stuttg., 1839—an attempt to illustrate the subject of the Greek mysteries by the paintings on Greek vases; on particular personages of the ancient mythology, to which he has devoted numerous monographs, including one on the Olympian deities, and others on the Etruscan deities, on the Agathodemon and Bona Dea, and a long list on Athene, Eros, the deities of the sun, Poseidon, &c.; besides such cognate subjects as the art-forms of the Phoenix, the oracle of Themis, &c., most of which have appeared as distinct publications. Another valuable class of works consists of descriptive notices of the antiquities (especially the vases) in the Museums of Naples and Berlin—that on the vases in the Berlin Museum, with its supplements, being a very elaborate and costly work, with numerous plates printed in colours. But perhaps the works which most fully exhibit Gerhard's extensive archaeological knowledge, are those in which he has investigated at length the subject of the painted vases and metal mirrors of Greece and Etruria. Of these works the chief are—the 'Auserlesene Griechische und Etruskische Vasenbilder,' with 330 engravings, 4 vols. 4to, Berlin, 1839—58; 'Vasenbilde Griechischen Alltagslebens,' 4to, Berlin, 1852—56; and 'Etruskische Spiegel,' 4 vols., and atlas, 4to, 1839—65, in which the things described are represented in many hundreds of coloured engravings, thus affording an almost inexhaustible store-house for the art-student. He is director of the archaeological department of the Berlin Museum, honorary professor in the University and member of the Academy of Berlin, and foreign associate of the French Institute.

GERHARDT, CHARLES FRÉDÉRIC, born at Strasbourg, 21st August, 1816; died 19th August, 1856. In this brief life of 40 years, Gerhard probably did more for chemistry than any man since the time of Davy. He was the son of a manufacturing chemist, and was educated at the Protestant Gymnasium at Strasbourg. Being destined to follow his father's business, he studied chemistry under Walkner at Carlsruhe, when he conceived a strong passion for the science. In 1832 he prosecuted his studies at Leipzig under Erdmann. On his return home he soon became disgusted with the details of business: this so offended his father that a quarrel arose, and Gerhard left home and enlisted in the chasseurs. Three months of this service sufficed to disgust the young chemist. He succeeded in raising sufficient money to purchase his discharge, and then entered the laboratory at Giessen, where he served under Liebig during 18 months: some accounts place this erroneously in 1840. In 1838 he went to Paris, and worked under Thénard and Chevreul, at the same time giving private lessons in chemistry as a means of support. He passed all the university grades with success, and in 1840 took his doctor's degree. He also joined Cahours in some researches on the essential oils. In 1844 he was appointed to succeed Balard as professor of chemistry in the Faculty of Science at Montpellier. He occupied this chair until 1848, and published some new and striking views on chemical theory in his 'Précis de Chimie organique,' and also introduced them into his lectures. In 1845 he joined Laurent in starting the 'Comptes Rendus des Travaux de Chimie publiés en France et à l'Étranger,' in which he not only gave abstracts of chemical work, but discussed it by the light of his own original views. In 1848 he resigned his professorship, and went to Paris, where he established a laboratory of his own. Here he gradually developed his views on Series, the theory of types, anhydrous acids, the amides, &c. He simplified many chemical theories by comparing, examining, and correcting the old ones. He referred all oxide and oxy-acids to the type of water; made classification easy for the mind to commit to memory; treated the composition of bodies not as absolute values, but as equivalents of composition; and introduced the idea of series into chemistry.

In 1855 Gerhard was appointed to the chair of chemistry at the Faculty of Sciences, and at the Upper School of Pharmacy of Strasbourg. A few months before his death in 1856 he was named corresponding member of the Academy of Sciences at Paris.

In addition to papers in journals, Gerhard published his 'Précis de Chimie Organique,' 2 vols. 8vo, 1844—45; 'Traité de Chimie Organique,' 4 vols. 8vo, 1863—56; and also in conjunction with Chevreul, 'Précis d'Analyse Chimique Qualitative,' 1855. Three years after his death appeared, under the names of the same authors, 'Précis d'Analyse Chimique Quantitative,' 1859.

Laurent on his death-bed arranged his papers and MS. notes for his posthumous work on chemical method. This represents the

views of Gerhard and himself. It was published under the care of a friend, with a preface by Biot dated 11th June, 1854. In 1855 a translation by Dr. Odling appeared under the auspices of the Cavendish Society.

GÉRICAUT, JEAN LOUIS THÉODORE ANDRÉ, a celebrated French painter, was the son of an advocate at Rouen, where he was born on the 26th of September, 1791. On the completion of his ordinary education at the Lycée Impérial, Paris, he entered the atelier of Charles Vernet, but soon left it for that of Guérin, who, disturbed by his daring modes of procedure, advised him to relinquish art. Géricault, instead, gave himself to hard study in the Louvre, then filled with the masterpieces of modern painting. In 1812 he sent to the Salon an equestrian portrait of M. Dieudonné of the Imperial Guard, in the act of leading a charge, which attracted much attention; and in the following year 'Le Chasseur à cheval' and 'Le Cuirassier blessé.' These pictures, now in the Louvre, were supposed to typify the French army in its success and in its reverses, and produced a powerful impression. On the fall of the empire, Géricault went to Italy, and remained there for nearly three years, mainly occupied in studying the works of the great masters. On his return he produced his chief work, 'The Wreck of the Medusa,' one of the most powerful works of recent French art, and now a leading attraction of the French section of the Louvre. Géricault painted a few other pictures, but none of equal grandeur. He was of a moody temper (when in London at the time his Medusa was being exhibited there he attempted to commit suicide), lived an irregular life, and though he made many sketches and studies, especially of horses, for which he had a passion, hesitated long before setting about a picture. He might, however, have done great things, but for his premature death. He was thrown from a spirited horse he was riding, and after ten months of suffering, died on the 18th of January, 1824, at the early age of 33. Besides the pictures named above, the Louvre possesses several brilliant studies of horses by him. His 'Wreck of the Medusa' has been very well engraved in mezzotint by S. W. Reynolds.

* GÉRÔME, JEAN LÉON, a distinguished French painter, was born at Vesoul (Haute-Saône) May the 11th, 1824. In 1841 he entered the atelier of Paul Delaroche, and the École des Beaux-Arts. He studied under Delaroche till 1844, when he accompanied him to Italy. His first picture, 'Young Greeks making Cocks Fight,' was exhibited at the Salon in 1847. In the following years he sent religious and classical subjects, without producing any marked impression. He made a journey to Turkey and the Danubian Principalities in 1853, and the next year travelled in Egypt and Nubia, supplying his sketch-book with many studies, and imparting a local colour to his style. A large painting, of a class much affected in France, 'Le Siècle d'Auguste et la Naissance de Jésus-Christ,' when exhibited in 1855, was greatly praised by the critics, purchased by the State, and procured for the painter the Cross of the Legion of Honour. It was, however, the 'Duel after a Bal-Masqué,' exhibited in 1857, which made him one of the most popular painters of the day. It has been exhibited everywhere; copied by him again and again for English as well as native purchasers; and reproduced by means of lithography and photography in almost every conceivable form. 'Ave, Cæsar Imperator, morituri te salutant,' exhibited at the Salon in 1859, and at the International Exhibition, London, in 1862, though a painful picture, is perhaps the most marvellous representation of the Roman amphitheatre which has been produced. 'Phryné devant le tribunal' (1860), almost equally well known in London as in Paris, showed the growth of a tendency to meretriciousness, which there was but too much in Parisian society to encourage, but which was only too palpable evidence of belonging to a corrupted and declining school of art. Other works have followed in the same style, but his latest pictures indicate the return to a healthier and manlier manner. Besides his easel pictures, M. Gérôme has decorated the walls of a chapel in Saint-Séverin and the refectory of Saint-Martin-des-Champs with various mural paintings illustrating the legends of the church. On the reorganisation of the École des Beaux-Arts in 1863, M. Gérôme was nominated professor of painting. M. Gérôme was one of the first foreign artists elected by the Royal Academy, 1869, honorary foreign academician, and he contributed to the exhibition of 1870 two remarkable pictures, 'The Death of Marshal Ney' and 'Jerusalem'—the shadow of the Crucifixion.

* GERVAIS, PAUL, zoologist, was born at Paris, Sept. 26, 1816. Having completed his school education he entered the Museum of Natural History as assistant naturalist; but in 1841

he went to Montpellier as professor of zoology and comparative anatomy. In 1865 he returned to the museum as successor to Gratiolet. He has been a voluminous writer, but his most noteworthy books are the undermentioned:—*'Zoologie et paléontologie Française, ou nouvelle recherches sur les Animaux vivants et fossiles de la France,'* 3 vols. folio, Paris, 1848—52; *'Théorie du squelette humain fondée sur la comparaison ostéologique de l'homme et des animaux vertébrés,'* 8vo, Montpellier, 1856; *'De la métamorphose des organes et des générations alternantes dans la série animale et dans la série végétale,'* 8vo, Montpellier, 1860; *'Recherches sur l'ancienneté de l'Homme et la Période Quaternaire,'* 4to, Paris, 1867; *'Éléments de Zoologie,'* 8vo, Paris, 1868, 1869. With Eydoux, he wrote the *'Zoologie'* in Laplace's *'Voyage autour du Monde,'* 1833, &c.; with Walckenaer, the *'Histoire Naturelle des Insectes aptères,'* &c., 8vo, 1837, in the *'Suites à Buffon,'* and with Van Beneden, *'Zoologie Médicale,'* 2 vols. 8vo, 1859; as also *'Ostéographie des Cétacés vivants et fossiles,'* 4to and folio, Paris, 1868, &c. His papers in the scientific journals are upwards of 130 in number.

*GERVINUS, GEORG GOTTFRIED, an eminent German historian, was born at Darmstadt on the 20th of May, 1805, and entered upon a commercial career in a house of business in his native town. He applied himself to languages and history; and finally, yielding to his inclination for literature, became in 1826 a student at the University of Heidelberg, where he had the advantage of the tuition of Schlosser. After taking his degree he was admitted a teacher and lecturer (*Privat-docent*); and in 1831 paid a visit to Italy, where he remained a considerable time occupied with literary and historical researches. He was called to be extraordinary professor at Heidelberg in 1835; and became in 1836 professor of history and literature at the University of Göttingen. One of the earliest acts of Ernest Augustus, Duke of Cumberland, on his accession to the throne of Hanover, in 1837, was the abolition of the constitution, and the demand from the professors of Göttingen of an oath of allegiance to his absolute sovereignty. Seven of the professors, including Ewald, the brothers Grimm, and Gervinus, protested against the illegal usurpation of authority, and were in consequence deprived of their academic preferments. [EWALD, G. H. A. VON, E. C. S. col. 509.] After several years of retirement, in the course of which he paid a second visit to Italy, Gervinus was invited in 1844 to become honorary professor of history at Heidelberg, where his lectures on the political state of Europe excited general interest. In the revolution of 1848 he was reckoned amongst the leaders of the constitutional party, and continued its champion for some time after his election to the German Parliament, at Frankfurt-am-Main. His opinions, however, underwent modification in the direction of republicanism; so that when his *'Introduction to the History of the Nineteenth Century'* was published in 1853, it was condemned as treasonable by the government of the Grand Duchy of Baden, and most of the other governments of Germany. On the 24th of February, 1853, he was brought to trial at Mannheim upon an indictment charging him with having published a work directed against constitutional monarchy, with the intention of deposing the lawful head of the State, and of changing and endangering the Constitution, thereby rendering himself amenable to the charge of disturbing public tranquillity and order, and incurring the guilt of high treason. Professor Gervinus, in his defence, said that the charge, apparently directed against himself, was in fact an accusation against history and against Providence, seeing that he was a narrator of facts rather than a propagator of subjective opinions, theories, and speculations. On the 2nd of March he was sentenced to four months' imprisonment, and his work was ordered to be publicly destroyed.

The works of Gervinus include a Survey of the History of the Anglo-Saxons, *'Geschichte der Angelsachsen im Ueberblick,'* 8vo, Frankfurt-am-Main, 1830; On the Correspondence of Goethe, *'Ueber den Goethe'schen Briefwechsel,'* 8vo, Leipzig, 1836; Outlines of History, *'Grundzüge der Historik,'* 8vo, Leipzig, 1837; Historical Writings, *'Historische Schriften,'* 6 vols, 8vo, of which the first volume, published at Frankfurt, 1833, was chiefly remarkable for its article on Machiavelli, and of which the next five volumes, Leipzig, 1835—42, were devoted to a History of German Poetry, *'Geschichte der poetischen Nationalliteratur der Deutschen,'* which has gone through several editions; *'Die Mission der Deutschkatholiken,'* third edition, 8vo, Heidelberg, 1846, of which an English translation, *'The Mission of the German Catholics,'* appeared in the *'Catholic Series,'* 8vo, 1844, &c.; the Protestant Clergy and the German Catholics, *'Die Protestantische Geistlichkeit und die*

Deutschkatholiken,' 8vo, Freiburg, 1846; *Historical Manual of German Poetry, 'Handbuch der Geschichte der poetischen Nationalliteratur der Deutschen,'* 8vo, Leipzig, second edition, 1842, fourth edition, 1849; the Prussian Constitution and the Patent, &c., *'Die Preussische Verfassung und das Patent vom 3 Februar, 1847,'* 8vo, Mannheim, 1847; *'Shakespeare,'* 4 vols. 8vo, Leipzig, 1849—50, third edition, 2 vols. 8vo, Leipzig, 1862, one of the most comprehensive contributions which Germany has supplied to the analytical criticism and intelligence of Shakespeare, which appeared in an English version by F. E. Bunnnett, as *'Shakespeare. Commentaries, &c.,'* 2 vols. 8vo, London and Leipzig, 1863; *'Händel und Shakespeare. Eine Parallele,'* 8vo, Leipzig, 1868; *'Einleitung in die Geschichte des neunzehnten Jahrhunderts,'* 8vo, Leipzig, 1853, which has been already alluded to as having caused the prosecution of the author, and which appeared in English as an *'Introduction to the History of the Nineteenth Century,'* 8vo, London, 1853. The *'Einleitung,'* &c., was professedly intended as "a portion and the commencement of a great work," which was published with the title of *'Geschichte des neunzehnten Jahrhunderts seit den Wiener Verträgen,'* 4 vols. 8vo, Leipzig, 1855—60, French translation, *'Histoire du Dix-Neuvième Siècle depuis les Traités de Vienne,'* by J. F. Minssen, and forming part of the *'Collection d'Historiens Contemporains,'* 8vo, Paris, 1864, &c.

GIB, ADAM, a Scottish divine, and one of the founders of the Secession Church, was born in Perthshire in the year 1713, and educated at the University of Edinburgh. He was strongly opposed to the exercise of private patronage in the church; and on the 2nd of April, 1741, was ordained a minister of the Associated Presbytery, then recently instituted by Mr. Ebenezer Erskine, and settled as pastor over a congregation in the suburbs of Edinburgh. The validity of this step was challenged in an anonymous *'Protestation and Declaration against the Calling, Ordination, and Settlement of Mr. Adam Gib, pretended Preacher, and now installed Incumbent in the Bounds near Edinburgh,'* 12mo, London, 1741. During the rebellion of 1745, Mr. Gib and his followers were conspicuous for their loyalty to the reigning house. The affairs of the Secession Church were in a flourishing condition, and Gib's own congregation had greatly increased, when, in 1747, a schism took place respecting the swearing of the oaths of burgesses. The body was divided upon this question into two parties, called respectively *Burghers* and *Anti-Burghers*; of the latter of which, the more rigid of the two, Gib was henceforth for the rest of his life considered the ablest advocate and leader. A new meeting-house was opened by him on the 4th of November, 1753, in Nicholson Street, where regularly for many years he continued his ministrations to about 2000 persons. His influence with his sect was so great that he was commonly known as *Pope Gib*, a sobriquet by which he was long remembered. When, in 1765, the General Assembly of the Church of Scotland took the subject of the Secession into consideration as a thing that "threatened the peace of the country," Mr. Gib wrote a spirited remonstrance against so injurious an imputation; and in proof of the loyalty of the Secession, drew attention to the known acts of its members in 1745. He died on the 18th of June, 1788, and was buried in the churchyard of Grey Friars, Edinburgh.

His works comprise *'The Present Truth: a Display of the Secession-Testimony in the three Periods of the Rise, State, and Maintenance of that Testimony,'* 2 vols. 8vo, Edinburgh, 1774; *'An Antidote against a new Heresy, concerning the True Sonship of Jesus Christ: a Sermon from John ix. 35, with some Enlargements and explanatory Notes. As also an Appendix: Concerning the wonderful Theory of Animalcular Generation, as lately brought in by a Clergyman of the Church of Scotland, for the proper Ground of the Fundamental Article of the Christian Religion,'* 8vo, Edinburgh, second edition, corrected, 1777, which was an attack upon a work by Dr. William Dalgleish, of Peebles, entitled *'The True Sonship of Christ investigated, and His Person, Dignity, and Offices explained and confirmed from the Sacred Scriptures. By a Clergyman,'* 8vo, London, 1776; and *'Kaina kai Palaia. Sacred Contemplations: In three Parts. (1) A View of the Covenant of Works, &c.; (2) A View of the Covenant of Grace, &c.; (3) A View of the Absolute and Immediate Dependence of all things in God, in a Discourse concerning Liberty and Necessity,'* 8vo, Edinburgh, 1786. The *'Discourse'* was an answer to Lord Kames's Essay on the same subject.

GIBSON, JOHN [E. C. vol. iii. col. 97]. In the above memoir Gibson is said to have been born at Conway in 1790, and this is what Gibson himself states in his Autobiography; but

his birthplace was Gyffin, a few miles distant from Conway, to which town his parents did not remove till some time afterwards. Gibson did little original work after the date to which our memoir was brought down. As late as 1862, however, he modelled a bas-relief of 'Christ blessing Children.' In that year he was enabled to gratify a cherished desire to bring fairly before his countrymen his system of applying colour to marble in sculpture. At the International Exhibition space was assigned to him for the erection of a light quadrangular temple in which, in three of the faces, the most important of his statues treated in this manner, the Venus, the Pandora, and the Cupid, were displayed to the best advantage, the fourth division being occupied by the uncoloured statue of Zenobia by his favourite pupil, Miss Hoeman. The result was not favourable, few converts being made probably from any class of cultivated art-students: but Gibson himself never doubted his success. Of his Venus he wrote, "When all my labour was complete, I often sat down quietly and alone before my work, meditating upon it and consulting my own simple feelings. I endeavoured to keep myself free from self-delusion as to the effect of the colouring. I said to myself, 'Here is a little nearer approach to life—it is therefore more impressive—yes, yes, indeed, she seems an ethereal being, with her blue eyes fixed upon me!' At moments I forgot that I was gazing at my own production; there I sat before her long and often." (Life, p. 211.) Rome continued to be Gibson's ordinary abode, but for some years before his death his summers were spent in Switzerland. Early in January, 1866, he was seized with paralysis. He died on the 27th of that month, and was interred in the English cemetery at Rome. By his will he bequeathed his works in marble not sold at the time of his death, and the models of his other works, to the Royal Academy on condition that space be provided so that they may be seen by the public on exhibition days.

(*Life of John Gibson, R.A.* Edited by Lady Eastlake, 8vo, London, 1870.)

* GIEBEL, CHRISTOPH GOTTFRIED, zoologist, was born at Quedlinburg, in Prussian Saxony, Sept. 13, 1820. He studied at Halle, and there became acquainted with Burmeister and Germar. In 1845 he acquired his doctorate, and then commenced delivering lectures in the Halle University, which were attended by large numbers of students. His lectures embraced a wide range of subjects. First they were on palæontology, geognosy, and mineralogy; next on zoology, and later still on comparative anatomy and general natural history. In 1868 he was appointed extraordinary, and in 1861, ordinary professor of zoology, to which last was added the directorship of the University Museum. His contributions to literature have been numerous and important, and are partly popular, partly scientific in their character. Amongst his separate works may be noticed his 'Palæozoologie,' 8vo, Merseburg, 1846; 'Gaea excursoria germanica,' 8vo, Leipzig, 1848; 'Deutschlands Petrefacten,' 8vo, Leipzig, 1852; 'Odontographie,' 4to, Leipzig, 1855; 'Die Säugethiere in zoologischen, anatomischen und paläontologischen Beziehung,' 8vo, Leipzig, 1855; 'Tagesfragen aus der Naturgeschichte,' 8vo, Berlin, 1857; 'Lehrbuch der Zoologie,' 8vo, Darmstadt, 1857, second edition, 1866; 'Die drei Reiche der Natur,' 4to, Leipzig, 1859; 'Die nützlichen Vögel unserer Aecker, Wiesen, Gärten und Wälder,' 8vo, Berlin, 1868; and 'Der Mensch,' 8vo, Leipzig, 1868. His papers are upwards of 120 in number, and have been contributed chiefly to Leonhard and Bronn's 'Neues Jahrbuch für Mineralogie, &c.,' and to the 'Zeitschrift für die gesammten Naturwissenschaften,' of which last periodical he is one of the editors. These papers are for the most part anatomical or palæontological, and relate to most of the classes of animals. The most important are those which deal with the osteology of the vertebrates.

GIESELER, JOHANN KARL LUDWIG, a divine and church historian, was born at Petershagen, near Minden, on the 3rd of March, 1792. He studied theology at the University of Halle; and in 1813 bore arms in the service of his country. He resumed his peaceful avocations in 1815, and in 1817 became conrector of the gymnasium at Minden, a position which he exchanged in the following year for that of Director of the newly established gymnasium of Cleves. In 1819 he took his degree of D.D., and was appointed professor of theology at Bonn, where he lectured on biblical exegesis, archaeology, and church history. In 1831 he became ordinary professor of theology at Göttingen, where he died on the 8th of July, 1854. Dr. Gieseler was known for his benevolent sympathy with the struggling poor, and as a prominent member of the Society of Freemasons. In 1837 he was appointed a consistorial counsellor,

and was afterwards admitted a Knight of the Guelphic Order. His works comprise a Critical and Historical Essay upon the Origin and Earliest Fortunes of the Written Gospels, 'Historisch-kritischer Versuch über die Entstehung und die frühern Schicksale der schriftlichen Evangelien,' 8vo, Leipzig, 1818; Observations on the Diet of Augsburg, in 1530, 'Etwas über den Reichstag zu Augsburg,' &c., 8vo, Hamm, 1821; Two Lectures on Ecclesiastical Subjects, &c., 'Zwei Abhandlungen über kirkliche Gegenstände,' 8vo, Bonn, 1824; and 'Lehrbuch der Kirchengeschichte,' 6 vols. 8vo, of which the first part was published at Darmstadt, and the rest of the work, in its various editions, at Bonn, between the years 1824 and 1857, the later ones, which were of posthumous issue, being edited by E. R. Redepenning. An English version by F. Cunningham of this very learned and impartial work was published in America with the title of a 'Text Book of Ecclesiastical History.' Translated from the third German Edition, 3 vols. 8vo, Philadelphia, 1836; and another, from the fourth German edition, "revised and amended," forms part of 'Clark's Foreign Theological Library,' and is entitled 'A Compendium of Ecclesiastical History,' &c., 5 vols. 8vo, Edinburgh, 1846—1855, of which the first two volumes were translated by Dr. Samuel Davidson, and the other three by the Rev. John Winstanley Hull.

GILBERT, SIR HUMPHREY, a distinguished soldier and navigator, was born at Dartmouth in 1539. He belonged to an ancient Devonshire family; his mother, when a widow, married Mr. Walter Raleigh, and became the mother of the famous Sir Walter Raleigh. After studying at Eton and Oxford, Gilbert was introduced at court by his aunt, Mrs. Catherine Ashley, one of Queen Elizabeth's ladies. This led to his entering the military service. In 1563 he went to Ireland to aid in suppressing a rebellion incited by Fitzmorris; for his services he was knighted, and made governor of Munster. In 1572 he sailed with nine ships to take part in Colonel Morgan's expedition for the recapture of Flushing. Much attention was drawn to a pamphlet published by him in 1576, under the title 'Discourse to prove a Passage by the North-West to Cathaia and the East Indies.' The favour into which he was brought by this work (a well-written production, evincing a considerable amount of geographical knowledge) procured for him in 1578 a patent from the queen for the discovery and ownership of any lands in the New World up to that time undiscovered. In his first voyage he was accompanied by his half-brother, Sir Walter Raleigh, who contributed largely towards the expenses. It was, however, unsuccessful; but he again set out with a better-appointed expedition in 1583, landed at Newfoundland, took possession of St. John's Harbour, and virtually established the first English settlement on American soil. His career was, however, lamentably cut short. On the 20th of August, the largest of his three ships having been lost off Cape Breton, he put to sea again in a small sloop or frigate, the Squirrel, to explore the coast, and then steered homeward in very tempestuous weather. On the 9th of September he was seen by the crew of the Golden Hind, the companion vessel, in the stern of the sloop, with a book in his hand, and called to them, "Courage, my lads! we are as near heaven at sea as at land." At midnight a raging sea swallowed up the Squirrel and all on board.

GIOLFINO, NICCOLO, called URSINO by Vasari, one of the best painters of the Veronese school, was born at Verona about 1465. His pictures range in date from 1486 to 1518; the year of his death is uncertain. Several of the churches of Verona were adorned with frescoes by him; the finest which remain are those in Santa Maria in Organo. He also decorated the fronts of several houses in Verona with frescoes. He painted the lower part of his own house by the Porta de' Borsari in this manner, his friend Mantegna painting the upper part. Giolfino's oil paintings are rarer than his frescoes. One of the best, a 'Virgin Enthroned,' is in the Berlin Museum. Our National Gallery possesses a series of portraits of the Giusti family (No. 749), formerly the predella of an altar. With more of archaism than some of his contemporaries, Giolfino's figures display much nobleness of character with tenderness of expression, and he was a good colourist. Paolo Farinato was his pupil.

GIOVANELLI, RUGGIERO, Italian composer, was born at Velletri, about the year 1560. He was Maestro di Cappella in the French chapel of St. Louis, at Rome, and afterwards in the church of the German college. In 1595 he succeeded Palestrina in a similar post at St. Peter's; and in 1599 was member of the College of Choristers at the Sistine chapel. Giovanelli was one of the best composers of the Roman school in that age, both in ecclesiastical and secular music. He devoted seven years to correcting and improving the *Gradual* (the

portion of the mass which intervenes between the Epistle and Gospel, used in the Pontifical chapel; the work was published in two large folio volumes, 1614 and 1615; the first volume comprising the 'Graduale de tempore,' and the second the 'Graduale de sanctis.' He published a considerable number of well harmonized madrigals and canzonets for all combinations of voices, from one to eight. The archives of the Vatican and the Sistine Chapel contain numerous MS. masses, motetts, and psalms of his, which have not been published. The year of his death is uncertain: he was living in 1615.

*GIRARD, CHARLES, zoologist, was born at Mülhausen in 1822. He received his education at Neufchâtel from Agassiz, whose assistant he subsequently became, and as such he contributed largely to the 'Nomenclator Zoologicus,' and the 'Bibliographia Zoologica et Palæontologica.' When Agassiz went to America, Girard was his companion, and he continued to help him until 1850, when he went to Washington. He has contributed accounts of the reptiles and fishes to a large proportion of the reports of exploring expeditions sent out by the United States government, amongst others to those of Stansbury to the Great Salt Lake of Utah, of Sitgreave to the Colorado River, of Marcy to the Red River of Louisiana, of Gillies to Chile, of the commission for determining the boundary between the United States and Mexico, of the commission for surveying the line of the Pacific railroad, and of Wilkes round the world. He has also written numerous scientific papers. One group relates to the *Planaria*, another to the fishes and reptiles of the United States, and a third to miscellaneous subjects. Most of these are published in the 'Proceedings of the Academy of Natural Science at Philadelphia' for the years from 1852 onwards. In the 'Smithsonian Contributions' for 1852 he has 'Contributions to the Natural History of the Freshwater Fishes of North America,' and in the 'Smithsonian Miscellaneous Collections' for 1862 he and F. S. Baird contributed a 'Catalogue of the North American Reptiles in the Museum of the Smithsonian Institution.'

*GIRARDIN, JEAN PIERRE LOUIS, chemist, was born at Paris, Nov. 16, 1803. In 1825 he entered the College de France, and joined Thenard's laboratory class. At Thenard's recommendation he was made professor of applied chemistry at Rouen in 1828, and subsequently filled temporarily various other professorial posts in the same town. He was very active in promoting the knowledge of agricultural chemistry, for which purpose he gave lectures to the farm labourers, and induced the authorities to found an agricultural school. In 1858 he went to Lille, where he was made Dean of the Faculty, and afterwards rector of the academy at Clermont. He is a member of numerous societies, and an officer of the Legion of Honour. He has been a busy writer. His lectures to workmen were issued under the title of 'Leçons de chimie élémentaire,' and went through many editions, the fourth being published at Paris in 2 vols. 8vo, 1860. It was translated into Russian, and owing to the immense stimulus it had given to chemical industry in that kingdom, the Czar honoured him with a gold medal and a casket of diamonds. He also wrote 'Mémoires de chimie appliquée,' 8vo, 1839; 'Des fumiers considérés comme engrais,' 18mo, 1847; 'Traité élémentaire d'agriculture,' 2 vols. 18mo; and numerous others, chiefly intended for general circulation. He has contributed numerous papers to the scientific journals, on volcanoes, artesian wells and water, springs, madder, various pathological products, analyses of ancient works of art, guano and manures, on fossilised bones, and on various substances employed in the arts.

GIRTIN, THOMAS, one of the greatest of our early landscape painters in water colours, was born in February, 1775. He was apprenticed to Edward Dayes, but, according to a book of questionable authority (Thornbury's 'Life of Turner,' vol. i. p. 103), quarrelling with him, and refusing to complete his term of servitude, he was prosecuted, and committed to the City Bridewell. There he was visited by the Earl of Essex, who was so struck by his talent that "he bought up the indentures, and burning them before Girtin's eyes, obtained his release, and took him down to the almost regal luxury of Cashiobury, where Girtin, free and happy, produced some of his greatest works." The last part of the story, at least, is apocryphal: Girtin had to wait and work much longer before he produced his greatest works. His greatness dates from his association with Turner, which certainly occurred later. The young men seem to have been for a time almost inseparable. They studied together; copied the earlier painters together of an evening at Dr. Monro's; sketched together the picturesque old buildings and scenery around London, and helped to form each other's style. Girtin's

progress was wonderfully rapid, and being fond of trying experiments in colour and modes of working, he struck out for himself a bolder and more powerful style than had yet been seen in water-colour painting, Turner readily adopting and working out his processes. To their combined efforts are to be ascribed the origin of the practice of painting directly in local colours instead of working with local colours over a gray or neutral basis. This practice so entirely changed the character and extended the range of the art that its inventors are fairly entitled to be ranked as the founders of the modern or English school of painting in water colours. Turner, who always spoke of him with respect, is said to have declared that Girtin's pictures were superior to his own. This could, however, have applied only to their very early works. In the 'Rivers of England,' now lying before us, and in the drawings made during the later years of Girtin's life, there can be no question as to the wider range, brilliancy, and artistic power of Turner's works. Girtin's drawings display much grandeur of effect, fine feeling, depth, richness, and sweetness of colour, but the neglect of detail is pushed too far; they are often inaccurate in drawing, and as a whole monotonous in character. Like Turner, he made many drawings for engraving. They were associated in the 'Rivers of England,' just referred to, and Girtin drew and etched the outlines of a series of 20 'Views in Paris,' as well as several for Miller's 'Picturesque Views of English Scenery.' His name appears among the exhibitors at the Royal Academy nearly every year from 1794 to 1801, inclusive. He is also said to have painted a panoramic view of London. But much as he accomplished, his genius had not fair play. He led a careless and reckless life, "trifled away a vigorous constitution," and "died, November the 9th, 1802, after a long illness, in the 28th year of his age."—(Dayes, 'Sketches of Modern Artists,' 4to, 1805, p. 329.) The British Museum possesses several of Girtin's drawings, and in the Ellison Collection at South Kensington are two, No. 380, 'A View on the Wharfe,' and No. 499, 'Rievaulx Abbey, Yorkshire.'

GISBORNE, LIONEL, civil and telegraphic engineer, was born at St. Petersburg, in 1823, his father being at the time British Consul-General in that city. His education was partly obtained at St. Petersburg, and partly in Derbyshire; but he afterwards went to Geneva to study foreign languages, and subsequently acquired a considerable knowledge of mathematics and physical science at Durham University. Selecting the profession of civil engineer, he obtained employment in 1842, in the Government service in Ireland, as engineer under the Works Department. He was much employed in deepening the river Shannon, and in constructing bridges, weirs, locks, wharves, &c. Later he conducted extensive drainage operations in various parts of Ireland, and took an active part in the relief measures during the famine of 1847. In 1852, under instructions from Sir Charles Fox, he went out to Panama, to survey the Isthmus of Darien for a ship canal, which had been pronounced practicable by Dr. Cullen. His investigations on this occasion, and again in 1854, when he was entrusted with powers by the Governments of England, France, the United States, and Granada, led him to a conviction that a ship canal in that region would be too arduous and uncertain an enterprise to be recommended. He contributed a 'Summary of the Report on the Survey of the Isthmus of Darien' to the Journal of the Geographical Society for 1857. In 1855 he organised for the East India Company a staff of civil engineers for executing public works, which became the nucleus of the present Public Works Department of India. Mr. Gisborne was one of the engineers who brought forward schemes for the embankment of the Thames; and he afterwards reported to the Swiss, Swedish, Russian, and Italian governments, concerning systems of railways for those countries. The operations, however, with which his name is chiefly associated are those relating to submarine telegraphy. He obtained a concession from the Turkish Government for an electric Cable from the Dardanelles to Alexandria; and subsequently a concession for a land telegraph through Egypt, from Alexandria to Suez. Under contract with the governments of England and India, he, or a company formed by him, submerged a cable from Suez, down the Red Sea to Aden, and another along the northern part of the Indian Ocean to Kurrachee: these two cables, 3,000 miles together, were laid down in 1859–60. His next undertakings were a telegraphic cable from Malta to Alexandria, for the English government, and one from France to Algiers, for the French government. He also prepared plans for cables from Rangoon and Singapore to Batavia and Australia; but he was cut off before the schemes were accepted. Mr. Gisborne's cables have mostly failed in steady working, and have entailed much

loss on the respective governments, owing to defects which experience had not at that time made manifest; but he nevertheless rendered great service, in affording other engineers data from which they could introduce improvements. He died at the early age of 38, on the 8th of January, 1861.

GIUSTI, GIUSEPPE, an Italian poet and satirist, whose verses contributed to the realisation of the unity of his country, was born on the 13th of May, 1809, at Monsummano, a small town of the Val di Nievole, in the Apennines, and, after receiving a preparatory education of a somewhat desultory kind, entered, in 1826, the University of Pisa, for the study of jurisprudence. In spite of an almost systematic neglect of this subject, and of a three years' intermission of his university residence, he succeeded in passing his examination in June, 1834, after which he repaired to Florence in order to commence his professional career; but gave himself up, as ever throughout his life, chiefly to literary associations. He now composed a series of minor poems, which, though laid aside by himself, were published after his death amongst his youthful productions. The death of the Emperor Francis of Austria, in 1835, called forth the first of Giusti's satires, the 'Dies Iræ,' which attracted public notice; and from this time he continued to produce various satirical poems, which, although unpublished, passed from hand to hand, and from mouth to mouth, even amongst the people of remote villages, who appreciated the sternness and vigour of the denunciations of political and ecclesiastical tyranny on the part of an author, who, without attaching himself to any political party, was a republican by sentiment and conviction. Amongst the more remarkable of his poems may be mentioned *The Boot*, 'Lo Stivale,' a description of Italy, in which the 'Boot' gives a sketch of its own history; 'San Giovanni,' or an Address to the Coin of Florence; the Apology for the Lottery, 'Apologia del Lotto;' and the 'Incoronazione,' written on the occasion of the coronation of the Emperor Ferdinand as King of Lombardy, September 6th, 1838. In February, 1844, he undertook a journey, for the sake of his health, to Rome and Naples, on his return from which, with but slight improvement, he visited Leghorn for the benefit of the sea air; and having heard that an inaccurate edition of his verses had been piratically published, he issued a collection of his more serious compositions, with the title of 'Versi,' 8vo, Leghorn, 1844, which was followed by 'Nuovi Versi,' 12mo, Florence, 1847; 16mo, Venice, 1848. He shortly afterwards broke the enforced silence of two years, by the production of his most celebrated poem, called *The Busybody*, 'Il Gingillino,' which he dedicated to the poet Alessandro Poerio, and which was intended, as the author informed the Marchesa Luisa d'Azeglio, to "express all the baseness, all the contumely, of those who seek to rise to offices in the state by dirty and mean conduct." Frassi, one of the biographers of Giusti, characterises this poem as "one of those which will be read, perhaps, when Italian, like Latin, will no longer be a spoken language." For the remainder of his life Giusti was a valetudinarian, and during the visits which he paid to various places for the restoration of his health, he occupied himself with making a collection of proverbs, which was published after his death, with the title of 'Raccolta di Proverbi Toscani,' &c., 12mo, Florence, 1853. A notice of the life of Parini, upon which Giusti was engaged between 1846 and 1850, and which he left incomplete, was afterwards published amongst his inedited works. He died on the 31st of March, 1850, at the palace of his friend, the Marchese Gino Capponi, at Florence. His works, whether in part or collectively, have appeared as 'Poesie Diverse,' &c., 12mo, London, 1833; 'Galleria Poetica,' 8vo, London, 1836; 'Il Congresso de' Birri, Ditirambo,' 8vo, Florence, 1847; 'Poesie,' &c., 12mo, Lugano, 1847; 'Congiuria delle Spie,' folio, Genoa, 1848; 'I Carlierari fallii,' folio, Genoa, 1848; 'Poesie, Edizione Completa,' 16mo, Venice, 1848; ultima edizione, ampliata, 12mo, Bastia, 1850; 'Versi editi ed inediti. Edizione postuma,' &c., 8vo, Florence, 1852; 'Epistolario di Giuseppe Giusti: ordinato da G. Frassi e preceduto dalla Vita dell' Autore,' 2 vols. 8vo, Florence, 1859; 'Scritti vari in prosa e in verso. Pubblicati per cura di A. Gotti,' 12mo, Florence, 1863; 'Le Lettere scelte di Giuseppe Giusti, postillate per uso de' non Toscani da G. Rigutini,' 12mo, Florence, 1864; and 'Nuova Raccolta di Scritti inediti di Giuseppe Giusti, pubblicati per cura di P. Papini,' 8vo, Florence, 1867. Giusti has been the subject of several biographies, amongst the most complete of which may be mentioned an English one, entitled 'The Tuscan Poet Giuseppe Giusti and his Times,' by Susan Horner, 8vo, London and Cambridge, 1864.

GIUSTINIANI, AGOSTINO (Justiniani Augustin); an
BIOG. DIV.—SUP.

Italian prelate, orientalist, and historian, was born in 1470, at Genoa, and at the age of fourteen entered a convent of Dominicans in his native city, and became a member of the order, at Padua, in 1488, when he substituted the name of Agostino for his secular name of Pantaleon. He devoted himself with much ardour to the study of oriental languages, which he taught in various seminaries of his order. In 1514, he was made bishop of Nebbio, in Corsica; and two or three years afterwards repaired to France, on the invitation of Francis I., who awarded him a pension, and appointed him the first professor of Hebrew in the University of Paris. After a five years' absence, during which he visited England and the Low Countries, Giustiniani returned, in 1522, to his diocese, to the administration of which he confined himself until 1531, when affairs of moment caused him to repair successively to Genoa and to Rome. He died in 1536, perishing in the wreck of a vessel on board of which he had embarked to make the passage from Genoa to Corsica. The most considerable of his works are his 'Psalterium Hebræum, Græcum, Arabicum, et Chaldæum, cum tribus Latinis Interpretationibus et Glossis,' folio, Genoa, 1516, which was the first Polyglot Psalter that had appeared in print, and which was intended to be a prelude to a similar edition of the whole Bible; 'Castigatissimi Annali, con la loro copiosa Tavola della Repubblica di Genoa, da fedeli ed approvati Scrittori accuratamente raccolti,' &c., folio, Genoa, 1537, a work of posthumous publication, of which an edition "corretti ed illustrati," was issued in 2 vols., 8vo, Genoa, 1834—35; 'Liber Job nuper Hebraicæ Veritatis restitutus,' 4to, Paris, 1516 or 1520; an edition of 'Victoria Porcheti adversus impios Hebræos, in qua tum ex sacris Literis, tum ex dictis Talmud, ac Caballistarum, et aliorum omnium Authorum quos Hebræi recipiunt, monstratur Veritas catholica Fidei,' &c., folio, Paris, 1520; and various translations.

* GLADSTONE, RIGHT HON. WILLIAM EWART, M.P., P.C., D.C.L., LL.D., &c. [E. C., vol. iii. col. 116.] The second administration of the late Lord Derby, which was formed on the 25th of February, 1858, included his son, the present earl, as Secretary of State for the Colonies; but Lord Stanley's office, upon his appointment to the secretaryship of state for India, was conferred upon Sir Edward Bulwer Lytton (now Lord Lytton), after having been declined by Mr. Gladstone, who, however, shortly afterwards accepted the office of "Her Majesty's High Commissioner Extraordinary to the United States of the Ionian Islands," to which he was gazetted on the 9th of November, 1858. It was greatly owing to his representations that these islands were ceded to Greece, a few months after the election of Prince George of Denmark to the throne left vacant by the abdication of King Otho, the treaty by which the Queen renounced her protectorate being executed in London on the 14th of November, 1863.

The Reform Bill of the Conservative administration was rejected on the 31st of March, 1859; and, an appeal being made to the country, the new Parliament, to which Mr. Gladstone was re-elected, not without agitation, as member for the University of Oxford, assembled on the 31st of May. When, on the 11th of June, a vote of want of confidence was adopted by the House of Commons, Lord Derby and his colleagues at once resigned, and were succeeded by the cabinet of Lord Palmerston, in which Mr. Gladstone resumed his former position as Chancellor of the Exchequer. The annual expositions of his financial policy during a period of seven years, were constantly looked for with interest, and generally admired for their eloquent lucidity. They have for the most part been separately published, and were issued collectively as 'The Financial Statements of 1853, 60—63. To which are added, a Speech on Tax Bills, 1861, and on Charities, 1863,' 8vo, London, 1863. The 'Financial Statements,' 8vo, London, of 1864 and 1865, followed in the respective years of their delivery. Of all the budgets introduced by Mr. Gladstone, the most memorable is perhaps that of the 10th of February, 1860, on account of its intimate associations with the French Commercial Treaty, which had just been contracted by Mr. Cobden, and the daring abolition of upwards of three hundred customs duties. Mr. Gladstone's address on this occasion was published as the 'Speech of the Chancellor of the Exchequer on the Finance of the year, and the Treaty of Commerce with France, delivered in the House of Commons, on Friday, February 10th, 1860,' 8vo, London, 1860. The Budget of 1861 was chiefly remarkable for the success with which, against a strong opposition, it incorporated the repeal of the Paper Duty, a measure which had been included in the budget of the previous year, and then lost through the antagonism of the Lords. The Financial Statement of 1862 was modified,

and almost formed, by the outbreak of the civil war in America, and left taxation nearly undisturbed. Amongst the minor measures of some importance, however, it contained the substitution of a fixed tax of threepence on each barrel of beer, for the precarious and irritating hop duty. In the course of this session there arose an animated discussion on the condition of the new kingdom of Italy, in which Sir George Bowyer, by the highly laudatory terms in which he spoke of the temporal government of the Pope, provoked from Mr. Gladstone a powerful and uncompromising reply, denouncing at once the impolicy and injustice of its continuance. In 1863 there was a considerable surplus, and Mr. Gladstone was in consequence enabled to satisfy the general expectation of a reduction in the tea duty and the income tax. The reception of the Budget was extremely favourable, and the financial measures of the Chancellor came to be recognised as a chief element of strength and stability of the Palmerston administration.

But the cares of office did not exhaust Mr. Gladstone's activity. In November, 1859, he was elected Lord Rector of the University of Edinburgh; and at the close of the session paid a visit to that city for the purpose of meeting his academic constituents, before whom he pronounced an address, which was immediately published, with the title of an 'Inaugural Address delivered before the University of Edinburgh, April 16, 1860,' 8vo, London, 1860. He was re-elected to the rectorship in 1862, and at the end of his second term of office, delivered, on the 3rd of November, 1865, an address on 'The Place of Ancient Greece in the Providential Order of the World,' 8vo, London and Edinburgh, 1865. In 1862 he delivered addresses, which were afterwards published, respectively to the Mechanics' Institute at Leeds, to the Association of the Lancashire and Cheshire Mechanics' Institutes, at Manchester, and to the Manchester Chamber of Commerce; and in November, 1863, delivered at Burslem, in Staffordshire, an address on 'Wedgwood,' 8vo, London, 1863. He also assisted in the production of a volume entitled 'Translations by Lord Lyttelton and the Right Hon. W. E. Gladstone,' 8vo, London, 1861, second edition, 4to, London, 1863, in which Lord Lyttelton turned various passages from English poets into Greek and Latin verse, whilst Mr. Gladstone gave English translations from the Greek, Latin, Italian and German, and Latin ones from the English of Milton, Toplady, and Heber. His 'Studies on Homer and the Homeric Age,' 3 vols. 8vo, Oxford, 1858, published just before his mission to the Ionian Islands, were rendered into German by Dr. Albert Schuster, Conrector of the Claustral Gymnasium as 'W. E. Gladstone's Homerische Studien frei bearbeitet, &c. Mit zwei Karten,' 8vo, Leipzig, 1863. In 1865, Mr. Gladstone was named a member of the Institute of France.

Before the general election of the last-named year, he had exhibited certain signs of willingness to take into consideration the alleged abuses of the Irish Church Establishment, and the University of Oxford refused to re-elect him. At the close of a five days' poll, Mr. Gathorne Hardy, who had been put up to oppose him, was returned by a majority of 180. Mr. Gladstone, who thus experienced the severance of a connection which had lasted for eighteen years, was thereupon returned for South Lancashire, a constituency for which he had already been nominated on the 17th of July, before the result of his Oxford candidature was ascertained. The literary result of the canvass of his new constituency was a volume of 'Speeches and Addresses delivered [July 18th to 22nd] at the election of 1865,' 8vo, London, 1865, at Manchester, Liverpool, and Newton, which were characterised at the time as being incomparably the most wonderful body of oratory ever composed and delivered by a statesman within so short a period.

Lord Palmerston died on the 18th October, 1865, and was succeeded in the Premiership by Lord Russell; but Mr. Gladstone, who now for the first time assumed the leadership of the House of Commons, was the real inspiring mind of the reconstituted cabinet. On the 12th of March, 1866, he introduced his "Franchise Bill," and the existence of the Government was staked upon the issue. "We have crossed the Rubicon," said Mr. Gladstone, "and burned our boats." The ministers were beaten, however, and, in fulfilment of their pledge, resigned in June, 1866; retaining, to quote again the words of Mr. Gladstone, "in the hour of defeat the presentiment of victory." His 'Speeches on Parliamentary Reform in 1866. With an Appendix,' 8vo, London, 1866, freely expressed his sense of the rights and the claims of the working people of England to be admitted within the precincts of the constitution.

Lord Derby resumed office on the 6th of July, 1866; and on

the 5th of February, 1867, Mr. Gladstone spoke in support of the address in answer to the Royal Speech, which recommended a "free extension of the elective franchise." During the debates that ensued on the Reform Bill of Mr. Disraeli, Mr. Gladstone endeavoured, by moving a series of amendments—in the course of which he experienced the defection of several of his party, of which he was for a time on the point of vacating the formal leadership—and by other action, to impart thoroughness to the measure; and when it at length became law, his beneficial influence upon its ultimate form was gratefully recognised.

His opposition during the session of 1868 was characterised mainly by the resolutions which he moved, March 23rd, for the disestablishment of the Irish Church; for the prevention of the creation of new personal interests by the exercise of any public patronage; and for the presentation of an address to the Queen praying Her Majesty to place at the disposal of Parliament her interest in the temporalities of the ecclesiastical dignities and benefices of Ireland. In May, the Queen gave her assent to the prayer of this petition; and Mr. Gladstone forthwith brought in a bill incorporating the resolutions. This was met by Lord Stanley's introduction of an amendment, the purport of which was to leave the whole matter open to the consideration of a new Parliament. An appeal was accordingly made to the country, and Mr. Gladstone, having been defeated in his candidature for South Lancashire, formally accepted, November 25th, the representation of Greenwich, which had been kept open for his conditional occupancy. Two days before the date of his letter to his new constituents, he had published 'A Chapter of Autobiography,' 8vo, London, 1868, in which, as the former author of 'The State in its Relations with the Church,' he apologised for the position he had assumed as the antagonist of the Irish Establishment. He professed (1) "that the great and glaring change in his course of action with respect to the established Church of Ireland was not the mere eccentricity, or even perversion, of an individual mind, but connected itself with silent changes, which were advancing in the very bed and basis of modern society; and (2) that the progress of a great cause, signal as it had been and was, appeared liable nevertheless to suffer in point of credit, if not of energy and rapidity, for the real or supposed delinquencies of a person, with whose name for the moment it happened to be specially associated." The 'Chapter of Autobiography' produced some discussion in the shape of 'Commentaries,' 'Thoughts,' &c., and 'Replies.' The critical situation of the cabinet of Mr. Disraeli, who had succeeded to the Premiership on the retirement of Lord Derby, in February, 1868, culminated in its resignation on the 1st of December, when Mr. Disraeli recommended to the Queen the appointment of Mr. Gladstone as his successor, who, a few days afterwards, undertook the formation of a new administration. The great measure of the session of 1869 was the passing of the Bill for the disestablishment and disendowment of the Irish Church, the debate on which was opened with an elaborate speech by Mr. Gladstone, on the 1st of March, and which, having successfully passed the third reading in the House of Commons, was finally carried, in spite of the opposition of the Peers. On the 15th of February, 1870, Mr. Gladstone proceeded to address himself to the conduct of the Irish Land Bill, which provided for the compensation of tenants for improvements and for disturbance of occupancy, extending to the whole of Ireland the customary tenant right of the province of Ulster. Another popular measure, for regulating admission to every department of the Civil Service, and for throwing open Government appointments to "unlimited competition," was affirmed, June 4th, by an Order in Council.

Since the breaking out of the war between France and Germany, it is understood that Mr. Gladstone has been watching for opportunities of successful mediation in the interests of peace; but when pressed upon the point by a deputation of working men, September 27th, he declined to recognise formally, whilst negotiating with it provisionally, the Republican Government of France. He could not, he said, anticipate the action of France herself in this matter; it would be time enough to recognise the Republic in that country when it had been legally constituted.

It may be mentioned that Mr. Gladstone has lately published 'Ecce Homo,' 8vo, London and Edinburgh, 1869, a series of articles on the celebrated book of the same title, which had their first appearance in 'Good Words'; 'The Irish Church: a Speech delivered in the House of Commons, March 1st, 1869,' 8vo, London, third edition, 1869; and 'Juventus Mundi. The Gods and Men of the Heroic Age,' 8vo, London and Oxford, 1869.

GLEIM, JOHANN WILHELM LUDWIG, a German song writer, was born April 2nd, 1719, at Ermsleben, in Halberstadt. On the completion of his education at Halle he served for a while as private tutor, and afterwards as secretary, first to Prince Wilhelm of Brandenburg, and, on his death, in 1744, to Marshal Dessauer. Finding Dessauer's rough temper unbearable, Gleim went to Berlin, and supported himself by literature, but was called in 1747 to Halberstadt to act as secretary to the chapter of the cathedral, an office he retained till his death, which occurred on the 18th of February, 1803. Whilst with Prince Wilhelm, Gleim had formed a close friendship with Kleist, who powerfully stimulated his taste for poetry. The first fruits of his muse appeared in a series of playful ballads, 'Versuch in scherzhaften Liedern,' Berlin, 1744—45, which became at once exceedingly popular, and secured for him the title of the German Anacreon. Serious songs, 'Lieder ernster Art;' romances, 'Romanzen;' and fables, 'Fabeln,' followed and strengthened his popularity. He was now brought into connection with all the leading literary men of Germany, and his house at Halberstadt became the centre of a circle of worshippers, over whom Father Gleim, as he was generally called, reigned supreme arbiter of taste. Gleim's permanent fame rests, however, on his war songs, 'Kriegslieder,' Berlin, 1778, the intense nationality and bitter anti-Gallican spirit of which have given them a new spring of popularity since the outbreak of the present war with France. Gleim was an ardent apostle of German unity, and his songs for the people, 'Lieder für das Volk,' and poems for the time, 'Zeitgedichte,' Berlin, 1789—1803, as well as his war songs, did much to extend and deepen the feeling among his countrymen. His 'Halladat, oder das rothe Buch,' Halberstadt, 1774, is a religious poem which has found comparatively few readers. His Songs and Fables for Children was a posthumous publication, 'Fabeln und Erzählungen, goldene Sprüche und Lieder für Kinder,' Halberstadt, 1810. His collected works were published at Halberstadt in 7 vols. 1811—13, and have been since several times reprinted in various places. A memoir of him, by W. Körte appeared about the same time, 'Gleim's Leben aus seinen Briefen und Schriften,' Halberstadt, 1811.

GLIDDON, GEORGE ROBERTS, a well-known writer on subjects connected with Egypt, was born in Devonshire in 1809. His father was a merchant in Alexandria, and thither he went to join him when still very young. He himself subsequently became a vice-consul at Cairo. After having resided about twenty-three years in Egypt, he went to the United States, and lectured on Egyptian subjects. During the latter part of his life he was agent for the Honduras Inter-Oceanic Railway Company. He died at Panama, November 16, 1857. With Nott and other writers he wrote 'Types of Mankind,' 4to, Philadelphia, 1854; and 'Indigenous Races of the Earth,' 8vo, Philadelphia, 1857. We also have from him 'Discourses on Egyptian Archaeology,' 8vo, London, 1841; 'Otia Egyptiaca,' 8vo, London, 1849; and 'Ancient Egypt,' 4to, London, 1850; 2nd edit., 1853.

GLINKA, SERGY NIKOLAEVICH [E. C. vol. iii. col. 123] died at Moscow, in 1847. Of the death of his brother, THEODOR NIKOLAEVICH GLINKA, we find no definite account, though he is referred to as deceased.

*GLOCKER, ERNST FRIEDRICH, mineralogist, was born May 1, 1793, at Stuttgart. During his earlier career he studied theology at Tübingen, and entered the Church, practising as the clergyman at Aalen for several months. Owing, however, to his desire for natural history pursuits, he relinquished his ecclesiastical appointments, and attended at Halle, Berlin, and Breslau for the purpose of studying botany and mineralogy. At the last-mentioned place he was appointed professor of mineralogy in the University, and keeper of the collection of minerals. One principal feature of his writings is, that they illustrate the geology and mineralogy of Silesia and Moravia. Amongst the more noteworthy are 'Grundriss der Mineralogie,' 8vo, Breslau, 1821; 'Geognostische Beschreibung der preussischen Oberlausitz theilweise mit Berücksichtigung der Sächsischen Antheile,' 8vo, 1857; 'Beiträge zur mineralogischen Kenntniss der Sudetenländer insbesondere Schlesiens,' 8vo, 1827; 'Mineralogische Jahreshefte,' 8vo, 2 vols., 1835—1843; 'Handbuch der Mineralogie,' 8vo, Nürnberg, 1831; 'Versuch einer Charakteristik der Schlesisch-mineralogischen Literatur,' 2 vols. 4to, Breslau, 1827—1832; 'Generum et Specierum Mineralium, etc.,' 8vo, Halle, 1847. His scientific papers in the Royal Society's 'Catalogue of Scientific Papers' number sixty.

GLYNN, JOSEPH, civil and mechanical engineer, was born at Newcastle-on-Tyne, February 6, 1799; his father was an iron-

founder, and also a shipowner. Making many voyages to sea in early life, young Glynn obtained a knowledge of ships which was afterwards useful to him. When just of age, in 1820, he commenced business as a mechanical engineer, constructing steam engines; and a new gas-work, which became a model work, followed afterwards. He next became engineer to the Butterley Iron Works, Derbyshire, where for twenty-five years he had the chief management in the construction of the numerous steam-engines, locomotives, marine engines, mining engines and machinery, steam dredges, iron roofs, mills, &c., for which that company has so high a repute. He executed large works at Sheerness dockyard, made the iron dam used during the building of New London Bridge, sent out a completely-fitted iron-work to Spain, and drained many thousand acres of fen land by steam power, using a scoop-wheel invented by himself, and largely employed since by other engineers. As a member of the Institution of Civil Engineers, he prepared papers on the Panama and Suez Canals, which gained for him the Telford Medal. In 1836 the Society of Arts awarded him their Gold Isis Medal, for his paper on 'The Application of Steam Power to Draining Fens,' which was afterwards translated into French, German, and Dutch. His 'Treatise on Cranes,' in 'Weale's Series,' had a large sale, and became at once a work of authority. In 1838 Mr. Glynn was elected Fellow of the Royal Society. Among the papers communicated by him to the Institution of Civil Engineers were the following:—'On a Sawing Machine for Cutting off Railway Bars;' 'On the Use of Mica as a Substitute for Glass in Workshop Windows;' and 'On the Causes of the Fracture of Railway Axles.' He also wrote papers on Turbines and on Water-Pressure Engines for the British Association. He was much consulted on arbitrations and by Parliamentary Committees on matters relating to civil engineers. After the Hudson exposures, Mr. Glynn was for two years chairman of the Eastern Counties (Great Eastern) Railway Company. He died on the 6th of February, 1863.

GMELIN, LEOPOLD [E. C. vol. vi. col. 995].

GNEISENAU, AUGUST WILHELM ANTON NEITHARDT, GRAF VON, a distinguished Prussian soldier and field-marshal, was born on the 27th of October, 1760, at Schilda, and in 1777 became a student of the University of Erfurt. In 1780 he entered the Austrian service, and, joining the army of the Margrave Alexander of Anspach-Baireuth, fought under the English colours in America. Here his career had scarcely opened when peace was concluded, and he returned with little more than the rudimentary idea of a popular army, which he afterwards elaborated in the interest of Prussia, into whose service he passed upon his arrival in Europe. In 1790 he was promoted to a staff captaincy, and took part in the Polish campaign in 1793 and 1794. The originality of his professional views, and the innovations which he advocated, barred his advancement, until the reverses of the Prussian arms in 1806, which Gneisenau had predicted, induced a greater tolerance of novelty on the part of the Prussian commanders. He was promoted to a majority in 1807, and was sent to Colberg, the command of which he took from the incapable hands of General Lucardon, and the defence of which he successfully conducted until the peace of Tilsit, July 8, 1807. During the siege he had been promoted to the rank of colonel, and in September following was made chief of the corps of engineers.

In 1809 Gneisenau was employed on a secret diplomatic mission to England, which occupied him for four years, at the end of which he returned to Prussia with promises of assistance from the British cabinet. He was now anxious for military employment; and, having received the rank of major-general, occupied himself, in concert with Blücher, in the organisation of the Landwehr, or militia of reserve, and the "Tugendbund," which was instituted to neutralise French influence in Germany. In the campaign of Blücher, it was Gneisenau who, although his subordinate, took the initiative in strategy, especially at the battles of Katzbach and Mookeren. He was made lieutenant-general after the battle of Leipzig, and after the peace of 1814 attained the grade of a general and the rank of a count. On the return of the Emperor Napoleon from Elba, Gneisenau became head of the staff to Blücher, and was mainly instrumental in accomplishing the opportune juncture of the Prussian troops with the British at Waterloo. It was he also who conducted the pursuit of the French when they fled from the field as beaten fugitives. He was now appointed a minister of State, and in that capacity took part in the conclusion of peace; and after having held for a few months the command of the army of the Rhine, retired to his estates. In 1825 he acquired his

ultimate promotion as field-marshal, and in 1831, during the time of the Polish insurrection, was commander-in-chief of the army of the East. He died of cholera on the 24th of August, 1831, whilst professionally employed in the Grand Duchy of Posen.

* GODRON, DOMINIQUE ALEXANDRE, a French botanist, born in the early part of the present century, was principally educated at Montpellier. He is dean of the faculty of science and professor of natural history at Nancy. His principal works are—'Flores de Lorraine,' 3 vols. 12mo, Nancy, 1843—4; 2nd edition, 1853; 'Flores de France,' 6 vols. 8vo, 1848—1856, in which he was assisted by M. Grenier; 'De l'espèce et des races dans les êtres organisés, et spécialement de l'unité de l'espèce humaine,' 2 vols. 8vo, Paris, 1859. He has also written numerous articles for the 'Mémoires' of the Royal Society of Sciences at Nancy. Of these may be mentioned his papers on '*Rubus*,' in the volumes for 1842 and 1849; his account of the plants at Port Juvenal, which have established themselves, although of foreign origin, in the volume for 1853; his experiments on *Aegilops* in the volumes for 1854, 1855, and 1858; his paper on the botanical geography of Lorraine, in the volume for 1862. His later papers relate to hybridity, the buds of plants, and ethnological remarks on the Prussians.

GOEPPERT, HEINRICH ROBERT, palaeophytologist, was born July 25, 1800, at Sprottau, Silesia. He received his education partly at Breslau, and partly at Berlin. In 1831 he was appointed an assistant professor in Breslau university, and was shortly afterwards full professor. His writings relate chiefly to fossil plants and to coal formations. A large proportion of them are contributions to scientific periodicals, and the few which have not appeared in that form are for the most part descriptions of the museum and garden at Breslau, and some small botanical papers. His scientific papers are upwards of 200 in number, and many of them are very long. Of these the following may be specified:—'Beobachtungen über die Blüthenzeit der Gewächse im Königl. botanischen Garten zu Breslau,' in the 'Nova Acta Acad. Cæs. Leop. Car.' xv. pp. 385—421 (1831); 'Die fossilen Farrenkräuter,' xvii. (1836), with 44 plates; 'Ueber die fossile Flora der Quadersandstein-Formation in Schlesien,' xix. pp. 97—134 (1842); xxii. pp. 353—368 (1847); 'Fossile Pflanzenreste des Eisensandes von Aachen,' xix. pp. 135—160; 'Ueber die fossile Flora der Gypsformation zu Deichsel in Oberschlesien,' xix. pp. 367—378; 'Ein Beitrag zu Flora des Uebergangsgebirges,' xix. pp. 379—382. He contributed two prize memoirs to the 'Naturkundige Verhandlung' of the Holland Academy of Science at Haarlem—one is 'Ueber die Entstehung der Steinkohlenlager aus Pflanzen,' in vol. iv. p. 1—298 (1848); the other is a 'Monographie der fossilen Coniferen,' in vol. vi. (1850). Amongst his papers in the 'Zeitschrift der deutschen Geologischen Gesellschaft' are 'Ueber die Stigmaria ficoides,' iii. pp. 278—302 (1851); 'Ueber die Braunkohlenflora des nordöstlichen Deutschlands,' iv. pp. 483—507 (1852). In 'Palaeontographica' he has papers entitled 'Beiträge zur Tertiärfloreschlesiens,' vol. ii. p. 259—282 (1852); 'Die fossile Flora der Permischen Formation,' xii. (1864—5). In 1869 he discovered what he considered to be traces of plants enclosed within certain diamonds, indicating the aqueous origin of these precious stones.

GOGOL, NIKOLAY IVANOVICH [E. C. vol. vi. col. 996].

GOLDFUSS, GEORGE AUGUST, palaeontologist, was born at Thurnau, near Baireuth, April 18, 1782. His studies were prosecuted at Berlin and Erlangen. In 1818 he proceeded to Bonn, where he became curator of the geological and palaeontological museum, and professor of zoology at the university. His literary productions relate to zoology and palaeontology, but the more important are those which deal with the fossils of Germany. One of his earliest works was 'Enumeratio insectorum eleutheriorum Capitis Bonæ Spei, totiusque Africae, etc.,' 8vo, Erlangæ, 1805. He also wrote some good accounts of the bones in Gailenreuth cave; and of the caves of Muggendorf, with the bears and other mammalian remains yielded by them. In the 'Nova Acta Acad. Cæs. Leop.,' x. pp. 455, 474—502 (1821); xi. pp. 449—490 (1823) he gives numerous details respecting fossil mammals, and in the volume for 1831 is a similar paper on fossil reptiles. In 1847 he was the first to describe some of the earlier reptiles found in the German coal measures in his 'Beiträge zur vorweltlichen Fauna des Steinkohlengebirges,' 4to, Bonn, 1847. It was for these he founded the genus *Archegosaurus*. He is, however, best known for his 'Petrefactæ Germaniæ,' fol. 'Düsseldorf, 1826—1844. In conjunction with Gustav Bischof, he wrote 'Physikalische-statistische Beschrei-

bung des Fichtelgebirge,' 2 vols. 8vo, Nürnberg, 1817. He died, October 2, 1848.

GOLDSCHMIDT, HERMANN, who combined in a remarkable way the abilities of a painter and an astronomer, was born at Frankfurt, June 17th, 1804. Brought up to a commercial life, he spent his leisure hours in the study of languages and painting; and at length acquired so strong a taste for the latter as to give up the counting-house for the studio. After a sojourn at Munich, where he studied under Cornelius and Schnorr, he went to Paris, and became gradually known as an exhibitor of poetical subjects, and occasionally of landscapes, at the Salons. Being naturally of weak frame and health, he was affected in middle life with a kind of melancholy; and, to divert his thoughts into some new channel, he went to hear Leverrier lecture at the Sorbonne on the lunar eclipse of 1847. This incident gave a new turn to his life. Excited by the novelty and beauty of the subject, he set about studying astronomy; and, obtaining a telescope of very moderate power, he began to watch the heavens at night from the window of his painting room, which was at the top of a house in the Quartier Latin. His acuteness of vision and accuracy of observation must have been great, for he discovered the planetoidal or asteroidal character of minute specks of light which are usually detected only by the aid of much larger telescopes. His assiduity was rewarded, on the 15th of November, 1852, by the discovery of the asteroid *Lutetia*; and during the next nine years he added thirteen more to the group. As no other observer has discovered so large a number of asteroids as this, it may be well to give a list of them:—

Lutetia, Nov. 15th, 1852.
Pomona, Oct. 26th, 1854.
Atalanta, Oct. 5th, 1855.
Harmonia, March 31, 1856.
Daphne, May 22, 1856.
Nysa, May 27, 1857.
Eugenia, June 27, 1857.
Melete, Sep. 9, 1857.
Doris, Sep. 19, 1857.
Pales,
Europa, Feb. 6, 1858.
Alexandra, Sep. 10, 1858.
Danaë, Sep. 19, 1860.
Panopea, May 6, 1861.

He was the only astronomer who discovered two asteroids in one day. Another series of observations undertaken by Goldschmidt related to the smaller stars contained in the great Berlin star maps. His indefatigable examination of the zone to which those stars belong enabled him to fill up many deficiencies, by defining the places of numerous small stars of the ninth and tenth magnitude, not previously included in the maps. The scarcely-discernible body known as the companion to Sirius, which revolves with that star round a common centre of gravity, was the subject of a paper by M. Goldschmidt in the 'Comptes Rendus' for 1863, 'Nouveaux Compagnon de Sirius.' This active astronomer, whose later years were almost wholly engaged in making observations and writing records of them, died September 11th, 1866.

GOMPERTZ, BENJAMIN, was born March 5th, 1779, of a Dutch Jewish family, named Cohen. His father was a diamond merchant. Benjamin had an early turn for mathematics, and at the age of eighteen became a member of the Old Mathematical Society of Spitalfields, of which he was president when it merged in the Astronomical Society. He became a member of the Stock Exchange, and in 1810 married the sister of Sir Moses Montefiore. In 1823 he lost his only son, which produced such a depression that he gave up business; and his friends, seeing that retirement acted injuriously on him, persuaded him to become actuary of the Alliance Office, which, it is said, his friends founded for the purpose of procuring him employment. After his retirement in 1848 he fell into a state of bodily debility, but continued to work at mathematics, of the old English school of which he was called the last member. He was a genuine disciple of the 'Ladies' Diary' and the 'Mathematical Companion.' He was also the last of the fluxionists, and used Newton's notation to the day of his death. He never used the abbreviations $\log. x$, $\sin. x$, &c. It was always logarithm of x in full, sine of x , &c. He had a paper in the 'Transactions of the Royal Society' containing his discovery of the function which so nearly gives the law of human life, a law which stands alone as capable of physiological enunciation; it is, "the power to oppose decay loses equal proportions in equal times;" add that the constants undergo nearly sudden changes, and a mathematician is able to re-establish the whole theory.

Mr. Gompertz became a fellow of the Royal Society in 1819 and died 14th July, 1866.

GOODALL, EDWARD [E. C. vol. iii. col. 144]. This excellent engraver died at his residence in the Hampstead Road, April 11, 1870, in his 75th year.

GOODSIR, JOHN, zoologist, was born March 20, 1844, at Anstruther, Fifeshire. He studied at Edinburgh under Knox and Monro, and formed one of a band of students, many of whom afterwards rose to distinction, such as E. Forbes, Dr. George Wilson, and others. Some of his earlier papers on the dentition of the ruminants and man, and on the secretions of various glands, attracted sufficient notice to procure his appointment (1841) as curator of the Museum of the Royal College of Surgeons of Edinburgh, and subsequently, 1844, as demonstrator of anatomy in the University of Edinburgh. In 1846 he succeeded Monro as professor of anatomy. For the last ten or twelve years of his life he was afflicted with a paralysis which deprived him of much of his former activity, both mental and bodily. He died November 6, 1867. As a lecturer he acquired considerable fame, his class being attended by students from all parts of the British islands, and from many of the colonies; while numbers who had already attended the classes of Meyer of Zurich, Hyrtl of Vienna, Kölliker of Würzburg, and Henle of Berlin, were amongst his audience. His career has been sketched and his papers collected in 'The Anatomical Memoirs of John Goodsir; edited by W. Turner,' 2 vols. 8vo, Edinburgh, 1868.

GOOGE, BARNABY, celebrated as a poet and translator, was born about 1540, at Alvingham, in Lincolnshire, and was educated at Christ's College, Cambridge, and at New College, Oxford. Leaving the University, he travelled through France to Spain, and, returning to England about 1562, became a retainer of his relative, Sir William Cecil. In 1563 he was one of the gentlemen-pensioners of Queen Elizabeth; and, in 1570 and 1577 respectively, was resident at Staple Inn and at Kingston. He died in some unascertained year later than 1588. His works comprise, 'The Zodiacke of Life,' written by the godly and zealous poet, Marcellus Palingenius Stellatus, wherein are conteyned twelve Bookes disclosing the heynous crimes and wicked vices of our corrupt Nature, and plainly declaring the pleasant and perfit pathway unto eternal Lyfe, besides a number of digressions both pleasaunt and profitable, newly translated into English verse, 4to and 8vo, London, 1565; revised editions, 4to, 1576 and 1588, of which 'The First Thre Bokes' and 'The First Syxe Bokes,' had been separately published in 8vo, London, 1560, and 8vo, London, 1561; 'Eglogs, Epytaphes, and Sonnetes,' 12mo, London, 1563, 4to, 1570; 'The Popish Kingdome, or Reigne of Antichrist; written in Latin Verse by Thomas Naogeorgus (Kirchmayer), and Englyshed by Barnabe Googe,' 4to, London, 1570, with which was printed 'The Spiritual Husbandrie of Thomas Naogeorgus,' in an English version, and with a Dedication to Queen Elizabeth; 'Foure Bookes of Husbandrie, collected by M. Conradus Herestadius, counsellor to the high and mighty Prince, the Duke of Cleve: containing the whole Art and Trade of Husbandrie, Gardening, Graffing, and Planting, with the Antiquities and Commendations thereof. Newly Englyshed and increased by Barnabe Googe, Esquire,' 4to, London, 1577, 1578, 1586, 1594, &c.; 'The Proverbes of the noble and worthy souldier Sir James Lopez de Mendoza, Marquis of Santillana, with the Paraphrase of D. Peter Diaz, of Toledo, wherein is contained whatsoever is necessarie to the leading of an honest and virtuous Life; translated out of Spanishe,' 8vo, London, 1579; 'A New Yeares Gift, dedicated to the Pope's Holinesse, and all Catholikes addicted to the See of Rome,' 4to, London, 1579. Googe likewise translated into English the Georgics of Virgil, and Aristotle's Table of the Ten Categories.

GORDON, GEORGE, LORD, the third son of Cosmo George, third duke of Gordon, was born in London, most probably in January, 1752, on the 27th of which month he was baptized. He entered the Royal Navy, in which he served some years; and, after his retirement, was elected, in 1774, to the House of Commons as member for Ludgershall, in Wiltshire, and spoke so often, that it was said "there were three parties in Parliament,—the Ministry, the Opposition, and Lord George Gordon." He took the lead of an association formed in Scotland to oppose the relaxation of the penal statutes against the adherents of the Church of Rome, the more vulgar and violent members of which, in February, 1780, broke out into tumultuous and riotous proceedings at Edinburgh and Glasgow. Mainly through his exertions, a spirit was excited in London as hostile to the repeal of those laws as that which had appeared in Scotland. On the 4th of January a deputation from the "Protestant Association," of which Lord

George was the patron or president, waited on Lord North, to request him to present a petition to Parliament against the law which had passed in favour of the English catholics; but to this request his lordship replied by an absolute refusal. During the ensuing session, Lord George frequently interrupted the business of the house by vexatious divisions, and the violent and irrelevant introduction of topics relative to religion, and the danger from popery. On the 2nd of June, the members of the Protestant Association assembled to the number of several thousands in St. George's Fields, and proceeded to the House of Commons for the purpose of delivering their petition, whilst Lord George Gordon vehemently pressed a motion in furtherance of their demands, which was, however, defeated by a majority of 192 votes against 6. The mob dispersed on the expostulation of a magistrate who arrived at the head of a body of soldiers; but proceeded to the demolition of Romish chapels in Lincoln's Inn Fields and Golden Square, and on several successive days resumed their work of plunder and demolition. Newgate and other places of confinement were burnt, the prisoners having been first released; and, amidst the scandalous scenes of riot and conflagration, 30 fires were observed blazing at one time, 210 persons were shot, and 75 died of their wounds, besides other casualties arising from the fall of houses, and excesses incidental to the general disorder. Amongst other dwellings, the house of Lord Mansfield, the Chief Justice, was destroyed. After tranquillity had been restored, Lord George was apprehended, and committed to the Tower on the 19th of June, on a charge of high treason. He was brought to trial on the 5th of February, 1781, when he was defended by Erskine with great ability, and at a quarter past five on the following morning, the jury returned a verdict of "not guilty." A special commission was issued for the trial of a great number of the rioters who had been apprehended, many of whom underwent the last rigour of the law.

In May, 1786, Lord George was excommunicated by the Archbishop of Canterbury, for contempt, on account of his refusal to appear in court as a witness in a trial, and in 1787 he was convicted of libelling the Queen of France and the French Ambassador. He sought refuge in Holland at the beginning of 1789, but was arrested there, and brought back to this country, to become for the rest of his life a prisoner in Newgate, where he died on the 1st of November, 1793, having in his latter years embraced the Jewish religion, with the members of which it was his last regret that he could not be interred.

GORDON, SIR JOHN WATSON, R.A. [E. C. vol. iii. col. 146]. This distinguished artist died on the 1st of June, 1864, aged 74.

GORE, MRS. CATHERINE GRACE, daughter of Mr. Moody, a wine merchant of East Retford, Nottinghamshire, was born in that town in 1799. In 1823 she was married to Captain Charles Arthur Gore; and from that time was actively engaged in writing and publishing novels and tales for at least thirty-six years, her 'Theresa Marchmont, or the Maid of Honour,' appearing in 1823, and her 'Sir Roger de Coverley's Picture Gallery' in 1859. Works produced with such facility were not likely to be of much value, but they were considered to be faithful pictures of aristocratic life; among fashionable people they had their day of popularity, and the authoress holds a certain place in the history of current literature. Here it will be enough to give the titles of her novels:—'Mrs. Armytage,' 'Men of Capital,' 'The Cabinet Minister,' 'Cecil,' 'Richelieu,' 'Hungarian Tales,' 'The Balsam Seller of Thurotzer,' 'The Hungarian Maiden,' 'The Fair of May Fair,' 'Mothers and Daughters,' 'The Opera,' 'The Courtier,' 'Pin Money,' 'The Heir of Selwood,' 'The Soldier of Lyons,' 'The Hamiltons,' 'Women as They Are,' 'The Ambassador's Wife,' 'The Banker's Wife,' 'The Birthright,' 'Castles in the Air,' 'The Dean's Daughter,' 'The Débutante,' 'The Diamond and the Pearl,' 'The Dowager,' 'Fascination,' 'Female Domestics,' 'Greville,' 'Heckington,' 'The Lost Son,' 'A Life's Lesson,' 'The Lover and the Husband,' 'Mamma,' 'The Man of Fortune,' 'Mary Raymond,' 'New Year's Day,' 'Peers and Parvenues,' 'Polish Tales,' 'The Popular Member,' 'Preferment,' 'Pique and Prejudice,' 'The Royal Favourite,' 'Self,' 'The Snow Storm,' 'The Two Aristocracies.' Her works were increased to nearly seventy in number by the addition of 'The School for Coquettes,' a comedy; 'Lord Dacre of the South,' a tragedy; a translation of 'Picciola,' 'A Good Night's Rest,' a farce; 'The Maid of Croissy,' a drama; 'King O'Neil,' a comedy; 'Historical Travels,' 'Modern Female Life,' 'The Tuileries,' 'Sketches of English Character,' the editing of 'Heath's Picturesque Annual' in 1832 and following

years, &c. Mrs. Gore died at Lynwood, Hants, on January the 27th, 1861.

GORI, ANTONIO FRANCESCO, an eminent Italian archaeologist, was born at Florence, December 9th, 1691; studied for the church, and was ordained priest in 1717. Several of his relatives were artists, and Gori, without neglecting his clerical duties, was led to pay particular attention to the arts and antiquities of Florence, in which he was encouraged and assisted by Fontanini, Archbishop of Florence, the Emperor Francis, Scipio Maffei, and other distinguished persons. His erudition was remarkable, and his industry unbounded; he was resorted to as the chief authority in his class of studies by learned men from all parts of Europe, and was a member of the principal academies and learned societies. He not only studied antiquities and transcribed inscriptions, but formed a considerable collection of objects of antiquity. In 1735 he founded the Columbarian Academy for the study of art, science, and literature. He was professor of history at the University of Florence, and in 1746 was appointed prior of the Baptistery of San Giovanni. He died at Florence on the 21st of January, 1751. Gori's works, which are very numerous, display extraordinary learning and diligence, and as collections of materials are invaluable; but he was deficient in critical acumen, wanting in precision, and negligent in style. The following are his more important works, but many of his monographs and dissertations are valuable: '*Inscriptiones antiquæ Græcæ et Romanæ, quæ exstant in Hetruriæ urbibus, cum notis Salvani*,' 3 vols. fol. Florence, 1726—44, more nearly superseded by later publications than perhaps any other of Gori's larger works; '*Museum Florentinum, exhibens insignia vetustatis monumenta, quæ Florentiæ sunt in Thesaurio Mediceo*,' with a large number of excellent engravings, 12 vols. large fol. Florence, 1731—66, a magnificent work, of which, however, Gori completed only the first six volumes: it comprises—1. Engraved Gems, 2 vols.; 2. Coins and medals, 3 vols.; 3. Statues, 1 vol.; 4. Portraits of painters, 4 vols., with a supplement to the portraits, by Ant. Pazzi, 2 vols.; '*Museum Etruscum, exhibens insignia veterum Etruscorum monumenta*,' 3 vols. fol. with about 300 engravings, Florence, 1737—43, by far the most important work which had up to that time appeared on the subject; '*Vita di Michel-Angelo Buonarroti da Arcanico Condivi*,' fol. Florence, 1746; '*Memorie di varia erudizione della Società Columbaria*,' 2 vols. 4to, Florence, 1747—52; '*Symbolæ litterariæ; opuscula varia, philologica, scientifica, antiquaria complectentes, ex auctoribus diversis*,' 10 vols. 8vo, 1748—53; '*Thesaurus Gemmarum antiquarum astriferarum*,' 3 vols. fol., with 200 engravings, Florence, 1750. His '*Columna Trajana*,' large fol. 18 plates, Amsterdam, 1752; '*Thesaurus veterum Diptychorum consularium et ecclesiasticorum*,' edited by J. B. Passeri, 3 vols. fol., with many engravings, Florence, 1759, the basis of all subsequent investigations on this very curious and suggestive subject; and '*Historia Glyptographica*,' 2 vols. fol. Florence, 1767, were posthumous publications. Besides his other dissertations already referred to, and some theological writings, Gori completed the catalogue of the MSS. in the Medicean Library commenced by Asseman, fol. Florence, 1744.

GORTSCHAKOFF [E. C. vol. iii. col. 150]. PRINCE PETER GORTSCHAKOFF, died at Moscow on the 18th of March, 1868. PRINCE MICHAEL GORTSCHAKOFF, who from the termination of the Crimean war held the office of Governor of Poland, died at Warsaw on the 30th of May, 1861. By his express desire his remains were carried to Sebastopol and interred in the place he had so bravely defended.

* GÖSCHEN, GEORGE JOACHIM, RIGHT HON., an English statesman of German extraction, eldest son of the late William Henry Göschén, a merchant of London, was born on the 15th of August, 1831; and was educated successively at Rugby and at Oriel College, Oxford, where he was first-class in classics in 1853. He was for some time a partner in the firm of Fröhling & Göschén, of Austinfriars; but quitted his commercial avocations in order to devote himself unreservedly to political, and especially to official, life. He was first returned to Parliament as one of the Liberal members for the City of London, in May, 1863, for which he was re-elected in 1865 and 1866. His financial reputation was established by the publication of his '*Theory of the Foreign Exchanges*,' 8vo, London, 1864, which went through five editions in the first year of its issue, and of which a French translation, by M. L. Say, appeared with the title of '*Théorie des Changes Étrangers*,' 8vo, Paris, 1866. He took office on the 20th of November, 1865, as Vice-President of the Board of Trade; and in January, 1866, became Chancellor

of the Duchy of Lancaster, which he vacated on the retirement of Earl Russell's ministry in July of the latter year. His financial ability was signalled by the acuteness with which he canvassed, as a member of the Select Committee which sat in July, 1868, the details of Mr. Ward Hunt's Bill "to enable Her Majesty's Postmaster-General to acquire, work, and maintain Electric Telegraphs." In December, 1868, he joined the Gladstone administration as President of the Poor Law Board, in which capacity he has displayed great vigour and accuracy in the collection of statistics and the adoption of measures for the diminution of pauperism. Mr. Göschén is a deputy-lieutenant for the city of London, and was formerly a governor of the Bank of England. He was sworn a member of the Privy Council in 1866. A few of his more important speeches have been published; as for instance, his '*Speech on the Oxford University Tests Abolition Bill*, June 14, 1865,' 8vo, London, 1865; and his '*Speech on Bankruptcy Legislation and other Commercial Subjects*,' &c., 8vo, London, 1868.

GOTTSCHED, JOHANN CHRISTOPH, a celebrated German author, was born at Judithenkirch, near Königsberg, Prussia, February 2nd, 1700. After receiving elementary education under his father, a Protestant pastor, he was sent at the age of 14 to Königsberg University, to complete his studies. When grown up to manhood, he fled from Königsberg to Saxony, in order to escape from the Prussian military system, and settled at Leipzig, where he passed the rest of his life. He educated the sons of Mencke. He was appointed extraordinary professor of philosophy at Leipzig University in 1730, ordinary professor of logic and philosophy in 1734, and later in life he was made decemvir of the University and dean of the Faculty of Philosophy. He was at different times a member of several literary societies at Leipzig; such as the '*Poetische Gesellschaft*,' the '*Deutsche Gesellschaft*,' and the '*Gesellschaft der freien Künste*.' As a critic of the German language, Gottsched came by degrees to assume a tone of dogmatism and assumption that raised much opposition outside his own circle, where he held supreme and undisputed sway. The literature of Germany at the time was at a low ebb; the language and style had become vitiated, and had lost their distinctive German character. He sought, by his lectures and writings, to effect a reform; and this he did by setting up Racine, Boileau, and other French writers, as models for the imitation of his countrymen. His opponents, and especially Bodmer and his associates, laughed at his theories, mocked his pedantic style, and burlesqued his poetry; and he consequently within his lifetime lost much of his influence, and for long his name was used as a synonym for a pompous, mechanical pedant. But it is now acknowledged that, unimaginative and unpoetical as was his mind and shallow as was his philosophy, he yet did good service to the literature of Germany by enforcing the necessity of purity, correctness, and refinement of style. Lessing, who was one of those who laughed at Gottsched, did much to introduce a richer and more vigorous way of writing; but Gottsched cleared the way for writers like Lessing, Schiller, and Göthe. The attacks on Gottsched as critic, philosopher, and poet, in no way injured his position at the University, which, indeed, was never better than during the last months of his life. He died September 12, 1766. His voluminous works on philosophy, poetry, and general literature, comprise, among others, the following:—'*Die vernünftigen Tadlerinnen*,' 2 vols. 8vo, Leipzig, 1725; '*Ausführliche Redekunst*,' 1728; '*Versuch einer kritischen Dichtkunst*,' 1730; '*Beiträge zur kritischen Historie der deutschen Sprache, Poesie, und Beredsamkeit*,' 8 vols., 1732—44; '*Die deutsche Schaubühne nach den Regeln und Exempeln der Alten*,' 6 vols. 1741—45; '*Neuer Büchersaal der schönen Wissenschaften und freien Künste*,' 10 vols., 1745—54; '*Deutsche Sprachkunst*,' 1748; '*Das Neuste aus der anmuthigen Gelehrsamkeit*,' 12 vols., 1751—62; '*Nöthige Vorrath zur Geschichte der deutschen dramatischen Dichtkunst von 1450*,' 2 vols., 1757—65; '*Der Sterbende Cato*,' a tragedy. His philosophy and poetry are alike poor when tested by later German standards; but they were of some importance in his day.

GOUGH, HUGH, VISCOUNT [E. C. vol. iii. col. 155.] Lord Gough was one of the first to be created Knight Commander of the Order of the Star of India on the institution of that order in 1861, and in 1866 was made Grand Cross. In 1862 he was nominated Field Marshal. He died at his residence, St. Helena, near Dublin, on the 2nd of March, 1869, in his 90th year.

GOULD, AUGUSTUS ADDISON, a zoologist, was born at New Ipswich, in the State of New Hampshire, North America, April 22nd, 1805. He graduated at Harvard College, in

1825; and, in 1830, commenced his medical practice, which he continued to follow until his death at Boston, September 15th, 1866. Most of his papers are in the 'Proceedings of the Natural History Society of Boston,' and are chiefly of a diagnostic character. He was a conditor with Agassiz in 'Outlines of Comparative Physiology,' 8vo, 1847; and 'Principles of Zoology,' 12mo, 1851; and with Kidder in 'The History of New Ipswich,' 8vo, 1852. He edited Binney's 'Terrestrial Molluscs of the United States,' 3 vols. 8vo, 1851, 1859; and, for many years, the Registration Reports of Massachusetts. He contributed notices of the shells to several of the reports of the exploration expeditions, such as those by Wilkes and Blake; and he also wrote several independent works: amongst others, 'Otia Conchologica,' 8vo, 1862; and, what may be considered his principal work, a 'Report on the Invertebrates of Massachusetts,' 8vo, 1841, 2nd ed. (comprising the Mollusca only), 1870. In the last-mentioned work, every species is figured, and every diagnosis was drawn up from specimens examined by himself. He was a contributor to several medical journals, an active member of numerous scientific, educational, and reformatory societies, and held many offices of trust.

* GOUNOD, CHARLES FRANÇOIS, a French musical composer, was born at Paris, June 17th, 1818. When a young man, studying at the Seminary at Rome, he had some thoughts of taking holy orders; but, on his return to Paris, he determined on a musical life. He studied harmony under Reicha, counterpoint under Halévy, and lyrical composition under Lesueur and Paër. In 1839, he obtained a prize at the Institute for musical composition. In 1841 he was made honorary maître de chapelle of the Chapel of St. Louis; and, two years afterwards, a similar post was given to him at the Church of the Missions Étrangères. In 1852 he became director of the normal course of singing in Paris, known as the "Orphéon," in which he endeavoured to adapt Wilhelm's method to ordinary notation. Gounod is a great admirer of Glück and the classical writers, to whose style his compositions bear more resemblance than those of most French composers. His ambition has been to take some classical subject, and combine modern forms with the system of musical declamation employed by Glück. His chief ecclesiastical compositions are a 'Messe Solennelle,' performed at St. Eustace at the beginning of his musical career; another mass, performed at Rome in 1841; a 'Messe Vocale pour le Carême,' in 1843; and an 'Ave Verum.' But opera is the chief direction which he has taken. In 1851 appeared his 'Sappho,' a grand opera to words by Augier. In 1852, choruses to Ponsard's drama of 'Ulysse,' at the Théâtre Français; 1854, 'La Nonne Sanglante,' a grand opera in five acts; 1855, a symphony; 1856, another symphony; also a cantata on the visit of Queen Victoria to Paris; 1858, music to 'Le Médecin malgré lui'; 1859, the opera on which his reputation chiefly rests, 'Faust'; 1860, 'Colombe'; 1861, 'Philemon et Baucis'; 1862, 'Mireille,' and the 'Reine de Saba'; 1867, 'Romeo et Juliette'; and, in 1869, a recasting of 'Faust' for the grand opera at Paris, with many additions. A chorus for voices and orchestra, 'Dance de l'épée et le vin des Gaulois,' is also among his compositions. His works are marked by skilful harmony, musical erudition, and respect for the true principles of his art. In England his 'Faust' met with an exceptional degree of success, and retains its popularity. In 1866 M. Gounod succeeded M. Clapißon as member of the Académie des Beaux Arts, in the Institute.

GRAHAM, GEORGE, inventor of the pendulum and the escapement known by his name, was born at Horagill, Cumberland, in 1675. At the age of thirteen he came to London, and was placed under Tompion, the celebrated watch and chronometer maker, by whom he was so much valued and esteemed as to be assisted in every way in developing a future position in life, and whom he eventually succeeded in business. He set himself the problem of constructing a compensation pendulum, of which the oscillations should be synchronous in all states of the weather. He experimented on various metals, studied their varying degrees of expansibility under the influence of heat, and speculated how to adopt such a mode of construction as to establish a balance or compensation, leaving the vibrating length of the pendulum always equal. The highly scientific mercurial pendulum was the result of these experiments. A cylindrical glass jar of mercury is connected with a steel pendulum; any increase of heat expands the mercury; it causes it to rise higher in the jar; but at the same time the heat expands the steel, and makes the whole jar take a somewhat lower position; a delicate adjustment causes the rise in the one case to compensate the fall in the other, and the effective vibrating length of the pendulum remains practically uniform. Graham was aware of certain inconveniences

which attend the use of a liquid metal such as mercury; he suggested the compensating action of bars of two kinds of metal; but it was left for Harrison to work out the idea in the gridiron pendulum. Another important invention of Graham's related to escapements for clocks and watches. Clement, in the 17th century, had invented the anchor escapement, as an improvement on the crown wheel and pallets previously in use; but Graham, knowing that Clement's apparatus produced a considerable recoil at every vibration, effectually removed this by a new contrivance, the dead-beat escapement, which has ever since remained in favour. The clock of the Bourse at Paris is regulated by a Graham escapement. Graham was also the most celebrated astronomical instrument maker of his day. He made the great mural quadrant at Greenwich Observatory, also a fine transit instrument, and the zenith sector which Bradley employed in discovering and measuring the aberration of the fixed stars and the velocity of light. He supplied instruments for the French astronomers engaged in the geodesical survey connected with the determination of the figure of the earth. In 1715 he constructed the most complete planetarium known at that time, in which the motions of the heavenly bodies were imitated with great accuracy. Many anecdotes are recorded of the great pride which he took in the excellence of the watches, clocks, chronometers, and instruments made by him. Graham, who was a member of the Society of Friends, and a Fellow of the Royal Society, died November 20th, 1751, and was buried in Westminster Abbey, in the same grave with his former master and friend, Tompion.

GRAHAM, RIGHT HON. SIR JAMES ROBERT GEORGE, BART. [E. C. vol. iii. col. 163]. Sir James Graham continued his political activity, though with some abatement of energy, the consequence of increasing years and failing health. His unpopularity slowly wore away, but he was not again included in any ministerial arrangements, and, indeed, appears to have desired to avoid the labour and responsibilities of office. He continued to represent Carlisle in Parliament till his death, which occurred at his seat, Netherby Hall, Cumberland, on the 25th of October, 1861; he was born on the 1st of June, 1792. Two memoirs of him have appeared: 'The Life and Times of the Right Hon. Sir James R. G. Graham, Bart.,' by Torrens McCullagh Torrens (now M.P. for Finsbury), 2 vols. 8vo, 1863; and 'Life of Sir James R. G. Graham, Bart.,' by Henry Lonsdale, M.D., 8vo, 1868.

GRAHAM, THOMAS [E. C. vol. vi. col. 996], was born in Glasgow, 21st December, 1805. His father was a merchant of that city. He began his education at the primary school, and at nine years of age went to the grammar school, and lastly to the University. In 1826 he took his degree of M.A. His father destined him for the church; but he was so much attached to science, that he opposed his father's wish, and the struggle between two strong wills caused much misery on both sides. The harsh treatment to which Graham was subjected, was mitigated by the tenderness of his mother; and when he became a student in Edinburgh, he satisfied his love of sympathy by communicating in writing to her his thoughts and feelings, and this habit of writing afterwards took the form of a journal, which it is hoped will one day be published. After two years in Edinburgh, he returned to Glasgow, and set up as a teacher of mathematics. He also opened a chemical laboratory, in which he gave lectures. In the winter of 1829—30, he became lecturer in the Mechanics' Institute, from which he was transferred to the Andersonian Institution, as successor to Dr. Ure. Here he continued till 1837, when he succeeded Dr. Turner as Professor of Chemistry at University College (then the London University). He held this appointment until 1855, when he succeeded Sir John Herschel as Master of the Mint. He died at his residence in Gordon Square, on the 15th September, 1869.

Graham was not a fluent speaker. When he first became a lecturer, it is said that he looked like a boy beginning to teach. He was hesitating in his manner, as if it were difficult to find the right word, and was so quiet in his bearing, that few persons would suppose he had that strong enthusiasm which carried him through forty years of original scientific work. But, amidst this want of fluency, and with a weak voice, he was clear and perspicuous, and his instruction was well grounded and thorough. His constitution was so feeble, that in later years he was afraid to visit Scotland except in June or July. His chest was tender, and the accidental exposure to an open window on a warm August day, brought on his final attack.

We must refer to the Arts and Sciences Division for an account of Graham's scientific labours. At the commencement of his career, he seems to have had an intense desire to know the inner structure of matter. His earliest paper, in 1826, is on the

Absorption of Gases by Liquids. In his latest work, he found the metal palladium to absorb 935 volumes of hydrogen gas, and he illustrates the passage of hydrogen through palladium, by comparing it to liquid diffusion through a colloid. His division of solids into colloids and crystalloids, and his process of dialysis, were the result of his numerous experiments on liquid diffusion, and these naturally arose out of many years of study on the diffusion of gases, their transpiration, &c.

In addition to the papers and memoirs written by Graham, he was also the author of a 'System of Chemistry,' which was published in parts; but it was written so slowly, and he parted with his copy so reluctantly that, as the publisher said, to get it was like drawing his blood. His painful anxiety to be correct gives a calmness to his writing, but diminishes the force of his exposition.

As Master of the Mint, he is said to have displayed a vigilance, a knowledge of the work, an amount of industry and energy, and even severity when called for, which astonished all, and especially some of the officials, who had never known such control. He brought about various reforms and economies in the working of the establishment, and introduced the new bronze coinage, which was not only more convenient than that before in use, but produced a large pecuniary profit to the state. After some years of struggle, Graham became Master of the Mint in the sense intended by himself, and he was then able to resume his favourite studies. Some of his finest results, we are told, were obtained by his assistant from carefully prepared and minute written directions, the master apparently seeing the results in his mind's eye, and not often taking the trouble to go upstairs to witness experiments which afterwards delighted the whole scientific world.

Graham became a fellow of the Royal Society in 1836, and received the Copley medal in 1862. He was a Doctor of Civil Law of Oxford, hon. member of the Royal Society of Edinburgh, corresponding member of the French Institute, and of the Academies of Berlin and Munich, and of the National Institute of Washington.

Notwithstanding Graham's brilliant success, he led a retired, quiet life, which to some appeared deeply melancholy; but we would rather say he appeared to us to be uniformly cheerful in his tone and expression, with a quiet and self-possessed manner peculiar to himself. He was seldom seen among the social gatherings of scientific life, and he had few friends out of the family circle of brothers and sisters, for Graham was never married.

GRAHAME, JAMES, a Scottish poet, advocate, and divine, was born on the 22nd of April, 1765; and was educated at the grammar school and the university of his native city, where he much distinguished himself, especially in English and Latin verse. In 1784 he removed to Edinburgh, in order to enter upon the study of law, and was admitted as a Writer to the Signet in 1791. The death of his father, in the latter year, set him free to follow the bent of his own inclination, which had always determined him to the Church; but, owing to the representations of friends, he effected a compromise which seemed to allow him the literary leisure he coveted, by becoming, in 1795, a member of the Faculty of Advocates. In 1797 he contributed, by instalments, to the 'Kelso Mail,' his 'Rural Calendar,' which seems to have been an amended form of various sketches which he had printed and privately circulated whilst at the university, and which, enlarged and improved, were afterwards published in an edition of his collective 'Poems,' 2 vols, 8vo, London, 1807. He next produced his 'Mary Stewart, Queen of Scots; an Historical Drama,' 8vo, Edinburgh, 1801, which is chiefly remarkable for the beauty of some of its descriptive passages. The work by which he is principally remembered at present is 'The Sabbath; a Poem,' 12mo, Edinburgh, 1804, second edition, corrected, and enlarged, by the addition of 'Sabbath Walks,' in Spring, Summer, Autumn, and Winter, 1805, fourth edition, 1806, &c. The first edition was published anonymously. Mr. Grahame at length received ordination at the hands of Bishop Bathurst, of Norwich, on Trinity Sunday, May 10, 1809, and for some time afterwards resided at Chester, which he quitted to undertake the curacy of Shepton, in Gloucestershire. Family affairs summoned him to Scotland in the following year; and, after an unsuccessful candidature for St. George's episcopal chapel, Edinburgh, he was appointed to the chapelry of St. Margaret, Durham, in August, 1810, and a few months subsequently became curate of Sedgfield, in the same diocese. Returning to Glasgow for the benefit of his native air, he died at Whitehill, the residence of his eldest brother, on the 14th of September, 1811. Mr. Grahame's other works include 'The Birds of Scotland;

with other Poems,' 8vo, and 12mo, Edinburgh, 1806; a pamphlet entitled 'Thoughts on Trial by Jury;' 'British Georgics,' 4to, London, 1809, second edition, 16mo, Edinburgh, 1812, a series of poems in which he follows the agricultural phases of the several months of the year, and advocates the claims of the husbandmen themselves to cultivation; and 'Poems on the Abolition of the Slave Trade,' 4to, London, 1810, which was embellished with engravings from paintings by Smirke.

GRAINGER, RICHARD [E. C. vol. iii. col. 165], died on the 4th of July, 1861.

GRANDI, ERCOLE, called **ERCOLE DA FERRARA**, a celebrated Italian painter, was born about 1491, at Ferrara. He was a pupil of Lorenzo Costa, at Bologna, where he continued to reside after Costa removed to Mantua. Ercole Grandi was an able and accomplished, but fastidious artist. He died at Ferrara, in 1531. His chief works were the frescoes in the Garganelli chapel of S. Pietro Martire, Bologna, on which he spent seven years. When the chapel was taken down, many years ago, portions of the frescoes were removed to the Tanara Palace, but have since been brought to England. Genuine works by Grandi are rare. The Dresden Gallery possesses two; and one, No. 73, 'The Conversion of St. Paul,' from the Aldobrandini collection, is in the National Gallery.

* **GRANT, ROBERT, M.A., F.R.S.** [E. C. vol. vi. col. 997.]

* **GRANT, ULYSSES SIMPSON**, a distinguished American general, and the eighteenth president of the United States, was born at Point Pleasant, Clermont County, Ohio, April 27th, 1822. So little promise did he give of ability when a boy, that his mother, who was in humble circumstances, punned upon one of his names by calling him 'Useless.' At the age of seventeen, however, he succeeded in obtaining admission to the Military Academy at West Point, where he grounded himself in those military studies which afterwards proved of such great value to him. He obtained a commission in 1843, and served as second lieutenant on the western frontier, near St. Louis. In 1845 he went to Texas, and served with distinction—first under General Taylor, and then under General Scott—in the Mexican war, being promoted to first lieutenant for gallantry at Molino del Rey, and captain at Chapultapac. In 1852 he served in Oregon. In the following year, having no taste for an idle soldier's life, and believing that there would be a long peace, and consequently little chance of further promotion, he gave up his commission, quitted the army, and established himself as a small farmer and debt collector at St. Louis, Missouri. We hear of him next as a farmer at Galena, in Illinois, in 1859; and here he was when the Civil War broke out, in 1861. On hearing of the surrender of Fort Sumter, he offered his services to the Federal government. He served as aide-de-camp to an officer of volunteers in the neighbourhood, and was then placed in command of the 21st Illinois volunteers; was promoted to the rank of colonel of volunteers in Iowa, and brigadier-general in August. He rendered good service near the Mississippi. With Cairo as a base, he secured Paducah, and with it Kentucky generally; and in November fought the battle of Belmont. Moving to the regular army in 1862, he made an important reconnaissance in the rear of Columbus, captured Fort Henry and Fort Donelson, and compelled the Confederates to evacuate Columbus and Bowling Green. With the rank of major-general, he was engaged at the battle of Pittsburg Landing, or Shiloh, and at the siege of Corinth, being second in command under General Halleck, he led in person the final charge which secured the victory at Pittsburg Landing. In December of the same year he was appointed to supersede General Halleck, who had failed before Vicksburg. By this time he had shown a capacity for strategical combinations which pointed him out as a fitting commander for large armies. In the summer of 1863, he fought a series of five great battles near Vicksburg, which he finally captured on the 14th of July, thereby ensuring the fall of Fort Hudson, and the re-opening of the Mississippi. After defeating General Bragg at Chickamauga, he was appointed (October, 1863) to supersede General Rosecranz, who had been baffled at that place, as commander of all the armies of the West. At length, in March, 1864, he reached the highest point of military distinction, being made commander-in-chief of all the armies of the United States. During this year he fought the terrible campaign against Lee in Virginia, the two generals obstinately contesting every inch of ground near the rivers James, Potomac, and Rappahannock, and on the various roads leading to Richmond. This was followed by the crowning scene, the surrender of Lee, his army, and the city of Richmond, April 9th, 1865,—the virtual termination of the war. When

General Grant visited New York, soon afterwards, he was received with the utmost enthusiasm. During the next two years he did not take a prominent part in politics, being averse to the extreme measures advocated by some of the Northern leaders in relation to the re-organisation of the South, of which Congress had made him military governor. He became, however, Minister of War in 1867, after the dismissal of Mr. Stanton. In the following year, without solicitation on his part, he was nominated Republican candidate for the presidency. His candidature was well received, and he was elected by a large majority in November, 1868; Mr. Colfax being chosen Speaker or Chairman of the Senate, and, as such, Vice-President of the United States. At his installation, in July, 1869, President Grant disclaimed party government; and, in relation to various proposed reforms, observed, "I know no more effective mode of ensuring the repeal of obnoxious laws than their strict execution." During the first year of his Presidency, his government announced their determination to pay the national debt in specie; he rapidly reduced the debt; sent a fleet of observation to Cuba; bestowed some civil appointments under government upon negroes; facilitated the gradual re-admission of the Southern States into the Union; and witnessed the opening of a direct railway, more than 3,000 miles long, from the Atlantic to the Pacific, across the entire breadth of North America, and every inch of it within the territory of the United States. When the war broke out between France and Germany, in July, 1870, President Grant announced his friendly relations towards both belligerents, and his determination to observe neutrality between them. Generally, indeed, his policy appears to be characterised by reserve, narrowness, and the resort to expedients, rather than by breadth and clearness of view and largeness and firmness of purpose. As a civil governor or statesman President Grant is not likely to reach the high rank he has secured as a military commander. His popular influence appears to have been for some time on the wane. Few living men have had so many memoirs of them published as President Grant. The names of Abbott, Badeau, Brisban, Brockett, Cannon, Coppee, Crafts, Dye, Denning, Dana, Havland, Headley, Mansfield, Penniman, Phelps, Lossing, Richardson, Willett, Wilson, fail to exhaust the list of the authors of these memoirs, nearly the whole of which, however, relate to the military achievements of the general.

* GRANVILLE, GRANVILLE GEORGE LEVESON GOWER, EARL [E. C. vol. iii. col. 170]. Lord Granville, who in 1857 obtained the distinction of K.G., continued in his office of Lord President of the Council until February, 1858, and was re-appointed to the same in June, 1859, retiring from it on the downfall of the administration of Earl Russell in June, 1866. He acted as chairman of the commission for the Great Exhibition of 1862. As leader of the Liberal party in the House of Lords, he displayed, in addition to his traditional courtesy, the qualities of firmness and skill; and especially distinguished himself, on the occasion of the introduction of the Suspensory Bill, for the conciseness and comprehensiveness with which he summarised the arguments against the Irish Church. In December, 1868, he returned to office as Secretary of State for the Colonies, in the administration of Mr. Gladstone, in which capacity he continued to carry out the policy of his recent predecessors by withdrawing Imperial troops from Canada and New Zealand, and successfully combated Earl Russell's motion for a committee on colonial administration. On the death of the Earl of Clarendon, Lord Granville was designated by universal opinion as the fittest successor to the deceased Secretary of State for Foreign Affairs; and in this capacity he has had opportunities of vindicating in the House of Lords the course of the English Government with reference to the questions raised by the war between France and Germany, and of replying with logical tact and dignity to the sometimes querulous expostulations contained in the despatches of Count Bernstorff, the minister in London of the North German Confederation, who was aggrieved by a neutrality which he regarded as being practically antipathetic to Germany. His reply, November 10, 1870, to the circular of Count Gortschakoff announcing that the Emperor and Government of Russia no longer hold themselves bound by the Treaty of 1856, has likewise met with general approval alike for the clearness and force of its reasoning and for the firmness, dignity, and courtesy of its language.

Earl Granville's first wife died in 1860, and on the 26th of September, 1865, he married Castalia Rosalind, the youngest daughter of the late Walter Frederick Campbell, Esq., of Islay, N.B.

GRATIOLET, LOUIS PIERRE, physiologist, was born at Sainte Foy, department of Gironde, July 6, 1815. In 1839 he went to Paris, and attended successively at the Stanislas College, at the École de Droit, and the École de Médecine. In 1839 he became a student in the hospitals. In 1842 he was admitted into Blainville's laboratory. In 1845 he took his degree of doctor. In the next few years he constantly acted as Blainville's and Duvernoy's substitute, and as such delivered courses of lectures on comparative anatomy and biology. In 1854 he was appointed assistant naturalist for comparative anatomy in the Museum of Natural History. On the death of I. G. Sainte-Hilaire he acted as a substitute, and in Nov. 1863, was appointed his successor as professor of anatomy, comparative physiology, and geology at the Sorbonne. Having thus gained a position in which he could turn his previous years of hard labour to account, and having established a high reputation as a deep thinker and as an eloquent lecturer, he was suddenly struck with apoplexy, which caused his death, Feb. 16, 1865. He was buried with public honours, and his family provided for by the State. The subject to which he gave most attention, and upon which he is considered to be one of the highest authorities, is the structure and functions of the brain of man and mammals, but he also made researches in various other departments of anatomical science. His best known memoirs are 'Mémoire sur les plis cérébraux de l'homme et des primates,' 4to, Paris, 1855; 'Études anatomiques sur la Térébratule australe,' in 'Journ. de Conchyliologie,' ii. pp. 209—258 (1857); 'Recherches sur l'organisation de système vasculaire dans la Sanguie médicinaire et Aulastome vorace,' in 'An. des Sci. Nat.' xvii. pp. 174—225 (1862); and in conjunction with M. Alix, 'Recherches sur l'Anatomie du *Troglodytes Aubryi*, Chimpanzé d'une espèce nouvelle,' in 'Nouvelle Archives du Mus. d'Hist. Nat.' ii. pp. 1—264 (1866).

* GRATRY, AUGUSTE JOSEPH ALPHONSE, a French theologian, was born at Lille on the 30th of March, 1805, and after a course of study at the École Polytechnique, entered somewhat later than usual upon an ecclesiastical career. In 1841 he was appointed director of the Collège Stanislas, and in 1846 was made almoner to the École Normale Supérieure, a post which he quitted in 1862 for the purpose of devoting himself, jointly with the Abbé Petetot, to the reconstruction of the order of the Oratorians of the Immaculate Conception. He became, in 1861, vicar-general to M. Dupanloup, Bishop of Orleans; and on the 28th of October, 1863, was appointed to the professorship of evangelical morality at the Sorbonne. M. Gratry received the decoration of the Legion of Honour on the 27th of April, 1845; and in 1867 was elected a member of the Académie Française, into which he was formally received in March, 1868.

His works comprise 'Catéchisme Social; ou, Demandes et Réponses sur les Devoirs sociaux,' 16mo, Paris, 1848; 'Lettres et Répliques à M. Vacherot,' 8vo, Paris, 1851; 'Philosophie Logique,' 2 vols. 8vo, Paris, 1855, fifth edition, 8vo, Paris, 1868; 'Philosophie. De la Connaissance de Dieu,' fifth edition, 2 vols. 8vo, Paris and Saint-Germain, 1856; 'Philosophie. De la Connaissance de l'Âme,' second edition, 2 vols. 8vo, Paris, 1857; 'La Philosophie du Credo,' 8vo, Paris, 1861; 'Les Sources: Conseils pour la Conduite de l'Esprit,' 12mo, Paris, 1861; 'La Paix. Méditations Historiques et Religieuses,' 8vo, Paris, 1861; 'Crise de la Foi: trois Conférences philosophiques de Saint-Étienne du Mont,' 1863, 12mo, Paris, 1863; 'Jésus-Christ. Réponse à M. Renan,' second edition, 12mo, Paris, 1864; 'Les Sophistes et la Critique,' 8vo, Paris, 1864; 'Description des Appareils de Maçonnerie les plus remarquables employés dans les Constructions en brique,' 8vo, Paris and Brussels, 1865; a Biography of 'Henri Perreyne,' 8vo, Paris, 1866; 'Petit Manuel de Critique,' 12mo, Paris, 1866; 'La Morale et la Loi d'Histoire,' 2 vols. 8vo, Paris, 1868.

GRAVATT, WILLIAM, was born at Gravesend, Kent, July 14, 1806. His father, Colonel Gravatt, R.E., having been appointed Inspector of the Royal Military Academy, settled at Woolwich, where William studied military and civil engineering. He entered the works of Messrs. Donkin and Co., and was employed for some time at the Thames Tunnel. In 1832 he became engineer to the Calder and Hebble Navigation at Halifax. In 1833 he was elected a fellow of the Royal Society. About this time he invented the level which bears his name, and introduced the system of reading the staff with the telescope instead of trusting to the staff-bearer, a method of working which has superseded other modes of observation. He also contrived an instrument called a Nadir for carrying out a system of levels where a regular staff of assistants cannot be had. In 1844, when

MM. Scheutz brought their calculating machine to this country, Gravatt announced its arrival to the Royal Society, and undertook to explain it; he also visited Paris for the same purpose, and superintended the publication of a volume of Specimen Tables. In 1856 he read a paper before the Royal Society on the gyroscope, and also published a pamphlet on the propulsion of ships by means of a jet of water. Mr. Gravatt died 30th May, 1866, through the accidental administration of an excessive dose of morphia.

* GRAVES, CHARLES, D.D., Bishop of Limerick, was born in Dublin, November 16, 1812. The grandson of Thomas Graves, Dean of Ardfurt, his views were early directed to the church. He entered Trinity College, Dublin, in 1829; won a scholarship in 1832; graduated with honours, and took the gold medal for mathematics in 1834. In 1836 he was elected Fellow of Trinity, and shortly after took orders. His early distinctions were mostly mathematical. His translation of Chasles's memoir on conic sections, with an appendix by himself on spherical coordinates, was adopted as a college class book. In 1843 he was appointed professor of mathematics, and his lectures on the higher branches of algebra and mathematics, including the calculus of operations, excited much admiration. Dr. Graves was a prominent and active member of the Royal Irish Academy, and for several years its secretary. His contributions to its proceedings are numerous and important. Several are on arcs of curves and other refined mathematical theorems; but of more general interest are those on Ogham inscriptions, and other obscure questions in Irish antiquities, on all of which he is a leading authority, and which he has done excellent service in elucidating. A pamphlet he wrote respecting the publication of the Breton Laws, led to the appointment by the government of a Commission for the Publication of the Antient Laws and Institutes of Ireland, of which he is a member, and has been the secretary from its origin. In 1860 he was nominated dean of the chapel-royal, and subsequently chaplain to the household of the lord-lieutenant, and dean of Clonfert. In November, 1866, he was consecrated bishop of the united dioceses of Limerick, Ardfurt, and Aghadoe.

* GRAY, ASA, M.D., a celebrated American botanist, was born at Utica City, New York, November 10, 1810. He studied medicine and graduated at Fairfield College in 1831. He afterwards settled in practice, but having acquired a taste for botany, he studied this science under Professor Torrey at New York. In 1834 he joined the United States exploring expedition as botanist, but resigned this position in 1837, having accepted the professorship of natural history at the University of Cambridge, Massachusetts. Professor Gray has laboured most assiduously at the flora of his native country. His botanical papers are scattered throughout the pages of scientific journals and transactions of societies of the United States, especially the 'Annals of the Lyceum of Natural History of New York,' the 'Transactions of the American Philosophical Society,' and the 'Smithsonian Contributions to Knowledge.' In 1836 he published an introductory work entitled 'Elements of Botany.' This was enlarged in subsequent editions, and was called 'The Botanical Text-Book,' and is extensively employed as a class book in the colleges of America. In the fifth edition, which was published in 1858, and illustrated with over 1300 woodcuts, the title was altered to 'Introduction to Structural and Systematic Botany and Vegetable Physiology.' In conjunction with Dr. Torrey, he commenced in 1838 the publication of 'The Flora of North America.' This work, which contains descriptions of a very large number of new plants, is still in the course of publication. The constantly extending boundaries of the United States into districts of an entirely new character give to this work great importance in relation to the history of the whole vegetable kingdom. In 1848 Professor Gray published a work of less magnitude, embracing descriptions of the plants of the northern states of America, under the title of 'Manual of Botany for the Northern United States.' A second and greatly extended edition of this work appeared in 1856 under the title 'Manual of Botany of the Northern United States; second edition; including Virginia, Kentucky, and all the rest of the Mississippi: arranged according to the Natural System (the Mosses and Liverworts by Wm. S. Sullivan), with 14 plates, illustrating the genera of the Cryptogamia.' He has also published an illustrated botany of the United States, under the title 'Genera Borealia Americana illustrata,' 3 vols. New York, 1848—66. In this work one species of each genus is figured. The extent of the flora of America forbids the possibility of illustrating every species, as has been done so successfully for

many of the limited districts of Europe, as, for instance, the plants of Great Britain. His later works are 'Botany for Young People and Common Schools. How Plants Grow, or Scientific Introduction to Structural Botany. With a Popular Flora, or an Arrangement and Description of Common Plants, both wild and cultivated. Illustrated by 500 wood engravings,' 4to, New York and Chicago, 1867; 'Manual of the Botany of the United States,' second edition. Professor Gray's knowledge of vegetable physiology is extensive, and few men in America have made a more decided impression on contemporary science.

* GRAY, GEORGE ROBERT, ornithologist, was born at Little Chelsea, July 8, 1808. He is a brother of Dr. J. E. Gray, and after studying zoology for several years in the British Museum, he obtained an appointment in the zoological department of that establishment in 1839. He has written numerous papers on butterflies and birds in the 'Annals and Magazine of Natural History,' 'Proceedings of the Zoological Society,' and the 'Zoologist;' but he is best known for his large work entitled 'Genera of Birds,' 1844—49, which embraces a description of most of the genera of birds then known, with lists of the species, and accompanied by 350 plates by D. W. Mitchell. His classification, which is a modification of that by Vigors, has been adopted by many subsequent authors. His numerous lists of birds and lepidoptera in the British Museum have been exceedingly valuable to zoologists. In 1869 he was made assistant keeper in the zoological department of the British Museum.

GRAY, HENRY, anatomist and physiologist, was born about 1823. He was lecturer on anatomy at St. George's Hospital, and in 1852 was elected a fellow of the Royal Society. His writings were not numerous, but the more important won for him a high reputation in his profession. They include a paper 'On the Development of the Ductless Glands in the Chick' ('Phil. Trans.' pp. 295—310, 1852), and another 'On the Structure and Use of the Spleen,' for which he was awarded the Astley-Cooper prize in 1854. His principal independent work is 'Anatomy, Descriptive and Surgical,' 8vo, 1858, fifth edition, 1869. He also contributed several articles to 'A System of Surgery,' edited by T. Holmes. He died June 8, 1861.

GRAY, STEPHEN, a name famous in the early history of electricity; but so little is known of the man that the date of his birth is not ascertained, nor even the correct spelling of his name, for Priestley ('History of Electricity') has it Grey, and Thomson ('History of the Royal Society') spells it Gray. Thomson laments the paucity of biographical information respecting him, and says: "From some observations made by Desaguliers, it appears that his character was very particular, and by no means amiable." Priestley refers to him as "a pensioner at the Charter House," and adds: "No person who ever applied to this study was more assiduous in making experiments, or had his heart more entirely in the work. This will appear by the prodigious number of experiments he made, and some considerable discoveries with which his perseverance was crowned; as well as by the self deceptions to which his passionate fondness for new discoveries exposed him."

Gray's most important discovery was, that all material substances may be reduced, so far as regards electrical phenomena, into two classes, electric and non-electrics, the former including all bodies then supposed to be capable of electric excitation by friction, and the other those which were incapable of it. He also found that non-electrics were capable of acquiring the electric state by contact with excited electrics. His experiments also led to the division of bodies into conductors and non-conductors. He likewise discovered the fact which afterwards led to the principle of induction. Du Fay saw the value of these experiments, and was one of the first to profit by them.

Gray became a fellow of the Royal Society in 1732, and died in London 15th February, 1736.

GREATRAKES, or GREATERICK, VALENTINE, celebrated as a pretender to the art of healing by manipulation, was born on the 14th of February, 1628, at Affane, in the county of Waterford, and received his early education at the Grammar School of Lismore. Being obliged to take refuge from the rebellion which broke out on the 23rd of October, 1641, his mother, who was the daughter of Sir Edward Harris, and at that time a widow, took refuge in England with her son, who, for five or six years, prosecuted his studies in Devonshire, under the guidance of a German clergyman, then settled in that county. Returning to Ireland, Greatrakes found it distracted by ecclesiastical and polemical disputes, and spent a year of contemplative brooding and retirement at the Castle of Caperquin. In 1649 he entered the service of the Parliament by accepting a lieutenant's com-

mission in the cavalry regiment under the command of the Earl of Orrery; and when this was disbanded in 1656, he retired to his ancestral residence at Affane. He was made clerk of the peace of the county of Cork, registrar for transplantation, and justice of the peace; all which places he forfeited, however, at the Restoration in 1660. About the year 1661, he began the practice of touching for the king's evil, in obedience to what he professed to be a divine impulse. After a successful treatment, extending over three years, of this single disease, another divine impulse gave him a like power over the ague, then violently epidemic in his neighbourhood; and this, according to a third divine impulse, April 2nd, 1665, was expanded into a general gift of healing. His patients, whom he treated gratuitously, thronged to him in great numbers from all parts of Ireland; and some even from England—among these being Flamsteed, the astronomer, who writes ('Autobiography,' p. 16):—"I was stroked by him all over my body, but found as yet no amends in anything but what I had before." At the request of the Earl of Orrery, Greatrakes came over to England, where, at Hagley and Worcester, he performed a great variety of cures. He did not claim a uniformity of success, however, and he confessed when any case was too much for his skill or his divine commission. His method of cure was that of stroking, which was affirmed to be especially efficacious in that class of disorder which he believed to arise from the presence of evil spirits, who could not endure the touch of his hand, or even of his glove. He was summoned from Worcester to attend upon the king at Whitehall; after which, he stayed for some time in London for the exercise of his gifts. The year in which Greatrakes died has not been ascertained, but it has been affirmed that he was living in Dublin in 1681. His pretensions, of course, gave rise to much discussion; and one unsuccessful attempt to work a cure occasioned the publication, by Mr. David Lloyd, reader to the Charter-house, of a pamphlet, entitled, 'Wonders no Miracles; or, Mr. Valentine Greatrakes' Gift of Healing examined, upon occasion of a sad Effect of his Stroking, March the 7, 1665, at one Mr. Cresset's House in Charter-house Yard,' 8vo, London, 1666. This brought forth from Greatrakes 'A Brief Account of Mr. Valentine Greatrakes, and Divers of the Strange Cures by him lately performed. Written by himself in a Letter to the Honourable Robert Boyle, Esq. Whereunto are annexed the Testimonials of several eminent and worthy Persons of the chief Matters of Fact therein related,' 8vo, London, 1666. The testimonials thus referred to were from Mr. Boyle, Sir William Smith, Sir Nathaniel Hobart, Sir John Godolphin, Dr. George Rust, dean of Connor, Dr. Wilkins, Bishop of Chester, Dr. Whichcot, Dr. Henry More, and Dr. Ralph Cudworth, as well as from a number of physicians, as, for instance, Drs. William Denton, James Fairclough, and Albertus Otto Faber. A more full voucher for the validity of Greatrakes' cures was afforded by a provincial physician, Dr. Henry Stubbe, of Stratford-on-Avon, who, in the form of a Letter to the Honourable Robert Boyle, published 'The Miraculous Conformist; or an Account of severall marvellous Cures performed by the Stroking of the Hands of Mr. Valentine Greatarick; with a Physicall Discourse thereupon,' 8vo, Oxford, 1666.

* GREELEY, HORACE, American journalist, was born at Amhurst, New Hampshire, February 3rd, 1811. The son of a farmer, he was employed at farm-work in the intervals of attending a district school. The bankruptcy of his father in 1820 led to his being apprenticed to a printer, with whom he remained five years. In 1826 he obtained employment in the office of the Vermont 'Spectator' newspaper; and was gradually entrusted with the condensing of paragraphs, and similar duties. After a time, he began to set up paragraphs and articles of his own, without writing them. This paper being discontinued in 1830, Greeley went to New York, where he worked as a journeyman printer; and in 1833 became partner in a firm of printers, Greeley and Story. They started the 'New York Morning Post,' the first cheap New York daily paper, at 2 cents. per copy. In 1834 commenced a weekly newspaper, the 'New Yorker,' with Mr. Greeley as editor. After this, for short periods, and with slight success, he carried on the 'Jeffersonian' and the 'Log Cabin.' In 1841 appeared the first number of the 'New York Tribune' newspaper, which, for nearly thirty years, has occupied his chief attention, and has become of great influence in the United States. The number of subscribers increased from 500 to 11,000 in two months; in recent years the circulation has reached 30,000; while two abridged editions, weekly and bi-weekly, command a much higher sale. The 'Tribune' is the chief American organ of Fourierism or socialism; and has persistently

advocated temperance, woman's rights, negro freedom, and the abolition of capital punishments. In 1848 Mr. Greeley entered Congress for a short time, but failed to attain any decided position. In 1851 he visited London, and served as one of the jurors at the Great Exhibition. His advocacy is believed to have secured the election of Mr. Lincoln, instead of Mr. Seward, as president, in 1860. At the outbreak of the civil war, he maintained, in the columns of the 'Tribune,' the doctrine that the Slave States had a right, by the declared principles of the Constitution, to secede from the Union if they chose so to do; but when fighting once began, he advocated the cause of the North with unswerving firmness. After the war was over, he counselled moderation on the part of the victors, and deprecated some of the prosecutions which were commenced.

GREEN, JOSEPH HENRY, D.C.L., an eminent surgeon and anatomist, was born in 1800. Having passed with success through the usual course of study in England, he visited Germany, made himself acquainted with the opinions and methods of the best surgeons, and studied the language and current philosophy, especially that of Tieck, which he continued to cultivate throughout his life. He ultimately established himself in practice at 22, Lincoln's Inn Fields, where he quickly won the confidence of the leaders of the profession. For some time he was associated with Sir Astley Cooper at St. Thomas's Hospital. Being appointed to deliver the Hunterian Oration before the Royal College of Surgeons in 1840, he selected for his subject, "Vital Dynamics," and the novelty of the combined metaphysical and physiological views attracted much attention, and led to its separate publication, 8vo, 1840. He again delivered the Hunterian Oration in 1847, and he contributed some anatomical and other papers to the scientific journals. Mr. Green was elected fellow of the Royal Society in 1825, and was also a fellow of the Geological and other scientific societies; and was for several years vice-president, and in 1858 president, of the Royal College of Surgeons. During many years he was professor of anatomy to the Royal Academy. But high as was his professional standing, he will perhaps be longest remembered by his friendship with Coleridge, who regarded him not only as a warm personal friend (and his portrait hung over the chimney-piece of the poet's bed-room at Highgate), but as his disciple and successor in philosophy. Green edited some of Coleridge's posthumous works, but he left unaccomplished the memoir of the poet, and the account of his philosophy, which it was understood he proposed to write. A work embodying his own views on the Intellectual Faculties, First Principles in Philosophy, the Truths of Religion, and the Idea of Christianity in relation to Controversial Theology, avowedly founded on the doctrines of Coleridge, appeared posthumously under the title of 'Spiritual Philosophy; founded on the teaching of Samuel Taylor Coleridge. Edited, with a Memoir, by John Simon,' 8vo, 1866. Mr. Green died at his residence, Hadley by Barnet, on the 13th of December, 1863.

GREENOUGH, GEORGE BELLAS, geologist and physical geographer, was born in 1778. By birth his name was Bellas, but his father dying when he was young, his maternal grandfather took charge of him, and left him his fortune, with a request that he should add the name Greenough to his own. He was educated at Eton, Cambridge, Göttingen, and Freiberg. He went to Göttingen for the purpose of studying law, but Blumenbach's lectures induced him to adopt natural history as his study. He went to Freiberg, and attended Werner's lectures on mineralogy, whose views he warmly advocated. He then travelled through various parts of Germany, Italy, and England. From 1801 to 1807 he was an active member of the Royal Institution. From 1807 to 1812 he sat as M.P. for Gatton, but he was more occupied in scientific matters than in parliamentary proceedings. In 1807 he collected a number of geologists together, and established the Geological Society, but the new society was opposed in every possible way by Sir J. Banks and some of the leading fellows of the Royal Society, who thought it would impair the dignity of their society. Many of Greenough's associates withdrew their names, and the Geological Society was almost annihilated. Greenough, however, persevered in his efforts to give it a status by removing the hostile feeling against it. The Royal Society proposed to make the Geological a branch of their own, but this was rejected. At length, in 1811, the new society was fully established, and Greenough was made the first president. In 1818 he was again president, and from 1833 to 1835 he served for the third time. Greenough was always busy collecting notes, which ultimately filled many volumes of manuscript, but he wrote little of much importance,

beyond his presidential addresses. His life was mainly spent in organizing and promoting the welfare of scientific societies. He took an active share in founding the British Association for the Advancement of Science, and assisted in the business of most of the scientific institutions of London. He was a skilful constructor of maps, and several which he published were the result of many years' labour. The most important are the 'General Sketch of the Physical Features of British India,' which was commenced in 1843, and completed in 1854, when it was published; and his 'Geological Map of England and Wales.' He had formed a fine collection of maps, as also of geological books, which he left to the Geological Society. The maps embody a large amount of labour by him in the form of additions and corrections. While travelling in Italy, he was attacked with dropsy, and died April 2, 1855.

* GREGORY, CHARLES HUTTON, civil engineer, son of Dr. Olinthus Gregory, the mathematician [GREGORY, OLINTHUS G., E. C. vol. iii. col. 193], was born in 1817, and was educated at a private school. After serving an apprenticeship to Timothy Bramah as a mechanical engineer, he became assistant to Mr. Robert Stephenson in the construction of the Manchester and Birmingham Railway; and then served in a similar capacity under Mr. James Walker, at that time engaged in some engineering works at Woolwich Dockyard. For some years, commencing with 1840, he was resident engineer of the London and Croydon Railway; conducted difficult operations in widening and improving the line without impeding the traffic of the Brighton and South Eastern Companies; and constructed the Croydon and Epsom line. In 1846 he succeeded Mr. Brunel as engineer-in-chief of the Bristol and Exeter Railway; and laid out many lines in the west of England. From 1855 to 1858 he was a member of the Ordnance Select Committee. He has been much employed by the Postmaster-General in arbitrating between the General Post Office and some of the railway companies, in disputed questions relating to the charge for carrying mails. He is engineer of the Somerset Central and Dorset Central Railways. In foreign countries, either as engineer-in-chief or consulting engineer, he has been concerned in the construction of the Pernambuco Railway, the Ceylon Railway, the Bezières and Graissessac Railways, and the draining of Lake Fucino in Italy. In 1869 Mr. Gregory was elected president of the Institution of Civil Engineers.

GRENVILLE, or GREENVILLE, SIR RICHARD, a famous Elizabethan soldier and seaman, was of the elder branch of the Cornwall Grenvilles, and was born in 1540 at Kilkhampton, on the Devon border. At the age of sixteen he joined as a volunteer the army of Hungary, at that time engaged in war with the Turks. On his return to England, he obtained the command of a body of troops sent to quell disturbances in Ireland; and was made sheriff of Cork. After this he was member of parliament and high sheriff for the county of Cornwall. A new career was opened to him by the example of his brother-in-law, Sir Walter Raleigh: who, notwithstanding the failure and death of Sir Humphrey Gilbert, determined to discover new lands in foreign parts, with that kind of private ownership which was in fashion in those days. Queen Elizabeth gave Raleigh a charter of discovery, empowering him to take possession of all lands he might discover in the new world, lying between 33° and 40° N. lat. (nearly equivalent to the region between the present Charleston and Philadelphia). Raleigh, who associated Grenville with himself in this venture, sent out two vessels, under the command of Captains Amidas and Harlow. They started April 27th, 1584, and returned in the following September, bringing with them a glowing account of the new land which they had seen, and which was at once named Virginia in honour of the virgin queen. Sir Richard Grenville then resolved to head a second expedition in person. Seven ships were fitted out, with all the necessities and some of the comforts for 108 colonists, who accompanied him. Setting sail from Plymouth on the 9th of April, 1585, he visited Porto Rico, San Domingo, and other islands and coasts of the new world; engaging in conflict with some of the natives, but establishing friendly relations with others. Leaving his settlers at a spot selected on the Roanoke, with Ralph Lee as governor, he set sail in August to return to England; on his way he captured a Spanish treasure-ship, which he brought as a prize into Plymouth. He went on another voyage to Virginia in 1586, with three ships; and found that the colonists, after fighting with the natives, had left the place and joined Drake (afterwards Sir Francis). Other colonists were left there, with provisions for a year, additional food being sent to them in 1587; and these were

the real pioneers of the English settlement of Virginia. In 1558, Grenville, in anticipation of the invasion of England by the Spanish Armada, took part in the defensive measures adopted; he was appointed member of the council of defence, and vice-admiral. In 1591 he was sent with a small squadron of six vessels, under Lord Thomas Howard, to intercept the Spanish bullion fleet. Near the Azores he fell in with fifty-three Spanish ships, having ten thousand soldiers on board. He achieved much, but was overpowered by numbers, defeated, received a mortal wound, and died three days afterwards, with his last breath thanking God that he had fallen in defence of his queen and country.

GRÈVE, ANTOINE, civil and hydraulic engineer, was born at Herrkendam, near the Maas, in Holland, November 12th, 1796. From early years he was associated with the surveying and engineering duties connected with the dykes, canals, and drainage of his native country; first in the college at Maastricht, then under a government surveyor, then as a member of the corps of surveyors. As engineer-surveyor of the first class, he assisted M. Hoogstraten in executing works at the mouths of the Maas; next fulfilled partial military duties with the army; then entered the office of the Inspector-General of Works, where he was engaged in large maritime works near Helder, in constructing the ship-canal from Amsterdam to the sea, and the canals of Huninhoek and Zederik. In 1825, as engineer of roads and bridges, he constructed a canal across the island of Voorne, in which he first introduced a new kind of flying bridge which he had invented, economical, but effective; and during many years he was engaged, in this office, in superintending various government works in South Holland. In 1834 he became engineer of the first class. In February, 1841, the rupture of a dyke and river wall at Gorinchem necessitated the adoption of prompt measures, which, for a time, placed his life in no small peril. In 1849 he received the Order of the Lion of the Netherlands from the king, and two gold medals from the Batavian Philosophical Society, for his skilful management of those public works. The same year witnessed the publication of his paper, 'Verhandeling over de Stoombemaling van Polders en droogmakerijen,' and two years later another paper, 'Verhandeling over het Zeegat van Goedereede,' in the 'Nederlandsche Verhandelingen.' In 1852 he received the appointment of engineer-in-chief of the second class, and soon afterwards that of engineer-in-chief of the first class, the head of the profession in a country where civil engineering is regarded with especial favour. One great work by him was the reconstruction of the locks of Mollegatsluis, near Gouda. As a member of the Town Council of the Hague, he advocated and introduced many public improvements. He died on the 15th of December, 1857. M. Grève was a member of the Batavian Philosophical Society, of the Royal Engineers of Holland, and of the Institution of Civil Engineers in England.

GREVILLE, ROBERT KAYE, botanist and philanthropist, was born at Bishop Auckland, Dec. 13, 1794. He studied at Edinburgh and London for the medical profession, but as he was possessed of independent means, he did not try for a degree, but resolved to devote himself to botany, to which science he had given much attention from a very early period of his life. He gave lectures on zoology and botany at the University of Edinburgh, and formed large collections, both botanical and zoological, which were purchased by the university. Towards the latter part of his life, altered circumstances induced him to resort to landscape-painting as a profession, but he still continued his botanical studies, the *Diatomaceae* being the principal object of his attention up to the last. He was an active social reformer, took a prominent share in repressing slavery in the British colonies, and was a member of numerous scientific associations. He assisted Sir W. J. Hooker in his 'Icones Filicum.' He published 'Flora Edinensis,' 8vo, 1824; 'Scottish Cryptogamic Flora,' 6 vols. 8vo, 1823-1827; and 'Algæ Britannicae,' 8vo, 1830. He also wrote numerous papers, mostly on the cryptogamic plants. He died June 4, 1866.

GRËW, NEHEMIAH, botanist, was born at Coventry about 1628. Having received his medical degree, he established himself at Coventry. In 1672 he removed to London, became a fellow of the Royal Society, contributed to it a paper on the structure of plants, and in 1677 became its secretary. He wrote several works, but the most important are the 'Anatomy of Vegetables, of Roots, and of Trunks,' 83 plates, fol. London, 1682. This work gave a considerable impetus to botany, and contains numerous novel observations on the structure and relations of the various parts of the seed, and on the various forms of pollen; indeed, he may be regarded as one of the pioneers of micro-

scopical research into plant structure. He also wrote a catalogue of the Royal Society's Museum; 'Museum Regalis Societatis' 1861; 'Cosmographia Sacra,' fol. 1701; and a few other works. He died in London, March 25, 1711.

* GREY, RIGHT HON. SIR GEORGE, BART. [E. C. vol. iii. col. 201]. Sir George Grey retained the post of Secretary of State for the Home Department till the resignation of Lord Palmerston's ministry, in March, 1858. When Lord Palmerston returned to office in June, 1859, Sir George Grey was made Chancellor of the Duchy of Lancaster, with, of course, a seat in the Cabinet; but on the re-arrangement of the secretaryships consequent on the death of Lord Herbert of Lea, August, 1861, he again became, for the third time, Home Secretary, and held the office till the disruption of the Whig Government in July, 1866. Sir George Grey was not included in the ministry of Mr. Gladstone, December, 1868. At the last election he was again returned member for Morpeth without opposition.

GRIFFIN, GERALD, Irish novelist, was born in Limerick city, December 18, 1803. At the age of seventeen he was left at Adare, under the charge of an elder brother, their parents having emigrated to America. Gerald soon began to send short poems and essays to the Limerick journals, with sufficient success to induce him to adopt a literary career. He went to London in 1823, taking with him a tragedy, called 'Aguire;' but he failed to find a publisher who would purchase it, or a manager who would put it upon the stage. He wrote another tragedy, 'Gisippus,' which met with like disregard. He now took to reporting, writing for the newspapers and periodicals, and gradually prepared himself to venture on distinct novels. He began in 1827 with 'Holland Tide.' This was followed soon after by 'Tales of the Munster Festivals,' a work which attracted much attention, on account of its vivid delineation of the character and habits of the Irish peasantry. In 1828 appeared the 'Collegians,' on which the popular drama of the 'Colleen Bawn' has recently been founded. Then followed 'Tales illustrative of the Five Senses,' in 1830; and at various dates, 'The Duke of Monmouth,' 'The Invasion,' 'The Rivals,' 'The Kelp Gatherers,' 'The Day of Trial,' 'The Beautiful Queen of Leix,' 'The Half Sir,' 'A Story of Psyche,' 'Tales of the Jury Room,' 'The Voluptuary Cured,' 'The Young Milesian,' and many minor tales. Mr. Griffin joined the Society of Christian Brethren in 1838, and died in the North Monastery, Cork, on the 12th of June, 1840. Two years after his death, his play of 'Gisippus' was brought out at Drury Lane Theatre by Mr. Macready with a certain success, but was soon withdrawn, and has not been revived. Griffin's collected works were published after his death, in ten volumes, and again in 1857 in eight volumes, with a memoir of him, by Daniel Griffin.

GRIMM, JAKOB LUDWIG CARL [E. C. vol. iii. col. 209]. This great philologist died at Berlin on the 20th of September, 1863, aged 78 years.

GRIMM, WILHELM CARL [E. C. vol. iii. col. 210]. Wilhelm Grimm, though a year younger than his brother, pre-deceased him by nearly four years, dying at Berlin on the 16th of December, 1859.

GRINDAL, or GRYNDALL, EDMUND, an English prelate of the 16th century, was born in or about the year 1519, at Hensingham, in the parish of St. Bees, Cumberland; and was educated at the University of Cambridge, where he was successively a member of Magdalen and Christ's Colleges, and of Pembroke Hall. He took his B.A. degree in 1538, and became a fellow of Pembroke; proceeded M.A. in 1541; B.D. in 1549; and D.D. on the 16th of April, 1564. On the 4th of July, 1544, he was ordained on a college title by Bird, Bishop of Chester. He served as senior proctor of the university in 1548; and on the 24th of March, 1549, was appointed Lady Margaret preacher, and in the same year became president of his college. He was made chaplain to Ridley, Bishop of London, by whom he was collated to the precentorship of St. Paul's on the 24th of August, 1551. In December, 1551, he became one of the king's chaplains; and having, in June, 1552, obtained a licence to preach, was installed on the 28th of the following month as a canon of Westminster. Being deprived of his ecclesiastical preferments on the accession of Mary, in 1553, he retired to Germany, and contracted a friendship with several of the continental reformers. The death of the queen opened a way for his return to England; and he arrived in London on the day of the coronation of Elizabeth, January 15th, 1559. On the 24th of February he preached before her majesty; and in March assisted at a solemn conference at Westminster between eight Popish and as many Protestant

divines. He was likewise employed in the revision of the Book of Common Prayer; and on the 19th of July was appointed one of the commissioners to put into execution the act for the uniformity of Common Prayer, and proceeded to the north to inspect the cathedrals there, and to inquire into the manners of the clergy and the state of religion generally. On the 20th of July he was elected to the mastership of Pembroke Hall, to which he was admitted by proxy on the 3rd of August, having on the 26th of July been elected to the bishopric of London, to which he was consecrated at Lambeth on the 21st of December, 1559. On the 8th of January, 1560, he preached at St. Paul's Cross; and was soon afterwards nominated by the Dutch Church in London to be their superintendent. He preached before the queen on Good Friday, March 27th, 1562; and in May of the same year resigned the mastership of Pembroke Hall, where, during the whole term of his incumbency, he had never once been in residence. On the 3rd of October, 1564, Bishop Grindal assisted at St. Paul's at the celebration of the funeral of the Emperor Ferdinand of Germany, in accordance with a custom retained from pre-Reformation times, which sanctioned the solemn performance of the funeral office, as if the corpse had been actually present. Upon this occasion he preached, and afterwards published, 'A Sermon [on Matthew xxiv. 44] at the Funeral Solemnitie of Prince Ferdinandus, the late Emperour, of most famous Memorye, holden in the Cathedrall Church of Saint Paule in London,' &c., 4to, London, 1564, Latin translation, by John Fox—whom, when they were both at Strasburg, the author had assisted in the compilation of his 'Acts and Monuments'—'Concio Funerbris,' &c., 4to, London, 1564. Dr. Grindal was an amiable and moderate man, but he was decidedly favourable to the Puritans; and when newly elected Bishop of London he corresponded with Peter Martyr, for the purpose of eliciting advice upon vestments, ceremonies, ritual, and various questions of ecclesiastical interest. He was elected Archbishop of York on the 11th of April, 1570; and was confirmed to that province, at Canterbury, on the 22nd of May. His election to the archbishopric of Canterbury took place on the 10th of January, 1576, and was followed by his confirmation on the 15th of February following. He now seriously meditated the reform of the Court of Arches and other ecclesiastical courts; but circumstances forbade the fulfilment of his intentions. He was anxious to advance the interests of the Church of England as a preaching church; and for this purpose encouraged and legislated for the religious exercises then common under the name of Prophesyings, at which the clergy of a district, assembled in a church, in the presence of the laity, and, under the control of a moderator, expounded in turn various passages of Scripture. The sensitive jealousy of Elizabeth saw in these clerical meetings the possibility of mischief; and, ignoring the regulations for their conduct which Grindal had propounded, she issued an order for their suppression. Against this mandate the conscience of the archbishop revolted; and he wrote, in December, 1576, a long and earnest letter of expostulation to her majesty. This letter enraged the queen, and resulted in the citation of the writer before the Star Chamber, and his sequestration from office. The sequestration was not fully removed until the close of the year 1582, although whilst it was in force the primate performed several acts of consecration, the less spiritual of his functions being performed by commission. The whole question is stated in 'Memorials of Archbishop Grindal: wherein the true Causes of his Suspension and Disgrace are impartially related. With his Letter to Queen Elizabeth in vindication of Prophesyings. Also the Address of the Convocation (to obtain his pardon) in Latin and English, with Remarks upon both,' 8vo, London, 1710. The archbishop died on the 6th of July, 1583, at his palace at Croydon, in the church of which town he was buried, having been blind for some time previously, and otherwise much afflicted. His works, which are rather numerous than bulky, and which comprise Sermons, Homilies, Forms of Prayer and Thanksgiving, &c., were for the most part included in a volume edited some years ago by the Rev. William Nicholson, for the Parker Society, 'Remains,' &c., 8vo, Cambridge, 1843. His biographer was John Strype, who wrote a 'History of the Life and Acts of the Most Reverend Father in God, Edmund Grindal, the first Bishop of London, and the second Archbishop of York and Canterbury successively, in the Reign of Queen Elizabeth,' folio, London, 1710, 8vo, Oxford, 1821.

* GRIS, JEAN ANTOINE ARTHUR, botanist, was born at Chatillon-sur-Seine, Dec. 11, 1829. In 1857 he obtained his degree of doctor of science; in the following year he was appointed an assistant naturalist in the Museum of Natural History at Paris;

and from 1864 almost to the present time he has acted as Brongniart's substitute in delivering lectures on botany. His writings consist chiefly of papers in the 'Comptes Rendus,' 'Annales des Sciences Naturelles,' and the 'Bulletins' of the Botanical Society of France. His principal works have consisted of descriptions of numerous New Caledonian plants in conjunction with M. Brongniart; of researches on chlorophyll, starch, and aleurone; and on the germination of seeds. He has followed by means of the microscope the changes which the starch undergoes, from its production to its final dissolution. In some plants it is eaten away in bits, which mode he distinguishes as local absorption; while in others it disappears in a uniform way so as always to have a smooth surface, which method he calls equal or uniform absorption. His papers on chlorophyll in the 'Annales des Sciences Naturelles,' vii. pp. 179—219 (1857), is probably the best account we have on the subject. It is to a certain extent a continuation and confirmation of Quekett's researches. He concludes that generally the chlorophyll originates from the nucleus of the cell as a green jelly, which is spread over the inner wall, then broken into polyhedral fragments, which ultimately assume the form of spherical masses, composed of numerous distinct particles.

*GRISEBACH, AUGUST HEINRICH RUDOLPH, botanist, was born at Hanover in 1814, studied at Göttingen and Berlin, and obtained his M.D. degree in 1836. In 1839 the Hanoverian government commissioned him to explore Turkey, and in execution of this duty he travelled over most parts of northern Greece and Asia Minor. In 1841 he became assistant professor of botany at Göttingen, and subsequently the full professorial rank was conferred on him. He has published 'Reise durch Rumelien,' 2 vols. 8vo, Göttingen, 1841; 'Spicilegium floræ Rumelicae,' 2 vols. Brunswick, 1843—45; 'Grundriss der systematischen Botanik,' 8vo, 1854; and 'Flora of the British West Indian Isles,' 8vo, London, 1864. This last work is important as being the first completed account of the flowering plants of any considerable tropical area. The area to which the book relates comprises about 15,000 square miles, in which 3050 flowering plants have been discovered. He has also written numerous botanical papers, which are partly descriptive and partly historical. The more important are 'Ueber den Einfluss des Klimas auf die Begränzung der natürlichen Floren' in 'Linnæa,' xii. pp. 159—200 (1838); 'Malpighiacearum Brasiliensium centuria' in 'Linnæa,' xiii. pp. 155—259 (1839); reports on the literature relating to the classification and distribution of plants for the period commencing from 1840 and ending with 1853, in Wiegmann's 'Archiv' for the years from 1841 to 1855; 'Ueber die Vegetationslinien des nordwestlichen Deutschlands' in 'Göttinger Studien' for 1847, pp. 461—562; 'Plantæ Kegelianæ Surinamenses' in 'Linnæa,' xxi. pp. 181—264 (1848); 'Beiträge zur Systematik der Ungarischen Flora' in Wiegmann's 'Archiv,' xviii. pp. 291—362 (1852); and 'Plantæ Wrightianæ e Cuba Orientale' in 'Memoirs of the American Academy of Arts and Sciences,' viii. pp. 152—192, 502—536 (1863).

GROSSETESTE, ROBERT [ROBERT (GROSSETESTE), E. C. vol. v. col. 113].

GROTEFEND, GEORG FRIEDRICH [E. C. vol. vi. col. 998].

*GROVE, WILLIAM ROBERT, M.A., F.R.S. [E. C. vol. vi. col. 999].

GRUBER, JOHANN GOTTFRIED [ERSCH, JOHANN SAMUEL, E. C. vol. ii. col. 802]. J. G. Gruber died August 7, 1851.

*GRUNDTVIG, NICOLAI FREDERK SEVERIN, a Danish poet, historian, and divine, was born on the 8th of September, 1783, at Udby, in Zealand, where his father was a clergyman. He was educated successively at the Gymnasium at Aarhus and at the University of Copenhagen, 1800—1803. In 1805 he officiated as a private tutor at Langeland, after which he entered a school at Copenhagen as teacher of history. About the same time the first fruits of his devotion to the study of northern antiquities appeared in a work on the Mythology of the North, or a Review of the Eddic Lore, 'Nordens Mythologie, eller Udsigt over Eddalæren,' 8vo, Copenhagen, 1808, of which a new and revised edition, being, in fact, an Historical and Poetical Explanation and Illustration of the Emblematical Language of the Northern Mythology, was published as 'Nordens Mythologie, eller Sindbilled-Sprog historisk-poetisk udviklet og oplyst,' 8vo, Copenhagen, 1832; to which succeeded a series of Episodes of the Ruin of the Heroic Life in the North, 'Optrin af Kæmpelivets Undergang i Nord,' 2 vols. 8vo, Copenhagen, 1809, second edition,

1861. Having received ordination, he became assistant to his father in the work of his parish, and having achieved great popularity by the eloquence of sermons preached at Copenhagen, received from the king, in 1822, the appointment of second preacher at the Church of Our Redeemer, Vor Frelser's Kirke, in that city, but surrendered this position in 1825, after he had been fined and censured for his manner of attack upon Clausen, a leader of the Rationalistic school. Grundtvig now founded, jointly with Rudelbach, a Monthly Religious Magazine, entitled 'Theologisk Maanedskrift,' 13 vols. 1825—28. In 1839 he was appointed preacher at the Hospital Vartou, a collegiate church at Copenhagen, and combined with his professional duties that of lecturing in the university on history and mythology, Greek and Scandinavian. Always a lover of his country, the war of race between Denmark and Germany in 1848 gave a new energy to his patriotism; and from that date, without omitting any of his literary or professional activities, he has been constantly a zealous and popular member of the Diet.

The principal works, not yet mentioned, which Grundtvig has produced are an Epitome of the History of the World, 'Kort Begreb af Verdens Kronike i Sammentræng,' 8vo, Copenhagen, 1812; 'Specimens of Saxo and Snorri Sturluson,' 8vo, Copenhagen, 1815; Europe, France, and Napoleon, &c., 'Europa, Frankrig og Napoleon, en dansk historisk Betragtning,' 8vo, Copenhagen, 1815; Songlings, or Small Poems, 'Kvædinger, eller Smaakvad,' &c., 8vo, Copenhagen, 1815; Rhyme Leaves out of Denmark's Church-Book for the Jubilee Year, 'Kong Harald og Ansgar. Rim-Blade af Danmarks Kirke-Bog til Juebel Aaret,' 8vo, Copenhagen, 1826; Christian Sermons, or Sunday-Book, 'Christelige Prædikener, eller Søndags-Bog,' 3 vols. 8vo, Copenhagen, 1830; Political Reflections with Regard to Denmark and Holstein, 'Politiske Betragtninger med Blik paa Danmark og Holsteen,' second edition, 8vo, Copenhagen, 1831; Handbook of the History of the World, 'Haandbog i Verdens-Historien,' 4 vols. 8vo, Copenhagen, 1833—43; Danish Folk-Fests, a Voice from the Danish Nation, 'Danske Folke-Fester, en Røst fra Danske Samfund,' 8vo, Copenhagen, 1842; Small Poems of the North, 'Nordiske Smaadigte,' 12mo, Christiania, 1838; a work for both sexes on Greek and Northern Myths and Antiquities, 'Brage-Snak om Græske og Nordiske Myther og Oldsager, for Damer og Herrer,' 8vo, Copenhagen, 1844; Danish Proverbs and Adages, collected and arranged, &c., 'Danske Ordsprog og Mundheld, samlede og ordnede,' &c., 8vo, Copenhagen, 1845; Historical Memories of the North. A Discourse delivered at the Northern Festival, 'Nordens Historiske Minder. Tale ved den Nordiske Høitid,' 8vo, Copenhagen, 1847; The Seven Stars of Christendom: an Ecclesiastical Epos, 'Christenhedens Syvstjerne: Et Kirkeligt Sagakvad,' 8vo, Copenhagen, 1860; The Living Voice: Leaves of Remembrance from the Friends' Meeting in the Days of September, 'Den levende Røst: Minde Blade fra Venue-Mødet i September-Dagene,' 8vo, Copenhagen, 1863; Message to the High North, in Verse, 'Budotikke i Hinorden,' 8vo, Copenhagen, 1864; The Danish State-Church, impartially considered, 'Den Danske Stats-Kirke upartisk betragtet,' 8vo, Copenhagen, second edition, 1868. Grundtvig is also known as the editor of a volume of Psalms and Hymns of the Danish Church, 'Sangværk til den danske Kirke,' 8vo, Copenhagen, vol. i. 1837; and as the translator into Danish of Saxo Grammaticus, 'Danmarks Kronike af Saxe Runemester, fordansket,' &c., 8vo, Copenhagen, second edition, 1855.

*GRUNER, WILHELM HEINRICH LUDWIG, engraver and decorative artist, was born February 24th, 1801, at Dresden, studied design in the Akademie der Decorationsmalerei there, and copper-plate engraving under Krüger, at Prague. In 1825 he went to Italy, where he worked under Longhi and Anderloni, studying at the same time the works of the great masters in the principal galleries. His early plates were portraits after Velasquez and Mengs, but later he sought to reproduce the choicer works of Perugino and Raffaello, one of the best of the latter being the 'Knight's Dream' from the picture in our National Gallery. He also executed a series of engravings of the frescoes of Raffaello and Lo Spagna, in the Villa Magliana, near Rome, and another of the mosaics in the Chigi chapel. For some time Herr Gruner resided in England, and whilst here was much patronised by the Prince Consort, for whom he executed plates of the 'Decorations of the Garden Pavilion in the Grounds of Buckingham Palace,' folio, 1840; and, under the authority of the Department of Art of the Council of Education, a series of 80 'Specimens of Ornamental Art, selected from the best Models of the Classical Epochs,' folio, 1850. In 1844—54 appeared his 'Fresco Decorations and Studies of Churches and Palaces in Italy, executed

during the fifteenth and sixteenth centuries; the Caryatides from the Stanza dell' Eliodoro in the Vatican, 16 plates, folio, London, 1852; the ceiling of the Sistine Chapel, after Michaelangelo, executed in chromo-lithography at the cost of Mr. Harford, and various other costly works. In 1858 he was nominated professor of engraving in the Dresden Academy; and the same year began the issue of a series of 83 plates in folio of the bas-reliefs on the principal front of Orvieto Cathedral, with text by Braun. The decorations of the mausoleum of the Duchess of Kent, and the very elaborate interior of that of the Prince Consort, were executed under the direction of Herr Gruner.

GRYNÆUS, JOHANN JACOB, a Protestant theologian, was born at Berne on the 1st of October, 1540. He was educated in classical and theological literature at Basel, and, at the age of 19, was made deacon or assistant minister of the church of Rötelen. In 1563 he repaired, for the further prosecution of his studies, to Tübingen, where he took the degree of D.D. In 1565 he succeeded his father, Thomas Grynæus, in the pastorate of Rötelen, which he left in 1575 to occupy the chair of Old Testament Exegesis at Basel, where he was instrumental in bringing about a better accord, on the subject of the Lord's Supper, between the followers of Luther and of Zwingli. About the year 1583 he accepted the appointment of Professor of Theology and History at Heidelberg, and in 1586 returned to Basel to succeed Sulzer as Professor of New Testament Exegesis, and as chief pastor of the city. He died on the 31st of August, 1618, having for five years previously been afflicted with blindness, a circumstance which had, however, the least possible effect in abating either his academical or his pastoral activity. His works comprise—'Monumenta S. Patrum Orthodoxographia, hoc est, Theologia sacrosanctæ Fidei Doctores numero circiter LXXXV. * * * Authores partim Græci, partim Latini, &c., 3 vols. folio, Basel, 1569; 'Sciagraphia sacre Theologiæ: accedunt thesæ 60 complectentes præcipua Religionis capita, et totidem de Studio Theologiæ,' 4to, Basel, 1577; 'Synopsis Historiæ Hominis: seu, de prima Hominis Origine, ejusdem Corruptione, Reconciliatione cum Deo et æterna Salute, &c., 12mo, Basel, 1579; 'Apologia respondens ad Criminationes J. Andree de Cœna Domini,' 4to, 1584; 'Disputationes theologicæ in Basiliensi Academia habitæ,' 4to, Geneva, 1584; 'Theologica Theoremata et Problemata, de quibus in inclyta Basiliensi Academia ~~zuercheris~~ institutæ fuerunt, 3 parts, 4to, Basel, 1588—90; 'Aethiæa sive Opuscula nonnulla theologico-miscellanea,' 8vo, Basel, 1746; 'Character Christianorum, &c., 8vo, Basel; and various Commentaries and Pælectiones on the Prophets and the Epistles, and on the Fathers of the Church.

GRYNÆUS, SIMON, a German Protestant divine, and great-uncle of the subject of the preceding notice, was born at Varingen, in Hohenzollern, in the year 1493. After filling various academical appointments, and undergoing several painful vicissitudes in consequence of his friendship for the leaders and the doctrines of the Reformation, he became in 1523 Professor of Greek in the University of Heidelberg, which he quitted in 1529 to undertake the duties of the Chair of Philosophy and Theology in the University of Basel. In 1531 he visited England, and in several succeeding years was identified with the principal measures which were taken for the reformation of faith, manners, and literature. He died at Basel, in the year 1541. He was the first who published the *Almagest* of Ptolemy in Greek; and who discovered, in 1531, five of the Books of Livy (xli.—xlv.). His other works include 'Novus Orbis Regionum ac Insularum Veteribus incognitarum, cum Tabula cosmographica, et aliquot aliis consimilibus Argumenti Libellis,' folio, Basel, 1532, 1537, 1539, 1556, and other editions; 'In Librum viii. Topicorum Aristotelis Commentaria: accedunt selectiores Epistolæ,' 8vo, Basel, 1556; an edition of Euclid in Greek, with a Preface, 1533, and one of the Works of Plato, with some Commentaries on Proclus, 1534.

GRYNÆUS, SIMON, the younger, the son of the preceding, who acquired considerable reputation as a physician and mathematician, was born at Berne on the 1st of December, 1539. He became Professor of Mathematics and a medical practitioner, at Heidelberg, which he quitted in order to establish himself, in 1580, at Basel, where he died on the 3rd of September, 1582. He is the author, *inter alia*, of 'Commentarii Duo: unus de igitis Meteoris; alter de Cometarum Causis atque Significationibus: accessit Observatio Cometæ qui in 1577 et 1578 fulsit; et Disputatio de inusitata Magnitudine et Figura Veneris conspecta in fine Anni 1578 et ad Initium 1579,' 4to, Basel, 1580, a work which is sometimes erroneously attributed to his father.

GUOHT, MICHEL VAN DER (called by Walpole MICHAEL

VANDERGUTCH), a celebrated engraver, was born at Antwerp, in 1660. He learnt engraving of one of the Bontats of that city, but settled in London, where he found employment at first in engraving anatomical plates, but afterwards chiefly portraits. He engraved several of the plates in Clarendon's History; Sir Josiah Child, after Riley; Sprat, Bishop of Rochester, after Lely; Bishop Atterbury, Addison, Congreve, and Betterton, after Kneller; Queen Elizabeth, after Sir Antonio More, and many other well-known prints. He died at his house in Bloomsbury, October 16, 1725. Two of his sons practised with success in London as engravers. The elder, GERARD VAN DER GUOHT, born about 1695, was much employed by the booksellers. Among his plates are three portraits of Milton, Dryden after Kneller, Jervas the painter, Colley Cibber after Van Loo, James II. and his Queen, and Archbishop Tillotson after Kneller. He kept a shop for the sale of prints and pictures in Great Brook Street, and died there, March 18, 1776. JAN VAN DER GUOCHT, born in 1697, etched various academic figures after Cheron; engraved many of the plates in Cheselden's 'Osteography,' 1773; some of those of Thornhill's Cupola of St. Paul's, and the portraits of John Dennis the critic, and of Ker of Kersland, prefixed to his 'Memoirs.' George Vertue was the pupil of Michiel Van der Gucht.

* GUÉRIN-MÉNEVILLE, FÉLIX ÉDOUARD, zoologist, was born at Toulon, October 12th, 1790. He was educated at Paris, and attended the classes of Cuvier, Latreille, Geoffroy St. Hilaire, and other eminent naturalists. His life has been mainly spent in teaching entomology in various Paris educational establishments, in encouraging the culture of silkworms, and in conducting or writing numerous literary works. He is a member of most of the scientific societies of France, and has been the secretary of the 'Société d'Acclimatation.' In 1846 he was decorated with the ribbon of the Legion of Honour. His principal separate works are 'Iconographie du "Regne Animal," de M. le Baron Cuvier,' 7 vols. 8vo and 4to, Paris, 1830—1844, consisting of 450 plates; and, 'Genera des Insectes,' with A. Percheron, 6 vols. 8vo, Paris, 1835. He has been editor of the 'Revue Zoologique,' 1838—1848, and of the 'Revue et Magasin de Zoologie' since its commencement in 1849. His scientific papers are very numerous, as many as 331 being cited in the Royal Society's 'Catalogue of Scientific Papers;' but a large proportion of them are very short, while some are little more than a paragraph long. For many years he has been the chief promoter of improvements in sericulture. His papers and his reports to Government contain almost a complete history of silkworm breeding and culture in most parts of the world, but especially in France.

* GUERRAZZI, FRANCESCO DOMENICO, an Italian poet, romance-writer, and politician, was born at Leghorn in 1805, and at the age of fourteen became a student of law at the University of Pisa, where he early became obnoxious to the Government by the boldness and freedom of his opinions. He was a great admirer of Lord Byron, and wrote verses after his manner. On leaving the University, he returned to Leghorn, and began life with great success as an advocate. For expressions which he used whilst pronouncing an eulogium on a brave Livornese soldier, in 1828, he was banished to Monte Pulciano, where he was detained until 1831, when he was allowed to return to Leghorn, but only to be arrested immediately after on the charge of having fomented a disturbance in the city, which he had, in reality, tried to allay. He was thrown into prison, and finally released, without having been brought to trial, to be seized again in 1834, and sent to a prison at Porto Ferrajo, in the island of Elba. Here he was allowed the use of the library left by the Emperor Napoleon, and occupied himself with writing his celebrated novel, entitled 'L'Assedio di Firenze,' in which he magnified the reputation of Francesco Ferruccio, the republican hero of the sixteenth century. On leaving prison, he returned to the practice of his profession, and it was not until 1847 that the more important part of his public career commenced, when he prepared to lead the democratic party in the revolution which was impending over his country. In January, 1848, he was arrested as the instigator of the insurrection which broke out at Leghorn against the Austrian alliance, and was confined at Porto Ferrajo until the 17th of February, the day on which a Tuscan constitution was granted. Upon his liberation, he was elected as a deputy to the Chambers, and became, in October, a member of the Montanelli ministry; and on the flight of the Grand Duke to Gaeta, formed one of the triumvirate, Montanelli and Mazzoni being the other two, to whom the affairs of Tuscany were committed. Of this triumvirate, Guerrazzi was the leading spirit;

and he presently assumed the dictatorship, having until April 12th, 1869, the entire responsibility of government. Internal dissensions, however, brought about the establishment of the Grand Duke's Government, and Guerrazzi was arrested and imprisoned in the fortress of Belvedere, which he quitted after a sentence, delivered upon him by a court specially constituted, of perpetual exile. He now repaired to Bastia, where he solaced himself with a return to his literary activity, from which he emerged to resume a share in political life as a member of the Parliament of Turin. He is remembered for having taken part in the stormy sessions of 1862; and in 1865 was returned as deputy by the Electoral College of Lecce. His principal works are—'La Battaglia di Benevento. Storia del Secolo XIII.,' 4 vols. 8vo, Milan, 1829, edizione nuovamente rivista e corretta dall'Autore, 8vo, Florence, 1852, and frequently reprinted and translated; 'Isabella Orsini, Duchessa di Bracciano,' 12mo, Florence, 1844, fourth edition, 8vo, Florence, 1847; 'Documenti diversi,' 12mo, Leghorn, second edition, 1846, being the Correspondence of Guerrazzi and S. Uzielli, &c., respecting the bank of Leghorn; 'Al Principe e al Popolo. Intorno allo Stato delle Cose in Toscana,' 8vo, Leghorn, 1847; 'Scritti,' 8vo, Florence, 1847; 'Memorie scritte da lui medesimo,' 8vo, Leghorn, 1848; 'Sull'Indipendenza Italiana, Discorso,' 8vo, Venice, 1848; 'Apologia della Vita Politica di F. D. Guerrazzi, scritta da lui medesimo,' 8vo, Florence, 1851; 'Orazione detta in sua Difesa avanti la Corte Regia di Firenze,' 8vo, Florence, 1853; 'Beatrice Cenci, Storia del Secolo XVI.,' 8vo, Pisa, 1854, English translation by G. A. Scott, with the title of 'Beatrice Cenci, an historical Novel of the sixteenth century,' 8vo, London, 1858; 'La Torre di Nanza, Racconto storico,' 8vo, Turin, 1857, fourth edition, 8vo, Milan, 1864, forming part of the 'Biblioteca delle Famiglie'; 'L'Asino-Sogno,' 4to, Turin, 1857; 'Amelia Calani: Considerazione sull'Educazione delle Donne Italiane. Proemio del Pasquale Paoli, Racconto corso del Secolo XVIII.,' &c., 16mo, Genoa, 1859; 'Il Buco nel Muro, Storia,' 8vo, Milan and Turin, 1862.

GUETTARD, JEAN ÉTIENNE, naturalist, was born at Étampes, September 22, 1715. He received his taste for the natural-history sciences from his grandfather, Bernard de Jussieu, and Réaumur. He had the care of the Duke of Orleans' museum, which was bequeathed to himself, but he relinquished his claim in favour of the Orleans family on receiving an annuity and free quarters in the Palais Royal, where he spent most of his life constantly engaged in scientific work. He wrote on subjects in all departments of natural history—zoology, botany, geology, and even on meteorological and medical topics. In botany he made some valuable discoveries on the glands of plants, both as regards their structure and their value for purposes of classification; on the transpiration of vegetables; on the paper-yielding species; and on the colouring matter of *Galium*, analogous to madder. In zoology he made great progress in the determination of fossils, at a time when many scientific men were disputing as to their organic nature; he first recognised the crustacean affinities of the trilobites; and recognised the true nature of many fossil sponges and *Actinozoa*, which had previously been enigmatical bodies; and he was the first to discover the existence of mammalian remains in the gypsum of Montmartre, which subsequently yielded such a rich field of discovery to Cuvier. In lithology he did an immense amount of good work, but his results have mostly been rendered antiquated, owing to the more finished and detailed researches of later investigators. He was one of the pioneer geologists of Western Europe, and in his works will be found many important facts and generalizations which had not been previously announced. Amongst these are the resemblance of the strata on both sides of the British Channel, the discovery of the extinct volcanoes of Auvergne, his observations on thermal springs, and his discovery of kaolin in France, which formed an important step towards the establishment of the older porcelain manufactures of that country. He first proposed and attempted to construct a geological map of France, but after publishing thirty-three sheets the work was stopped, his resources being insufficient, and the state of science scarcely forward enough for the enterprise to be efficiently carried out. Besides numerous papers, his principal publications are 'Atlas de Description Minéralogique de la France,' by himself and Monnet, 1 vol. fol., Paris, 1778–1780; 'Mémoires sur diverses questions d'histoire naturelle de Science et d'Art,' 6 vols. 4to; and 'Mémoires sur la Minéralogie, du Dauphiné,' 4to, Paris, 1779. He died January 7, 1786.

* GUIGNIAUT, JOSEPH DANIEL, French archaeologist, was born May 15th, 1794, at Paray-le-Monial, department of Saône.

et-Loire, and educated at the Lycée Impérial and the École Normale. In 1813 he was appointed teacher of classics in the Lycée Charlemagne, and then for several years was master of the studies, first in history, afterwards in Greek literature, at the École Normale, and finally, after the revolution of 1830, was made head-master to the school. In 1835 he was nominated professor of history to the Faculté des Lettres de Paris; from 1845 to 1850, was member of the Council of Instruction, then became secretary to the council of the university, and in 1854 was called to lecture on history and morals at the Collège de France. He retired in 1862, with the rank of honorary professor. M. Guigniaut was elected a member of the Institute (Académie des Inscriptions et Belles-lettres), in 1837, in 1847 received the cross of officer, and in 1862 was promoted to be commander of the Legion of Honour. M. Guigniaut has been distinguished chiefly by his zeal in promoting the study of the Greek language and literature in France during the last half century. His papers on ancient literature, mythology, and archæology, in the proceedings of the Institute and of learned bodies, in serials, and as separate monographs, have been very numerous and valuable, but his chief independent work is his 'Religions de l'Antiquité, considérées principalement dans leur formes symboliques et mythologiques,' in four divisions, 11 vols. 8vo, with 400 engraved plates, Paris, 1825–51. This vast work is founded on the 'Symbolik und Mythologie der alten Völker,' of Creuzer, but M. Guigniaut has added to it a great body of notes and much original illustrative matter, so that it is, in fact, a treasury of information on classical mythology.

GUILLIM, JOHN, a writer on heraldry, was born in Herefordshire, about the year 1565, and received his education at Oxford. In 1617 he was appointed rouge-croix poursuivant-at-arms, and died vested with that office in 1621. His name is principally known by his connection with a work which he published under the title of 'The Display of Heraldry,' &c., folio, London, 1610, which has been frequently reprinted, receiving the augmentations of various editors and others, and the original authorship of the greater part of which is referred to John Barkham, Dean of Bocking. [E. C. S. col. 167.]

* GUIMET, JEAN BAPTISTE, French chemist, was born at Voiron, department of Isère, July 10th, 1795, and educated at the École Polytechnique. In 1817 he was engaged at the Government Saltpetre and Gunpowder Works: and in 1830 was commissary of gunpowder at Toulouse. In 1846 he made the discovery with which his name is chiefly associated: that it is possible to produce a blue colour which shall serve as a substitute for the exquisite but costly ultramarine, by artificially combining the ingredients of which that mineral is found to consist. During a long course of experiments, he ascertained that silica, alumina, sulphur, and soda, carbon, &c., would suffice, in proportions varying according to the tint to be produced. This discovery obtained for Guimet a prize of 6000 francs offered by the Société d'Encouragement des Arts, and many gold medals. In 1855 he received the Cross of the Legion of Honour. The German chemist Gmelin, about the same time, introduced another method of producing artificial ultramarine: and the two plans have since become so extensively adopted, that ultramarine, instead of being confined to the use of artists, is now used also by house painters, coach painters, paper stainers, and others. Circumstances connected with the experiments, brought Guimet into controversy with Gmelin concerning the honour of priority; but they appear to have been independent investigators. Gmelin, however, published his process, whilst Guimet kept his secret, and maintained a manufactory which, for several years, enjoyed an almost exclusive monopoly. In 1827, the artificial ultramarine having received the stamp of approval from the French artists Ingres and Horace Vernet, Guimet established his manufactory in the environs of Lyons, in which city he was president of the Academy of Sciences. The Jury report of the Paris International Exhibition of 1855 stated that, at that time, there were sixty to eighty manufactories of artificial ultramarine, producing 2,500,000 kilogrammes annually, at an average of 2 francs 10 centimes per kilogramme (5,500,000 English lbs., at 1s. 9d. per lb.); as against a very small amount of real ultramarine, at 3000 francs per kilogramme (about 70s. per oz.). The quantity manufactured has since largely increased, especially in Germany, which now takes the lead in the manufacture. For artistic purposes, the artificial ultramarine is very inferior to the real; but it is of great value in decorative work, as the colour is very beautiful when well managed, and the enormous difference of price renders it available where real ultramarine would be out of the question. Two scientific papers by M. Guimet are

'Lettre à M. Gay Lussac, sur la fabrication de l'Outremer,' *Annales de Chimie*, 1831; 'Rapport sur la Garancine de M. Bastet,' *Annals of the Agricultural Society of Lyons*, 1841.

GUINAND, PIERRE LOUIS, an improver of optical glass, was born at Brenets, near Neuchâtel, Switzerland, in 1745. Under his father, who was a cabinetmaker, he became skilful in handling tools, and made and repaired many articles lying beyond the usual range of his trade. Having to mend an English telescope, he resolved to make one for himself; and having weak sight, he made himself a pair of spectacles. This practice, and a little instruction in optics under Droz, enabled him to enter upon the business of making spectacle-glasses and telescope-lenses. For seven years he experimented, with a furnace and kiln of his own construction, to ensure achromatism in lenses. At length, in 1798, he sent to Lalande at Paris two discs of optical glass, four inches and six inches in diameter respectively, remarkably free from striae and imperfections. He seems to have adopted some mode of stirring up the ingredients of flint glass, while in a molten state, more completely than had been before practised; and he also effected improvements in the grinding and polishing processes. In 1805 he was invited to Munich by Fraunhofer, the celebrated optician; and there he assisted in fabricating a large number of fine object-glasses for telescopes, one of which, nine inches diameter, gained great celebrity in the Dorpat Observatory. Returning to Switzerland in 1814, Guinand recommenced lens-making on his own account; and one of his lenses, submitted to the Astronomical Society of London, was reported on in terms of high commendation by Messrs. Herschel, Dollond, and Pearson. His prime production was a disc of flint glass, 24 inches diameter by $\frac{1}{4}$ thick, almost absolutely free from speck and striae. Louis XVIII., hearing of his skill, invited him to settle in Paris; but Guinand, now an old man, preferred to end his days in his own country. He died in 1825. A pamphlet by his son was published in 1831, 'Reclamation sur l'invention de flint et de crown glass.'

* GUIZOT, FRANÇOIS-PIERRE-GUILLAUME [E. C. vol. iii. col. 224]. The later activity of M. Guizot has been of an almost exclusively literary kind, and besides the production of several new works, he has prepared new editions of many of those which have been already mentioned. He has taken part in the questions which have agitated the Protestant communities of France; and although a sometime President of the Protestant Consistory of Paris, has been a consistent advocate of the temporal power of the Pope, in favour of which he spoke very emphatically on the 21st of April, 1861, when presiding over one of the annual meetings of a Protestant society in the Temple de l'Oratoire. The most public of his recent acts were the addressing of a letter to the 'Times,' which appeared in that journal on the 26th of October, 1870, the object of which was to combat the "general belief" of England, "first, that France wished for and brought about the present war with Prussia; and secondly, that, in consequence of the reverses experienced by the French army, France is no longer able to carry on the war, and ought to accept the conditions of peace which Prussia dictates, however hard these conditions may be;" and a long and elaborate letter to Mr. Gladstone, setting forth the duty of England to exert her "moral influence," in order to re-establish peace on a firm and honourable basis. The principal works of M. Guizot still remaining to be mentioned are 'Sir Robert Peel. Étude d'Histoire contemporaine,' 8vo, Paris, 1856, 12mo, 1858; 'Memoirs of Sir Robert Peel,' 8vo, London, 1857; 'Études sur les Beaux Arts,' 8vo, Paris, 1858; 'Mémoires pour servir à l'Histoire de mon Temps,' 8 vols. 8vo, Paris, 1858—67; English translation, by J. W. Cole, 4 vols. 8vo, 1858—61; 'L'Eglise et la Société Chrétienne,' 8vo, Paris, 1861; English translation, 1861; 'Discours académiques, suivis des Discours prononcés pour la Distribution des Prix aux Concours Général de l'Université et devant diverses Sociétés religieuses, et de trois Essais de Philosophie littéraire et politique,' 8vo, Paris, 1861; a Speech delivered in his capacity of Director of the Académie Française, entitled 'Discours en Réponse au Discours prononcé par M. Lacordaire pour sa Réception à l'Académie Française le 24 Janvier, 1861,' 8vo, Paris, 1861, and another entitled 'Discours en Réponse au Discours prononcé par M. Prevost-Paradol pour sa Réception à l'Académie Française le 8 Mars, 1866,' 8vo, Paris, 1866; 'An Embassy to the Court of St. James's in 1840,' 8vo, London, 1862; 'Un Projet de Mariage Royal,' 12mo, Paris, 1863, reprinted from the 'Revue des Deux Mondes'; 'Trois Générations 1789, 1814, 1848,' 12mo, Paris, 1863; 'Complément des Mémoires pour servir à l'Histoire de mon Temps. Histoire parlementaire de France. Recueil complet des Discours pro-

BIOG. DIV.—SUP.

noncés dans les Chambres de 1819 à 1848,' 5 vols. 8vo, Paris, 1863—64; 'Méditations sur l'Essence de la Religion chrétienne,' 8vo, 1864, &c.; English translation, 1864, and 'Meditations on the Actual State of Christianity, and on the Attacks which are now being made upon it,' 8vo, London, 1866; 'Memoirs of a Minister of State from the Year 1840,' 8vo, London, 1864; 'The Last Days of the Reign of Louis Philippe,' 8vo, London, 1867; 'Mélanges biographiques et littéraires,' 8vo, Paris, 1868; and 'Mélanges politiques et historiques,' 8vo, Paris, 1869.

GUTCH, JOHN, F.S.A., &c., a divine and antiquary, was born in 1745, and educated at All Souls' College, Oxford, of which he became chaplain in 1769, and retained his appointment for sixty-two years. He proceeded M.A. on the 8th of June, 1771. In 1786 he was preferred to the rectory of Kirkby Underwood, in Lincolnshire, and in 1795 to that of St. Clement, near Oxford; and was for many years chaplain of Corpus Christi College. In 1797 he was elected to the office of registrar of the university, and also of registrar of the Courts of the Chancellor, the former of which he resigned in 1824, but retained the latter till his death on the 1st of July, 1831, at which time he was the oldest resident member of the university. His works comprise, 'Collectanea Curiosa; or Miscellaneous Tracts, relating to the History and Antiquities of England and Ireland, the Universities of Oxford and Cambridge, and a variety of other Subjects. Chiefly collected, and now first published, from the Manuscripts of Archbishop Sancroft; given to the Bodleian Library by the late Bishop Tanner,' 2 vols. 8vo, Oxford, 1781; 'The History and Antiquities of the University of Oxford, now first published from the original Manuscripts in the Bodleian Library; written by Anthony Wood, M.A., published in English, with a Continuation to the present Time,' 5 vols. 4to, Oxford, 1786—96; an edition of another work by Anthony Wood, 'Fasti Oxonienses; or a Commentary on the Supreme Magistrates of the University; with a Continuation, and Additions and Corrections to each College and Hall,' 4to, Oxford, 1790.

* GUTHRIE, THOMAS, D.D., a Scottish divine and philanthropist, was born at Brechin, in Forfarshire, in the year 1800, and was educated at the University of Edinburgh. After being admitted a probationer of the Church of Scotland, he proceeded to Paris in order to prosecute the study of medicine, a knowledge of which he designed to turn to account in his future pastoral experience. Returning to his native country, he was ordained in 1830, minister of the parish of Arbirlot, in the presbytery of Arbroath, which he left on his appointment to the collegiate church of Old Greyfriars, Edinburgh. In 1840 he became minister of the new church and parish of St. John; and in 1843 took a prominent part as one of the leaders of the Disruption party, with which originated the Free Church. A new church, Free St. John's, was built for him, to which for a long series of years he has attracted a large congregation by the earnestness, fervour, and pathos of his eloquence. As a philanthropist, Dr. Guthrie is known as the originator of the Ragged or Industrial Schools of Edinburgh, and as a strenuous advocate of the temperance movement, and of nearly all the current schemes of Christian benevolence. His works include 'A Plea for Ragged Schools,' 8vo, Edinburgh, 1847, of which eleven editions were printed in the first year of its issue; 'Supplement to a Plea for Ragged Schools,' 8vo, Edinburgh, 1847; 'A Second Plea,' &c., 8vo, Edinburgh, 1851; 'A Short Plea for the free and full Use of the Bible in Ragged Schools,' 8vo, Edinburgh, 1852; 'A Plea on behalf of Drunkards, and against Drunkenness,' 8vo, Edinburgh, 1850; 'The Gospel in Ezekiel, illustrated in a Series of Discourses,' 8vo, Edinburgh, 1856, fortieth thousand, 8vo, 1863; 'Christ, and the Inheritance of the Saints,' &c., 8vo, Edinburgh, tenth thousand, 1858, twelfth thousand, 1859; 'Speaking to the Heart, or Sermons for the People,' 8vo, London and Edinburgh, 1862; 'Platform Sayings, Anecdotes, and Stories,' &c., 12mo, London and Edinburgh, 1863, fourth thousand, 1864; 'The Parables read in the Light of the present Day,' 8vo, London and New York, 1866, originally published in 'Good Words'; 'Out of Harness,' 8vo, London, 1867; 'Our Father's Business,' 8vo, London, 1867; and 'Studies of Character from the Old Testament,' 8vo, London, 1867, both of which were reprinted from the 'Sunday Magazine,' of which, on its foundation in 1864, Dr. Guthrie became the editor; 'Early Piety,' 32mo, London, 1867; and a number of Sermons, either published separately or grouped together in volumes.

GUY, THOMAS, bookseller, the founder of Guy's Hospital, London, was the eldest son of Thomas Guy, "lighterman and coalmonger," Fair Street, Horselydown, where he was born about 1645. His mother being left a widow when Thomas was

about 8 years old, removed to Tamworth, her native town, and married again, but took care that her children should have a good education, and in 1660 apprenticed Thomas to John Clarke, the younger, "a binder and seller of books in Mercers' Hall Porch in Cheapside," for the term of eight years. On the expiration of his apprenticeship, Guy was admitted a freeman of the Stationers' Company and of the City, October, 1668. He at once commenced business on his own account, as bookseller and publisher, "with a stock of about two hundred pounds," taking for the purpose the little corner-house at the angle formed by Cornhill and Lombard-street, afterwards occupied by Bish, the lottery-office keeper. From the first he seems to have been of an enterprising turn. Few books are known which bear his name as publisher, but he did a good trade as a bookseller, and was on the watch to turn his profits to account. His earliest venture was in bibles. The printing of bibles in London was limited by patent to the king's printer, and they were consequently badly printed and high-priced. Guy joined with other booksellers in inducing some printers in Holland to prepare editions at a lower price, yet with better types and paper, and he "became a large dealer therein." But the monopoly was far too valuable to be readily lost. Prosecutions were instituted, the copies seized, and the traffic of necessity abandoned. Guy did not, however, give up the contest. The University of Oxford had a concurrent privilege with the king's printer; of this Guy purchased an assignment, "and, having furnished himself with types from Holland, carried on a very great trade in bibles for divers years to his very great advantage."

Guy was a flourishing and prosperous tradesman, and a prominent member of the Company of Stationers; but the bulk of his fortune was not made by bookselling. The purchase of the payment tickets of seamen of the royal navy was, during the war with France, exceedingly profitable, and Guy was an early dealer in them; he also dealt largely and successfully in other government securities; but his crowning speculation was in South Sea Stock. For this he subscribed at the commencement to the amount of over forty-five thousand pounds, and seeing the rapid rise, and predicting the reaction, like a prudent man "began to sell out his stock at about three hundred (for that which probably at first did not cost him above 50*l.* or 60*l.*), and continued selling till it rose to about six hundred, when he disposed of the last of his property in the said company." (Maitland.) Guy was chosen sheriff of London, but preferred paying the fine of 500*l.* to serving the office. About 1695 he was elected member of Parliament for Tamworth, which place he seems to have kept up his early connection with, and to have regarded with especial interest. He built and endowed an almshouse in Tamworth, for 14 poor men and women, providing them with a small pension and a library; and is said to have been "a generous benefactor to the corporation" in various other ways. But the townsmen, by electing, 1706, another representative, diverted his benevolence into a different channel. He was a bachelor, and resolved to apply the bulk of his property to charitable purposes. In 1707 he built and furnished three new wards to St. Thomas's Hospital, appropriated 100*l.* a-year to their support, and afterwards added two new houses, and otherwise improved the establishment. In 1721 he purchased a large spot of ground near St. Thomas's Hospital, removed the houses which were standing on it, and commenced the erection of a new hospital, with the intention at first of making it an appendage to St. Thomas's, but eventually establishing it as an independent institution, which has ever since been known by his name. He lived to see the fabric roofed-in, dying on the 27th of December, 1724, in his 80th year. Guy's munificent provision for his hospital was probably without parallel. The building, which provided for 400 beds, cost nearly 18,800*l.*, and he endowed it with about 219,500*l.* (the exact total was 238,292*l.* 16*s.* 5*d.*), besides an annuity of 400*l.* to Christ's Hospital, conditionally on the governors admitting four children annually on the nomination of the governors of Guy's Hospital. Nor was his munificence exhausted by his favourite foundation. He left 1,000*l.* for the relief of poor prisoners, and various other charitable bequests. For many years he had given stated allowances to his needy relatives, which by his will he continued as annuities, while he left above seventy-five thousand pounds "amongst his younger relations and executors." It is an illustration of the customs of the period that his executors finding in his iron chest a thousand guineas, which they imagined were put there for the purpose, "caused him to be buried in a very pompous manner; at whose burial there were no less than forty coaches, with six horses each." A statue of him, in bronze, by Scheemakers, was erected

shortly after his death in the first court of the hospital; and another, in marble, by Bacon, has since been erected in the chapel. Guy's title to remembrance is the hospital which preserves his name. But he was in many ways a memorable man. John Dunton, writing in his lifetime (1705), and long before the foundation of his hospital, says: "He entertains a very sincere respect for English liberty. He is a man of strong reason, and can talk very much to the purpose upon any subject you will propose. He is truly charitable," &c. And Maitland, about 14 years after his death, writes: "As Guy was a man of an unbounded charity and universal benevolence, so was he likewise a great patron of liberty and the rights of his fellow subjects; which, to his great honour, he strenuously asserted in divers Parliaments, whereof he was a member." (Maitland, *History of London*, p. 607, &c.; John Dunton, *Life and Errors*; Nichols, *Literary Anecdotes*; Charles Knight, *Shadows of the Old Booksellers*, chap. i.)

GUYON, RICHARD DEBAUFRE, GENERAL [E. C. vol. iii. col. 238]. General Guyon died at Constantinople of cholera on the 12th of October, 1856, aged 44.

* GUYOT, ARNOLD HENRY, physical geographer, was born near Neuchâtel, Switzerland, September 8, 1807. He was educated at Neuchâtel, Stuttgart, and Karlsruhe, and was much influenced as to the direction of his studies by Humboldt, Steffens, and K. Ritter, as also by Agassiz, with whom he formed an intimate friendship. In 1835 he took his degree of M.D. at Berlin, and then resided five years in Paris, passing the winter in study and the summer in excursions, a habit which he has kept up all his lifetime. In 1838 he visited the glaciers of Switzerland. He discovered the laminated structure of the ice, and showed that the motion of the glacier was due to the displacement of the molecules. These discoveries were confirmed by Agassiz, Forbes, and others. He supported the opinion which had been long before announced by Venetz, that the glaciers had formerly extended far beyond their present bounds, and as far as the Jura mountains, by tracing the lines of erratic blocks from the Jura range to their original valleys, a task which occupied him for seven summers, and involved the taking of upwards of 3000 barometric observations for altitudes. These details were intended for Vol. ii. of the 'Système Glaciaire,' by himself, Agassiz, and Desor, the publication of which was prevented by the disturbances in France in 1848. The results are, however, published in the 'Bulletins' of the Society of Natural Science at Neuchâtel. From 1839 to 1848 he was professor of history and physical geography in the Academy of Neuchâtel, and then the establishment was broken up. He removed to the United States, where he was occupied in delivering lectures on physical and political geography, under the direction of the Massachusetts Board of Education, and in organizing a system of meteorological observation for the Smithsonian Institution. In 1855 he was appointed professor of physical geography in the College of New Jersey at Princeton. One course of lectures which he delivered at Boston in 1848, on the relations between physical geography and history, has been published under the title of 'Earth and Man,' 8vo, 1849. His summer work in the United States has consisted in investigating the physical structure and elevation of the Alleghany range of mountains. He made important improvements in the method of determining altitudes by means of barometric observation, and has thereby been enabled to ascertain the heights of most of the prominent points, with a liability to error of not more than a few feet.

GWILT, JOSEPH [E. C. vol. iii. col. 241]. This able architect died on the 14th of September, 1863.

GWYNN, JOHN, R.A., was born at Shrewsbury in the first quarter of the 18th century. He obtained fair practice as an architect, built a church or two, and some mansions, but his professional fame rests on the picturesque English Bridge at Shrewsbury and the better known Magdalen Bridge at Oxford. He competed for the erection of Blackfriars Bridge, and the respective merits as to beauty and stability of two of the designs—Gwynn's, having semicircular arches, and Mylne's, in which the arches were elliptical,—led to a warm controversy, Gwynn's claims being stoutly supported by his friend, Dr. Johnson. Mylne was, however, successful, and his bridge, which was completed in 1769, lasted exactly a century. Gwynn will perhaps be longest remembered on account of the very remarkable suggestions contained in his writings. His 'Essay on Design, including Proposals for erecting a Public Academy,' 4to, 1749, comprised a carefully considered plan of 'An English Academy of Painting, Sculpture and Architecture,' which afforded the ground-work of the scheme of the Royal Academy

of Arts, established in 1768, and of which Gwynn was one of the original members, his name standing seventh on the list in the 'Instrument,' or Charter of Foundation. Still more noteworthy were the suggestions contained in his 'London and Westminster Improved,' 4to, 1766, to which Johnson contributed an admirably written dedication to the King. In this work Gwynn pointed out the necessity of most of the great improvements which have since been effected in the metropolis, as well as others yet waiting to be accomplished; and this not in a general way merely, but with ample and detailed descriptions, maps and plans. Among the leading improvements thus suggested were the embankment of the Thames, between London and Westminster bridges, and the formation of the river-side road, 100 or 120 feet wide, half the width being devoted to quays and half to a carriage way; the erection of a new bridge across the Thames by Somerset House (the site now occupied by Waterloo Bridge), and the widening of the Strand; the formation of new approaches to London Bridge; the removal of Smithfield Market; the construction of a complete system of sewers; the prohibition of interments within the metropolis, and the establishment of extra-mural cemeteries; the formation of open central spaces,

and the construction of several new and broad streets connecting the principal places of business and public resort. His scheme was no crude or hasty project. He tells us that he had in the first instance prepared a much less comprehensive proposal, based on Wren's plan for the rebuilding of London after the Great Fire, but becoming convinced of its inadequacy he had spent seventeen years in the elaboration of the scheme he at length laid before the public. But the author was in advance of his age. He was set down as a visionary, and his suggestions were neglected—till some three quarters of a century afterwards they were one by one revived to make the fame and fortune of men who had not the candour to mention the source of their inspiration. The year of Gwynn's death does not appear to be recorded, but as an Academician was elected in 1786, "in the place of John Gwynn, Esquire, deceased," it most probably occurred in that year. Boswell describes Gwynn as "a fine, lively, rattling fellow." He adds that "Dr. Johnson kept him in subjection, but with a kindly authority." It is evident, however, that Gwynn could hold his own in argument and retort with the conversational potentate, and his books show that he possessed great mental vigour as well as liveliness of imagination.

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HAGEDORN, CHRISTIAN LUDWIG VON, younger brother of Friedrich von Hagedorn, was born at Hamburg, February 14th, 1713. Educated with a view to diplomatic employment, he served at several courts as secretary of legation, but became known by his writings on art. 'Lettres à un Amateur de la Peinture,' 8vo, Dresden, 1755, showed considerable technical knowledge, and also that he had read and reflected much on the subject. His fuller dissertation 'Betrachtungen über die Malerei,' 2 vols. Leipzig, 1762, French translation by Michael Huber, 1775, was even better received, and led to his appointment, in 1763, as director-general of the Art Academies of Dresden and Leipzig. He established the first exhibition of the Dresden Academy, in 1765, and generally did much to promote the study of the arts in Saxony. He died at Dresden, on the 24th of January, 1780. A selection from his correspondence on Art was published under the care of F. Baden, 'Briefe über die Kunst von und an Hagedorn,' 8vo, Leipzig, 1797.

HAGEDORN, FRIEDRICH VON, a poet, whom Wieland called the Horace of Germany, was born on the 23rd of April, 1708, at Hamburg, and was educated successively at the Gymnasium of that city, and at the University of Jena, where he was a student of law from 1726 to 1729. In the latter year he published a small collection of his poems, and immediately afterwards repaired to London, where he became private secretary to the Danish ambassador. He devoted his leisure to the study of the great English writers, especially to the works of Pope; and, returning to Hamburg in 1731, was appointed in 1733 to be secretary to the company of British merchants there, an office which left him sufficient time for the purposes of literary and general cultivation. He died at Hamburg, on the 28th of October, 1754.

The works of Hagedorn, comprising odes, fables, songs, and humorous and didactic poems, were published separately at various times, and were issued collectively, with the title of 'Poetische Werke,' 3 vols. 8vo, Hamburg, 1756. Several editions followed, amongst which may be mentioned that of his complete poetical works, 'Sämmtliche Poetische Werke,' 5 vols., 12mo, Vienna, 1790—91, which occupied vols. xii. to xvi. of a collection of the best works of the German poets and prose writers, 'Sammlung der vorzüglichsten Werke deutscher Dichter und Prosaisten.' The best edition, however, is one which appeared in 5 vols. 8vo, Hamburg, 1800, under the care of Professor Johann Joachim Eschenburg, the translator of Shakspeare into German, who contributed a biography of Hagedorn and a critical estimate of his genius and his place in German literature.

HAGEN, FRIEDRICH HEINRICH VON DER, celebrated as one of the most ardent cultivators and students of ancient German poetry, was born on the 19th of February, 1789, at Schmiedeburg, in Uckermark, and was educated successively at the Gym-

nasium of Prenzlau, and the University of Halle, where he studied jurisprudence. In 1803 he commenced his professional career at Berlin, but in a few years abandoned it for the more exclusive pursuit of ancient German literature. In 1810 he was appointed extraordinary professor of the German language and literature at the newly founded University of Berlin; was called to Breslau in 1811; and in 1821 returned as ordinary professor to Berlin, where he was afterwards admitted a member of the Academy of Sciences. He died at Berlin, on the 11th of June, 1856.

His works, which have given a strong impetus to the study of the German philology and literature of the middle ages, comprise various researches into the history of the Nibelungen, as, for example, his work entitled 'Zur Geschichte der Nibelungen,' 8vo, Vienna, 1800, a critical edition of which he published, 'Der Nibelungen Lied,' 8vo, Berlin, 1810; 'The Book of Fools,' 'Narrenbuch: herausgegeben,' &c., 8vo, Halle, 1811; 'The Book of Heroes,' 'Der Helden Buch: herausgegeben,' &c., 7 parts, 8vo, Berlin, 1811; 'Pictures of the Heroes from the legendary Cycles of Charlemagne, &c.,' 'Heldenbilder aus den Sagenkreisen, Karls des Grossen, Arthurs, der Tafelrunde und des Grals, Attilas, der Amelungen und Nibelungen,' 2 vols., 8vo, Breslau, 1819—1821, each volume being illustrated with thirty coloured prints; 'Literary Outline of the History of German Poetry, &c.,' 'Literarischer Grundriss der Geschichte der deutschen Poesie, von den ältesten Zeit bis in dem 16^{ten} Jahrhundert,' 8vo, Berlin, 1812, in which he was assisted by J. G. G. Buchsing; 'Letters written from Germany, Switzerland, &c.,' 'Briefe in die Heimat aus Deutschland, der Schweiz, und Italien,' 4 vols., 12mo, Breslau, 1818—21; 'Monumenta mediæ ævi plerumque inedita,' &c., 8vo, Breslau, 1821, and 'Denkmale des Mittelalters,' first part, 8vo, Berlin, 1824; 'Tales and Legends,' 'Erzählungen und Märchen: herausgegeben,' &c., 2 vols., 8vo, Prenzlau, 1825—26, and 'Histories, &c.,' 'Geschichten, Sagen, und Märchen,' 8vo, Breslau, 1824, edited in conjunction with E. T. A. Hoffman and H. Steffens; 'Thousand and One Days,' 'Tausend und ein Tag,' 11 vols., Prenzlau, 1826—32, second edition, 1836; 'On the oldest Representations of the Faust Legends,' 'Ueber die ältesten Darstellungen der Faustusage,' 8vo, Berlin, 1844; a Collection of Adventures, &c., 'Gesamtabenteuer. Hundert altdeutsche Erzählungen: Ritter und Pfaffen-Mären, Stadt und Dorfgeschichten, Schwänke, Wundersagen und Legenden von Jak. Appet, Dietrich von Glatz, und anderen, meist zum erstenmal gedruckt und herausgegeben,' &c., 3 vols., 8vo, Stuttgart and Tübingen, 1850; 'Crusade of Louis the Saint,' 'Kreuzfahrt des Landgrafen Ludwig des Heiligen,' Leipzig, 1854; 'Pictures of the Knightly Life and Poetry, &c., of the Middle Ages,' 'Bilder aus dem Ritterleben und aus der Ritterdichtung nach Elfinbeingebilden und Gedichten des Mittelalters,' 4to, Berlin, 1856. Besides the above, and others, Hagen took part with collaborators in the production of various works; and also contributed to various

Periodicals, especially to the Yearbook of the Berlin Society for the cultivation of the German Language and Antiquities, 'Jahrbuch der Berliner Gesellschaft für deutsche Sprache und Alterthumskunde,' which was instituted, under his direction, in 1835.

* HAGENBACH, KARL RUDOLF, a Swiss divine and ecclesiastical writer, and son of Karl Friedrich Hagenbach, a naturalist of distinguished attainments and professor of anatomy and botany in the University of Basel, was born in that city on the 4th of March, 1801. After receiving his earlier education in his native place, he repaired successively to the Universities of Bonn and Berlin, where he prosecuted the study of divinity. He returned to Basel in 1823, and after passing the intermediate grades of tutorial experience in the university there, became in 1828 professor of theology, an honorary doctorate in which faculty was conferred upon him in 1830. His works, which are almost exclusively professional, include Ecclesiastical Memorabilia of Basel, in connection with the Reformation, 'Kirchliche Denkwürdigkeiten zur Geschichte Basels, mit der Reformation,' 8vo, Basel, vol. i. 1821; Presentation of Christ in the Temple, 'Darstellung Christi im Tempel: eine Homilie,' 8vo, Basel, 1825; Conspectus of the History of Doctrines, &c., 'Tabellarische Uebersicht der Dogmengeschichte bis auf die Reformation,' &c., 8vo, Basel, 1828, a subject which he further developed in his great work entitled 'Lehrbuch der Dogmengeschichte,' 2 vols. 8vo, Leipzig, 1840—41, fourth edition, 1857, English translation, by Carl W. Buch, forming part of 'Clark's Foreign Theological Library,' and entitled 'Compendium of the History of Doctrines,' 2 vols. 8vo, Edinburgh, 1846—47; an academical Lecture on the Importance of Scientific Method in Theology, 'Ueber den Begriff und die Bedeutung der Wissenschaftlichkeit im Gebiete der Theologie,' 8vo, Basel, 1830; Lectures upon the Spirit and History of the Reformation in Germany and Switzerland, &c., 'Vorlesungen über Wesen und Geschichte der Reformation in Deutschland und der Schweiz, mit steter Beziehung auf die Richtungen unserer Zeit,' 6 vols. 8vo, Leipzig, 1834—43, second edition, 1851—56; Encyclopædia and Methodology of the Theological Sciences, 'Encyclopädie und Methodologie der theologischen Wissenschaften,' 8vo, Leipzig, 1833, seventh edition, 1864; Ecclesiastical History of the 18th and 19th Centuries, from the Stand-point of Evangelical Protestantism, 'Die Kirchengeschichte des 18 und 19 Jahrhunderts aus dem Standpunkte des evangelischen Protestantismus,' &c., 2 vols. 8vo, Leipzig, 1848—49, third edition, 1856, of which a condensed English translation, by W. L. Gage and J. H. W. Stuckenberg, appeared with the title of 'German Rationalism, in its Rise, Progress, and Decline, in Relation to Theologians, Scholars, Poets, Philosophers, and the People: a Contribution to the Church History of the eighteenth and nineteenth Centuries,' 8vo, Edinburgh, 1865; Lectures on the Ancient Christian Church, 'Vorlesungen über die ältere Kirchengeschichte,' vol. i. embracing the first three centuries, 8vo, Leipzig, 1853, second edition, 1856; vol. ii. embracing the next three centuries, 8vo, Leipzig, 1855; Guide to Christian Instruction, &c., 'Leitfaden zum christlichen Religionsunterrichte an höhern Gymnasien und Bildungsanstalten,' &c., 8vo, Leipzig, 1853, third edition, 1861. Professor Hagenbach has also published several volumes of Sermons and various academical Lectures. As a poet he has produced 'Luther und seine Zeit. Eine Sammlung von Gedichten,' Zurich and Frauenfeld, 1839; and 'Gedichte,' 2 vols. 8vo, Basel, 1846, second edition, 1863; and as a biographer has written Lives of Ecolampadius and Myconius: 'Johann Oekolampad und Oswald Myconius, sein Leben und ausgewählte Schriften der Väter und Begründer der reformirten Kirche.'

* HAHN-HAHN, IDA MARIE LUISE SOPHIE FREDERIKE GUSTAVE, GRÄFIN VON, was born at Tressow, in Mecklenburg-Schwerin, June 22, 1805. Her father, Count Carl Friedrich von Hahn, in his enthusiasm for theatrical affairs, neglected the family. The mother and daughter resided successively at Rostock, New Brandenburg, and Griefswald, until, in 1826, Ida married her wealthy cousin, Count Friedrich Adolf von Hahn, from whom, however, she was divorced in 1829. From that time Countess Ida kept herself almost constantly in public notice as a traveller and an authoress. She visited Switzerland in 1835, Vienna in 1836—37, Italy in 1838—39, Italy, Spain, and France in 1840—41, Sweden in 1842, and afterwards Syria and the East. Well received in the best society of the several countries, she had opportunities of painting one aspect, at least, of national life; consequently her letters and books of travel were much read at the time. She was made known to English readers by a translation of her 'Letters of a German Countess,' written during her Travels in Turkey, Egypt, the Holy Land,

Syria, Nubia, &c., 1845. Her travels, however, have little permanent value. As a novelist she has been called the George Sand of Germany; but the resemblance is chiefly in the fact that both authoresses have taken as a favourite subject the wrongs of divorced wives. Written between 1838 and 1848, these novels, or romances of society, comprised 'Aus der Gesellschaft,' 'Der Rechte,' 'Gräfin Faustine,' 'Urich,' 'Sigismund Forster,' 'Cecil,' 'Zwei Frauen,' 'Clelia Conti,' 'Sibylle,' and 'Levin'; they were collected into a new edition in 21 volumes, completed in 1851. Her poems were mostly of earlier dates—'Gedichte,' 1835; 'Neue Gedichte,' 1836; 'Venetianische Nächte,' 1836; and 'Lieder und Gedichte,' 1837. She did not escape bantering criticism in her own country, as was shown in 'Diogenes, Roman von Iduna Gräfinn von H.-H.,' by Fanny Lewald, 1847, a satirical imitation of her style. Disturbed in various ways by the revolutionary events of 1848, the Countess took to religious reading; abjured Protestantism in 1850; and soon afterwards entered the Convent of the Good Shepherd, Breslau, founded by herself for the reclamation of degraded women. Between 1851 and 1853 she wrote several religious works, some of which have been translated into English. These were followed, at various dates, by several religious stories or romances, intended to contrast the peacefulness of the cloister with the turmoil of worldly life. The German titles of several of these religious publications are—'Von Babylon nach Jerusalem,' Mainz, 1851, an account of her conversion; 'Aus Jerusalem,' 1851; 'Die Liebhaber des Kreuzes,' 1852; 'Maria Regina,' 1860; 'Doralice,' 1861; 'Zwei Schwestern,' 1863; 'Peregrina,' 1864; 'Bilder aus der Geschichte der Kirche,' 3 vols. 1856—64. An English translation of one of her works was published in 1867, under the title of 'Lives of the Fathers of the Desert.'

* HAIDINGER, WILHELM VON, geologist and mineralogist, was born at Vienna, February 5th, 1795. His early education was received at Vienna, and his father, who was himself distinguished for his knowledge of mineralogy and geology, early imbued him with a taste for these sciences. In 1813 he went to Gritzz for the purpose of attending Mohs's lectures on mineralogy, and when that professor removed to Freiberg, in 1817, Haidinger accompanied him. In 1822, he was Count Breunner's companion in a tour through France and England, and in the following year we find him residing in the house of Allen, the banker, at Edinburgh, where he seems to have stopped some time. It was here that he translated and published an English translation of Mohs's 'Grundriss der Mineralogie.' Most of his papers written prior to 1830 were published in the scientific journals of Edinburgh. In 1825 he went with a son of Allen through Norway, Sweden, Denmark, Germany, Italy, and France. In 1827 he undertook the direction of his brother's porcelain works at Elbogen, and he continued to do so until 1840. In the last-mentioned year he succeeded Mohs as a counsellor of mines. The care of the imperial collection of minerals, or Montanistic Museum, was entrusted to him, and in 1843 he commenced his lectures on mineralogy in connection with that duty. In 1849 he was appointed director of the Geological Institute of Austria, in which capacity he has had the editing of the publications of the institute, and the directing of the geological survey of the empire. This survey has been mapped on several scales, from 1-144,000th to 1-576,000th. Of the larger scale, upwards of 168 sheets, comprising the larger portion of Austria, have been published. The maps are accompanied by explanatory treatises by the various surveyors, which are inserted in the 'Jahrbuch' and 'Abhandlungen' of the 'Geologischen Reichsanstalt.' From 1847 to 1851 he also edited the 'Naturwissenschaftliche Abhandlungen;' and 'Berichte über die Mittheilungen von Freunden des Naturwissenschaften in Wien,' of which society he has been president. His principal works consist of a 'Treatise on Mineralogy,' 3 vols. 8vo, Edinburgh, 1825, a translation of the work by Mohs; 'Handbuch der bestimmenden Mineralogie,' 8vo, Vienna, 1845, in which he incorporated the substance of his lectures; 'Krystallographisch-Mineralogisch Figuren Tafeln zu dem Handbuch,' 4to, 1846; and 'Die Kais. Königl. Montanistische Museum und die Freunde der Naturwissenschaften in Wei in die Jahren 1840—50,' 8vo, 1869. He has also written a large number of papers; 289 are enumerated in the Royal Society's 'Catalogue of Scientific Papers,' and since 1863 about a dozen more have come from his pen. These embrace a great variety of subjects, but those to which he has given most attention are the physical properties of minerals and aërolites.

HALDANE, JAMES ALEXANDER [E. C. vol. vi. col. 1001].

HALDANE, ROBERT [E. C. vol. vi. col. 1000].

HALES, JOHN, a scholar and divine of the 17th century, and known as the "ever-memorable" was born at Bath, in the year 1684; and, after receiving his early education in his native city, was entered, in the beginning of 1697, of Corpus Christi College, Oxford. He stood successfully for a fellowship at Merton College, and distinguished himself so much in the course of the examination that he was appointed college lecturer in Greek; and in 1612 was made Greek professor in the University. Six years afterwards he went out with Sir Dudley Carleton, King James's ambassador to the States of Holland, in quality of chaplain, and was employed by him to attend the sittings of the Synod of Dort, upon the proceedings of which he reported in a series of thirty-two Letters written to Carleton, between November, 1618, and February, 1619, which were published, three years after the author's death, by Dr. Pearson, afterwards Bishop of Chester, as forming, with nine sermons, the 'Golden Remains of the ever-memorable Mr. John Hales, of Eton College,' 8vo, London, 1659; second edition, enlarged by the addition of four Sermons, and several miscellaneous Tracts, 4to, London, 1673. Hales had been educated as a Calvinist, but the arguments of Episcopius, the Arminian champion at the Synod, so greatly prevailed with him that, as he observed to his friend Anthony Farindon, he "bade John Calvin good night." Shortly after his return to England, Hales was appointed to a fellowship at Eton College, through the joint exertions of Sir Dudley Carleton and Sir Henry Savile, the latter of whom was then Provost of Eton, as he had been Warden of Merton, at the time when Hales, through his encouragement, contested a fellowship in that College. In 1628 he composed the famous tract on 'Schism and Schismatics,' which was first published without the author's consent, and from an imperfect copy, in 4to, London, 1642, and 4to, Oxford, 1642, but of which a manuscript copy fell into the hands of Laud, who was naturally offended at the freedom with which the author reduced "Church Authority" to a nonentity. "Church authority," he had written, "there is none." Hearing of the offence he had given, Hales addressed a 'Letter to Archbishop Laud, upon occasion of the Tract concerning Schism,' &c., the wit, learning, and courage of which procured him a conference with the primate, who, it is probable, employed him in preparing for the press the second edition of his Answer to the Jesuit Fisher. Hales was placed on the list of chaplains at Lambeth, and soon afterwards, in June, 1639, was presented with a canonry of Windsor. He forfeited this preferment, however, together with his fellowship, by his refusal to take the "Engagement" imposed by the Parliament; and was obliged to sell his valuable library for his support. Owing to his generosity in sharing the produce with his fellow-sufferers in the same cause, and to the final declaration of Cromwell against the clergy, in 1655, which forced him to retire from a private tutorship he then held in a family near Eton, he was at length reduced to extreme destitution, in the midst of which he shrank from accepting the offered assistance of friends and admirers, even of Farindon, to whose necessities he had formerly administered. Hales died on the 19th of May, 1656, leaving behind him a character for liberality and toleration at that time all but unparalleled. Although Wood calls him a "walking library," he wrote little—scarcely anything, except at the earnest desire of his friends; "and yet he cannot," says Dr. Pearson, "be accused for hiding of his talent, being so communicative that his chamber was a church, and his chair a pulpit." His works, besides those already mentioned, include four 'Sermons preached at Eton,' 4to, London, 1673; 'A Tract concerning the Sin against the Holy Ghost,' 8vo, London, 1677; and 'Several Tracts,' 8vo, London, 1677, the fifth of which is the famous one concerning 'Schism and Schismatics.' Peter des Maizeaux published an 'Account of the Life and Writings of John Hales; being a Specimen of an Historical and Critical English Dictionary,' 8vo, London, 1719; and an edition of his 'Works. Now first collected together,' &c., 3 vols., 8vo, Glasgow, 1765, was issued under the care of Sir David Dalrymple, Lord Hailes, known as the learned author of the 'Annals of Scotland,' and various other historical works.

HALÉVY, JACQUES FRANÇOIS ELIE FROMENTHAL [E. C. vol. vi. col. 1002]. M. Halévy was born at Paris, March 27, 1799. Subsequently to the performance of 'La Tempesta,' referred to in the above notice, M. Halévy produced 'Jaguarita,' an opera in three acts, 1855; 'Valentine D'Aubigny,' a comic opera in three acts, 1856; and his grand opera, 'La Magicienne,' in five acts, 1858, the success of which procured his promotion to be Officer of the Legion of Honour. He died on the 19th of March, 1862. A pension of 5000 francs (200l.) was voted to his

widow by the Corps Législatif. A selection from his posthumous papers was published under the title of 'Derniers Souvenirs et Portraits,' with a biographical and critical notice by Fiorentino, 18mo, 1863.

HALIBURTON, THOMAS CHANDLER [E. C. vol. iii. col. 257]. At the general election in May, 1859, Mr. Haliburton was returned as member for Launceston. Born in 1797, he entered the House too late in life to adapt himself readily to the tone of thought and manners of that assembly, and after a few trial speeches, he subsided into a steady, but for the most part silent, supporter of the Conservative party. Occasionally he spoke on colonial and especially on Canadian subjects, when he always secured the attention of the House. To literature he made no further contributions. He died at Gordon House, Isleworth, on the 27th of August, 1865.

HALL, THE RIGHT HON. BENJAMIN, LORD LLANOVER [E. C. vol. iii. col. 261]. Sir Benjamin Hall went out of office with his party in February, 1858. He was not included in Lord Palmerston's ministry, June, 1859, but he was shortly after raised to the peerage with the title of Baron Llanover of Llanover and Abercorn in the county of Monmouth; and in 1861 he was nominated lord-lieutenant of Monmouthshire. In the House of Peers Lord Llanover did not assume a prominent place. His great work as a politician was the carrying through the House of Commons of the Act which created the Metropolitan Board of Works. Lord Llanover died at his residence, Great Stanhope Street, on the 27th of April, 1867, in his 65th year. He was born on the 8th of November, 1802. He married in 1823 Augusta Charlotte Elizabeth, daughter and co-heir of Benj. Waddington, Esq., of Llanover, by whom he left an only daughter. The title is consequently extinct. Lady Llanover is known as having edited the 'Diary of Mrs. Delany.'

* HALL, JAMES, geologist and palæontologist, was born of English parents, at Hingham, Massachusetts, in 1811. From 1831 to 1836 he attended the Rensselaer school at Troy, New York, where his studies were directed by the geologist, Amos Eaton. In 1837 he was appointed one of the geologists on the survey of the State of New York, and as such the investigation of the fourth, or western district, was committed to his charge. His reports thereon extend from 1837 to 1843, when they were collected into a thick quarto volume, forming one of the series of volumes devoted to the natural history of the state. He gave especial attention to the organic remains, and by their means he has succeeded in establishing the stratigraphical succession of the older formations. His palæontological labours have been unintermittent, although he has had to contend with many obstacles. Thus in 1850 the survey was ordered to be stopped, but he nevertheless continued his labours, and employed persons to collect, not only in his own district, but also in the far western states, at his own expense. While thus out of employment, Sir W. Logan was anxious to secure his services on behalf of the Canadian Survey, and some arrangement was made, but, owing to subsequent events, his assistance resulted in little more than a report on the Canadian graptolites, forming Decade II. of the Geological Survey of Canada, under the title 'Graptolites of the Quebec Group,' 8vo, 1865. In 1855 he was appointed State Surveyor of Iowa, and the printing of his reports on the New York Survey was recommenced; in 1857 he was commissioned to survey Wisconsin. In 1858 he received the Wollaston medal of the Geological Society of London, of which society he had previously been elected a foreign member, in recognition of his merits. The work on which his reputation mainly rests is the 'Palæontology of New York,' forming Part VI. of the 'Natural History of New York,' published by a State Commission. It consists of four large quarto volumes, illustrated with hundreds of plates, drawn partly by himself, partly by his wife, and partly by Meek and other draughtsmen. Vol. 1 was issued in 1847, vol. 2 in 1852, vol. 3 in 1859, the text of vol. 4 in 1867, but the plates were not issued till long after, we believe, not until 1870; and the manuscript of vol. 5 has been in the hands of the Commissioners for some time past. The fossils are described in the order of their antiquity, beginning with the oldest. The fourth volume completes the Devonian fauna; the fifth deals with the Crinoidea, Crustacea, Mollusca, &c., of the higher rocks. With Whitney he wrote 'Report on the Geological Survey of the State of Iowa,' vol. 1, 8vo, Iowa, 1858. He has also contributed the descriptions of fossils to most of the reports issued under Government auspices, such as those of Fremont, Stainsbury, &c. Besides a few other books, he has written a large number of papers for the scientific journals of America, mostly relating to palæozoic fossils and formations.

HALL, MARSHALL, physician and physiologist, belonged to an old Nottinghamshire family, and was the son of an eminent cotton-spinner at Basford, near Nottingham, at which place he was born, February 18, 1790. His early education was received at Nottingham, and subsequently at Edinburgh, where he manifested much earnestness of study, and frequently acted as demonstrator to the professor of anatomy, Dr. Fyfe. He was one of the most prominent members of the Royal Medical Society of Edinburgh, and in 1811 was elected its senior president, an honour much coveted, and rarely obtained by one so young. In the following year he took his degree of M.D., and was almost immediately afterwards appointed the resident house physician to the Royal Infirmary at Edinburgh. In 1814 he made a tour through Europe, in the course of which he walked from Paris to Göttingen. In 1817 he commenced practice at Nottingham, and soon rose to eminence. In 1825 he became physician to the General Hospital at Nottingham. Desiring to extend his reputation, he removed to London in 1826, and there he carried on a successful practice for about a quarter of a century, his professional income ranging from 800*l.* to upwards of 4,000*l.* per year. In 1853 he visited America, and in 1854 he went to Italy for the benefit of his health, but the disease which he had gradually gained upon him, and he died at Brighton, August 11, 1857.

Dr. Marshall Hall wrote several books and numerous papers. His most important contributions to medical literature relate to the circulation of the blood, the nervous system, and the diagnosis of diseases. From his earliest days as a medical student he paid especial attention to the symptoms of illness. His habit was to write the name of each disease, with its characters, on separate slips of paper, to arrange these in every possible way, according as one or other, or a group, of the characters appeared to be the most important, and to check the conclusions he arrived at by observations in the hospital. In this way he discovered that several diseases which had been confounded with others having strong similarity of symptoms, were distinct, and required a very different mode of treatment. When he commenced practice at Nottingham, he published a work 'On Diagnosis,' 8vo, 1817, which at once won a high reputation, and obtained a place among the standard works of medical literature. Soon after he settled in London he wished to become a fellow of the Royal Society, and, as a qualification for the election, he commenced a series of researches, on which he based his 'Essay on the Circulation of the Blood,' 8vo, 1831. It contains an account of his discovery of the connection of the arteries and veins (in the lower vertebrates), by means of simple channels, in which the most important chemical alterations of the blood are effected; as also, of the so-called "caudal heart" in the tail of the eel. At a somewhat earlier date he wrote a paper 'On the effects of the loss of blood,' for the 'Transactions of the Medical and Chirurgical Society,' vol. xiii., pp. 121—151 (1827), which, together with his practice, did much towards lessening the almost indiscriminate use of the lancet by medical men. In 1833 was published a paper 'On the reflex functions of the Medulla oblongata and Medulla spinalis,' Phil. Trans., pp. 635—666, which was the first of a long series of communications embodying the results of his investigations on the nervous system during a period of nearly twenty-five years. He established the doctrine of the reflex function of the nervous system, and applied his doctrine to the elucidation of disease. The second paper was 'On the function of the Medulla oblongata and Medulla spinalis, and on the excitomotor system of nerves,' which formed the Bakerian lecture for 1837. The Royal Society refused to print it in their 'Transactions,' on the ground of its being essentially the same as the first; this Dr. Hall considered a grievance, and a coolness existed for years between him and the Royal Society in consequence. It was published in the 'Annales des Sciences Naturelles,' vol. vii., pp. 321—370 (1837). Most of his subsequent papers on the subject appeared either in the 'Transactions of the Medical and Chirurgical Society,' in Müller's 'Archiv für Anatomie,' or in 'Comptes Rendus.' Amongst other works by him, we may mention the following: 'Commentaries on some of the more important of the diseases of females,' 8vo, London, 1827; 'Memoirs on the Nervous System,' 8vo, 1837, 4to, 1843; 'Researches principally relative to the morbid and curative effects of loss of blood,' 8vo, 1830; and 'Principles of the Theory and Practice of Medicine, including a third edition of the work on Diagnosis,' 8vo, 1837. He was the inventor of a method of restoring suspended respiration, which is now usually adopted in the case of partially drowned persons. Details respecting it are given in 'Prone and Postural Respiration in Drowning,' 8vo, 1857. Obituary memoirs of Dr. Hall were given in most of the medical

journals of 1857, and a full account of his life was published by his widow, in 2 vols, 8vo, 1861.

HALLAM, HENRY [E. C. vol. iii. col. 264.] This distinguished historian died on the 21st of January, 1859. His latest literary labour was, we believe, the incorporation of his 'Supplemental Notes' with the text of the eleventh edition of the 'View of the State of Europe during the Middle Ages,' 8vo, 1855, &c.

* HALLECK, HENRY WAGER, an American general, was born at Westernville, State of New York, in 1816. After attending Union College, he entered the Military Academy at West Point in 1835, graduated in 1839, was made lieutenant of engineers, and became assistant professor of engineering. Between 1841 and 1844 he was engaged on the fortifications of New York; and in 1845—6, gave the course of lectures at Boston which formed the basis of his work 'Elements of Military Art and Science.' From 1846 to 1854 he filled various duties in the Pacific States of the Union, being at different times Secretary of the State of California under military government, Chief of the Staff to Commodore Shubrick, member of the Convention which framed the constitution of California, lieutenant-governor of Mazatlan, judge advocate, and inspector of lighthouses. In 1854 he retired from the army, in which he had been appointed first lieutenant in 1845, brevet captain in 1847, and captain in 1853. He settled at San Francisco as a lawyer, and was engaged in that profession about seven years, and was also director-general of the New Almaden quicksilver mines. During this time he published a 'Treatise on International Law and the Laws of War,' and a translation of the mining laws of Mexico. When the Civil War broke out, in 1861, he rejoined the army, with the rank of major-general. He relieved General Hunter in the command of the department of the West, which resulted in the conquest of Tennessee by the Federals. About the middle of 1862 he was summoned to Washington, to assume the post of Commander-in-Chief of the U. S. army, which had been withdrawn from General McClellan on account of his failure before Richmond. He held the supreme command, without many great military successes, until 1864, when he was superseded by General Grant, who made him Chief of the Staff. General Halleck held for a time the post of Minister of War, succeeding Mr. Stanton in that office.

HAMILTON, PATRICK, one of the earliest martyrs for the Reformed faith in Scotland, was born about the year 1503. He was of a noble family, the Earl of Arran and the Duke of Albany being respectively his paternal and maternal uncles; and his circle of relatives included James V. He was carefully educated for a high career, and whilst prosecuting his studies received the emoluments of the abbacy of Ferne. He became suspected of favouring the doctrines of the Reformation, and proceeded to Germany, where he made the acquaintance of Luther, Melancthon, and other reformers, and unreservedly adopted their opinions. Returning to Scotland about the year 1526, he preached in various places against the corruptions of the Romish Church, so that he was presently brought to trial at St. Andrew's, before Archbishop Beaton and his convention, on the charge of maintaining and propagating sundry Lutheran and heretical opinions. The articles on which he was arraigned accused him of holding:—That the corruption of sin remains in children after their baptism; that no man, by the power of his free-will, can do any good; that no man is without sin as long as he liveth; that every true Christian may know himself to be in a state of grace; that a man is not justified by works, but by faith only; that good works make not a man good, but that a good man doth good works, and that an ill man doth ill works; yet the same works, truly repented of, make not an ill man; that faith, hope and charity are so linked together, that he who hath one of them hath all, and he that lacketh one lacketh all; that God is the cause of sin in this sense, that he withdraweth his grace from man: and grace withdrawn, he cannot but sin; that auricular confession is not necessary to salvation; that actual penance cannot purchase the remission of sin; that there is no Purgatory, and that the holy patriarchs were in heaven before Christ's passion; that the pope is anti-Christ, and that every priest hath as much power as he. For these articles, and for refusing to abjure them, Hamilton was condemned as an obstinate heretic on the 28th of February, 1527, on which day he was also condemned by the secular power, and burnt to death in the area before the gate of St. Saviour's College, St. Andrew's.

HAMILTON, WILLIAM JOHN, geologist and geographer, was born in London, July 5, 1805. He was educated at the Charterhouse School and at Göttingen; served in the diplomatic

department of government for some years; was then a member of parliament for Newport, Isle of Wight, and lastly, was chairman of the Great India Peninsula Railway Company, from 1849 to 1867. Through his intimacy with Sir Roderick I. Murchison, his attention was directed to geology, and he himself was introduced to Hugh Strickland, with whom he commenced a scientific examination of Asia Minor, but Strickland was his companion for a few months only. He left England in July, 1835, made a rapid tour through Italy and Greece, and reached Smyrna towards the end of October. From there he traversed most parts of Asia Minor, and terminated his travels at Smyrna, in August, 1837. The results of his researches formed the subject of various papers read before the Geological Society, but the fullest account is given in 'Researches in Asia Minor, Pontus, and Armenia, with some account of their antiquities and geology,' 2 vols. 8vo, London, 1842. The map of Asia Minor which was drawn up from his notes, was an important improvement upon those previously published. Amongst his other literary contributions may be noticed his paper 'On the geology of the Mayence basin,' in the 'Quarterly Journal of the Geological Society,' vol. x., pp. 254—298 (1854); and 'On the Tertiary Formations of the North of Germany,' in the same journal, vol. xi. pp. 126—143 (1855). He was for many years an officer of the Geological Society; from 1832 to 1835, and from 1841 for several years afterwards he was secretary; and in 1854, 1855, 1865, 1866, he was president. He was also president of the Royal Geographical Society in 1837, 1841, 1842, and 1847. He died June 27, 1867.

HAMILTON, SIR WILLIAM ROWAN, was born at Dublin, August 9, 1805. His father, Archibald Hamilton, was an attorney; his mother was related to the mathematician, Dr. Hutton. The precocity of young Hamilton's intellectual powers was very marked. Being placed with his uncle, the Rev. James Hamilton, curate of Trim, he knew a good deal of Hebrew at seven years old, wrote a Persian letter to the Persian ambassador in his fourteenth year, and was at that time familiar with the rudiments of the Latin, Greek, French, Italian, Spanish, German, Syriac, Arabic, Sanscrit, Hindustani, and Malay languages. In mathematics he was almost self-taught. Beginning with a Latin Euclid at ten years old, and advancing to fluxions at fourteen, he mastered Newton's 'Principia,' the Differential Calculus, and Laplace's 'Mécanique Céleste,' before he was nineteen. No sooner had he entered Trinity College, Dublin, in 1822, than he began to carry all before him, becoming optime in Greek and in science, and being almost as much distinguished in poetry and metaphysics as in mathematics. Even a year before he entered the college he had attracted the notice of Dr. Brinkley, Irish Astronomer Royal, by a paper discussing a demonstration in the 'Mécanique Céleste,' and by an original research on the calculation of certain curves of double curvature. He read a memoir on caustic curves before the Royal Irish Academy in 1824. The astronomers of Europe were somewhat astonished when, in 1827, a young man who had not attained the age of 22 stepped at once from the position of an undergraduate to that of Andrews' professor of astronomy and superintendent of the Observatory, at Dublin, especially as he was not known to have displayed any talent for practical astronomy or observing. In truth, the authorities of Trinity College were so proud of this undergraduate, that when Dr. Brinkley died they gave young Hamilton the appointments in order to keep him amongst them. They were so far right that the great mathematician shed lustre on their college for a further period of nearly 40 years, although not for the kind of labour usually expected in an astronomical observatory. About this period he produced one of his great works, the 'Theory of Systems of Rays,' which, with its supplements, is regarded as of the highest order in relation to the geometry of optics. Chasles spoke of it as "dominant toute cette vaste théorie." Starting from the fundamental idea that light, whatever be its cause or constitution, must be amenable to the principle of least action (nature's economy in using up force), he arrived at most important deductions relating to reflection and refraction. One of his discoveries, literally made upon paper, was that of conical refraction, a thing neither known nor surmised by practical experimenters in optics. He found by calculation that a single ray of light falling at a certain angle on a bi-axial crystal ought to become a conical sheet of light under certain circumstances. Dr. Lloyd, of Dublin, went through a difficult and delicate course of experiments, suggested by this speculation, and found the truth to be as Hamilton had predicted. The relation between Hamilton and Lloyd in this remarkable instance was analogous to that afterwards presented between Leverrier and Galle, and between Adams and Challis, in regard

to the planet Neptune. In 1834—5 Hamilton developed his 'General Method in Dynamics,' a great step in advance in theoretical dynamics, and considered by competent authorities worthy to rank with Lagrange's 'Mécanique Analytique.' More especially on the Continent has this work been appreciated and developed in important ways. Probably the work which brought him most into fame is his 'Calculus of Quaternions,' the invention and development of which occupied him nearly twenty years. Ever since the time of Descartes, it had been customary to denote the position of a point in space by its distance from three co-ordinate planes. Hamilton's conception was to represent such a point by the relation which exists in space between two intersecting lines. Four elements would be involved—(1) the relation between the lengths of the two lines; (2) the angle at which they cross each other; (3) the inclination to some fixed or known plane of the plane in which the two lines lie; and (4) the nodal points of these two planes. These four he calls quaternions. The theory grew out of an early paper by him on 'Algebra as the Science of Pure Time.' There was a strong tinge of metaphysics about Hamilton; he believed that no great advance in mathematics is now to be looked for, except from a metaphysical point of view. A "metaphysical atmosphere" surrounds Hamilton's theory of quaternions, which deters many mathematicians from grappling with it, but all admit that it is a product of the highest order of mathematical genius.

Sir W. R. Hamilton (he was knighted on the occasion of the first Dublin meeting of the British Association for the Advancement of Science, in 1835) developed his great theory in two publications, 'Lectures on Quaternions,' 1853, and 'Elements of Quaternions,' 1866, nearly ready for the press at the time of his death. The work was still further developed, at Sir William's request, by Professor Tait, of Edinburgh University, whose 'Elementary Treatise on Quaternions' appeared in 1867. Sir William wrote more than 70 papers in various scientific journals, principally the 'Transactions of the Irish Academy,' the 'Philosophical Magazine,' the 'British Association Reports,' the 'Correspondence Mathématique,' and the 'Cambridge and Dublin Mathematical Journal.' Besides researches on rays, on analytical dynamics, and on quaternions, these papers treated of equations of the fifth degree, the theory of probabilities, variable functions, &c. Although a member of the Astronomical and many other learned societies, president of the Irish Academy, and the recipient of gold medals as recognitions of his mathematical genius, he was not a Fellow of the Royal Society: it was understood that he objected to some of the conditions under which admission to that body is obtained. During many years he was in receipt of a pension of 200*l.* a year from the Crown. Poetry had always a great charm for him; he numbered Coleridge, Wordsworth, Southey, and Mrs. Hemans among his personal friends; and a poetical vein, as well as a metaphysical subtlety, is to be met with in many of his mathematical writings. He last appeared in public at the Dublin Exhibition in 1865, and died September 2nd in that year.

HAMMER-PURGSTALL, JOSEPH, BARON VON. [E. C. vol. vi. col. 1002.]

* **HAMON, JEAN LOUIS**, French painter, was born May 5, 1821, at Plouha (Côtes-du-Nord), and studied painting in the ateliers of Paul Delaroche and G. C. Gleyre. He exhibited in the Salon of 1848 and in the following years pictures of historical and ecclesiastical character, one or two of which were purchased by the Government and consigned to provincial museums; but, failing to secure popular attention, he accepted an engagement in the Sèvres porcelain works, where he remained till 1852. Vases painted by him are now greatly esteemed. On returning to the Salon in 1852, his picture of 'La Comédie humaine' proved a great attraction, but it was the naïveté, grace, and artistic charm of his little Greek idylls, 'Ma sœur n'y est pas' (1853) and 'Ce n'est pas moi' (1854) which secured his fame. M. Hamon has since continued to produce these quaintly graceful classic fancies, in which for the most part children imitatively painted are exhibiting some pretty wilfulness. He has of course found many imitators, but none with his native piquancy or rare artistic talent. M. Hamon is spoken of by French writers as the head of the 'École neo-grecque,' but, with all its cleverness and charm, even M. Hamon's own work, if Greek, is Greek of Paris, and of the second empire. About it there is an air of enervation and lassitude, and just a touch of voluptuousness, whilst the pale and hazy colour seems redolent rather of the atmosphere of Pompeii than of Athens. M. Hamon received the cross of the Legion of Honour in 1855.

HAMPDEN, RIGHT REVEREND RENN DICKSON,

D.D., late bishop of Hereford, was born in 1793, in the island of Barbados, where his father was colonel of the local militia. He was brought to England when six years of age, and was privately educated under Dr. Rowlandson, vicar of Warminster, in Wiltshire. In 1810 he entered as a commoner at Oriel College, Oxford, where he had Copleston for his tutor, and Arnold and Whately among his friends. He took his B.A. degree in Michaelmas term, 1813, and proceeded M.A. in 1817; and in 1833 took the degrees of B.D. and D.D. by accumulation. In 1814 he carried off the Chancellor's prize for a Latin essay on the office of the Ephors at Sparta, 'De Ephorum apud Lacedæmonios Magistratu Disputatio Præmio donata,' &c., 8vo, Oxford, 1814; and was appointed to a fellowship in his college, which he vacated on his marriage on the 24th of April, 1816. After a short residence at Bath, he became successively curate of Newton, Faringdon, and Hackney; the literary results of this period of his life being 'An Essay on the Philosophical Evidence of Christianity; or the Credibility obtained to a Scriptural Revelation, from its Coincidence with the Facts of Nature,' 8vo, London, 1827, which was spoken of as an appropriate and worthy companion to Butler's 'Analogy,' and 'Parochial Sermons illustrative of the Importance of the Revelation of God in Jesus Christ,' 8vo, London, 1828. Returning to Oxford in 1828, he became college tutor at Oriel, and in 1829—30, and again in 1831—32, acted as public examiner in classics. He delivered the Bampton Lectures in 1832, which were published with the title of 'The Scholastic Philosophy considered in its Relation to Christian Theology,' 8vo, Oxford, 1833; second edition, with an 'Introduction,' which was also separately published, 8vo, London, 1837; third edition, 1848, of which 'An Epitome,' &c., 8vo, London, 1848, was published by the Rev. W. J. Irons. The lectures were upon an abstruse and difficult subject, into which few theologians had penetrated, and their tendency was affirmed by the High Church party to be Arian and heretical, yet their author was promoted by Lord Grenville to the principalship of St. Mary Hall, left vacant by the death of Dr. John Dean, on the 12th of April, 1833. Next year Dr. Hampden was elected to be Whyte's professor of political economy, the patronage of which, it is worthy of remark, is vested in the vice-chancellor, the dean of Christ Church, the presidents of Magdalen and St. John's, and the two proctors. The lectures which he delivered in this capacity were published as 'A Course of Lectures introductory to the Study of Moral Philosophy,' 8vo, London, 1835. On the recommendation of Lord Melbourne, he was appointed on the 17th of February, 1836, to the Regius professorship of divinity, in succession to Dr. Edward Burton; and on the 1st of March following was preferred to be one of the eight prebendaries or canons of Christ Church. Dr. Hampden's nomination to the chair of theology gave rise to much opposition, especially from the High Church party, who, with the help of some of the Evangelicals, procured the passing of a university statute of censure against him on account of the assumed heterodoxy of the Bampton lectures. The Crown, however, persisted in the appointment, and the new professor of divinity delivered his first lecture on the 17th of March, and published it with the title of an 'Inaugural Lecture read before the University of Oxford in the Divinity School,' 8vo, London, first three editions, 1836. The appointment raised a storm of controversy, into which nearly every review of importance in England, and some American ones, entered on one side or the other. The very voluminous literature of the subject may be represented by a 'Letter to the Archbishop of Canterbury, by Jortin Redivivus,' 8vo, London, three editions, 1836; 'State of Parties in Oxford. With an Appendix containing Letters relative to the Persecution of the Regius Professor,' 8vo, 1836; 'Statements of Christian Doctrine, extracted from the published Writings of Dr. Hampden,' 8vo, London, second edition, 1836; 'Elucidations of Dr. Hampden's Theological Statements,' 8vo, Oxford, 1836; 'Correspondence between Dr. Hampden and the Archbishop of Canterbury,' 8vo, Oxford, second edition, 1838; 'Dr. Hampden's past and present Statements compared,' 8vo, Oxford, 1836; 'Dr. Hampden's Theological Statements and the Thirty-Nine Articles compared,' 8vo, 1836, from the pen of Dr. Pusey; 'The Propositions attributed to Dr. Hampden by Professor Pusey compared with the Text of the Bampton Lectures, in a Series of Parallels,' 8vo, London and Oxford, 1836; 'Observations on a Letter addressed to the Archbishop of Canterbury,' &c., 8vo, Oxford, 1836, by Misopseudes; and 'The Oxford Persecution of 1836. Extracts from the Public Journals in Defence of the present Regius Professor of Divinity,' 8vo, London and Leamington, 1836. Three years after his appointment Dr. Hampden produced 'A Lecture

on Tradition, read before the University in the Divinity School, Oxford, March 7th, 1839, with additions,' 8vo, London and Oxford, second edition, 1839; fourth edition, enlarged, 8vo, London, 1841, which he followed by 'The Thirty-Nine Articles of the Church of England,' &c., 8vo, London, first and second editions, 1842. On the 11th of December, 1847, he was nominated to the bishopric of Hereford, to which he was consecrated on the 26th of March, 1848. Between these two dates great wrath and agitation prevailed against Lord John Russell, at that time Premier, and an organised opposition to the appointment was the result, with which Dr. Merewether, the Dean of Hereford, so closely identified himself as to vote against the election when the *congé d'élire* reached the cathedral. The chief literary results of the controversy are 'Letters to Lord John Russell on the Nomination of Dr. Hampden,' by an "Englishman"; 'The Hampden Controversy: the Whole of the Correspondence, &c., between the Bishops of London, Exeter, Norwich, &c., and Lord John Russell. Also Dr. Hampden's Letter to his Lordship, together with some Prefatory Remarks by the Editor of the "Church Warbler,"' 16mo, London, 1847; 'Fifty-Two Propositions. A Letter to Dr. Hampden, submitting to him certain Assertions in his Bampton Lectures, &c.,' 8vo, 1848, by the Rev. W. J. Irons; 'The Official and Legal Proceedings connected with the Appointment of Dr. Hampden to the See of Hereford, including the principal Documents connected with this important Controversy, and a Translation of all the Extracts. With Notes and an Appendix,' 8vo, London, 1848; and 'A Concise History of the Hampden Controversy, from the Period of its Commencement in 1832 to the Present Time. With all the Documents that have been published, and a Brief Examination of the "Bampton Lectures" for 1832, and of the "Observations on Dissent,"' 8vo, London, 1848, from the pen of the late Rev. Henry Christmas.

Dr. Hampden was always known rather as a student and a thinker than a man of action, and his academical habits of seclusion attached to him after he became the incumbent of a diocese. Two years before his death he suffered from a paralytic seizure, which incapacitated him from severe mental activity; but the disease which proved fatal to him was congestive apoplexy from concussion of the brain. He died in Eaton-place, London, on the 23rd April, 1868, and was buried in the cemetery at Kensal Green. His works, in addition to those already mentioned, include 'Observations on Religious Dissent,' 8vo, Oxford, first and second editions, 1834; 'A Postscript to Observations on Religious Dissent, with particular Reference to the Use of Religious Tests in the University,' 8vo, London, 1835; various 'Visitation Charges' and 'Sermons,' especially a volume entitled 'Sermons preached before the University of Oxford from 1836 to 1847,' 8vo, London, 1848; a review of Thomas Aquinas and the Scholastic Philosophy, contributed to the 'Encyclopædia Metropolitana,' and articles on Socrates, Plato, and Aristotle, which, after having been issued in the 'Encyclopædia Britannica,' were reprinted, with additions, under the title of 'The Fathers of the Greek Philosophy,' 8vo, Edinburgh, 1862.

HANKA, WACLAW. [E. C. vol. iii. col. 280.] In 1849, Hanka, who had for some time been lecturer on the Slavonic language at the University of Prague, was nominated professor. He died at Prague on the 12th of January, 1861.

HANMER, SIR THOMAS, a statesman and man of letters, a member of the family of the Hansmers of Hanmer, in the marches of North Wales, was born at Bettisfield Park, the seat of his grandfather, on the 24th of September, 1677, and was educated at Westminster, and at Christ Church, Oxford. He succeeded to the title and estates of his uncle, Sir John Hanmer, in 1701, and in the following year was elected to represent the county of Flint in the first parliament of Queen Anne. He was for nearly 30 years an influential member of the House of Commons, of which he was elected Speaker in 1713. In the latter part of his life he devoted himself almost exclusively to literary pursuits, and is chiefly remembered for an edition of Shakspeare, which he prepared and presented to the University of Oxford, under whose auspices it was printed, with engravings by Gravelot, with the title of 'The Works of Shakspeare, carefully revised and corrected by former Editions, and adorned with Sculptures,' 6 vols. 4to, Oxford, 1744 and 1770—71; reprinted in 9 vols. 12mo, London, 1747, &c., which contained prefaces severally by the editor and by Pope, and "some account of the Life, &c., of Mr. William Shakspeare, written by Mr. Rowe." Sir Thomas Hanmer died at his estate in Suffolk, on the 5th of May, 1746.

Amongst the publications conversant about him may be mentioned a 'Castrated Letter in the Sixth Volume of the "Biographia Britannica," wherein is discovered the First Rise of the present Bishop [Warburton] of Gloucester's Quarrel with him about his Edition of Shakespeare's Plays,' 4to, London, 1763; and Sir Henry Edward Bunbury's 'Correspondence [1706-44] of Sir Thomas Hanmer, with a Memoir of his Life. To which are added other Relicks of a Gentleman's Family,' 8vo, London, 1838, a work which contains much curious literary and political matter.

HANNEMAN, ADRIAAN, Dutch portrait painter, according to the usual authorities was born at the Hague in or about 1610, and died there in 1680; but recent Dutch writers place his birth in 1601, and his death in 1669. As much difference exists respecting his master, English writers stating that he was a pupil of the elder Ravesteyn, the Dutch of Mytens; but it is certain that his style was formed on that of Vandyck. He came to England and worked for a time as assistant to Mytens, but afterwards on his own account, when he met with abundant patronage. Yet, though his name often occurs in old catalogues, English portraits attributed to Hanneman are now seldom met with,—whilst doubtless many of those attributed to Vandyck are really by Hanneman. On the outbreak of the Civil War, Hanneman, after a residence of 16 years in England, returned to the Hague, was appointed portrait-painter to the Princess of Orange, and continued in great reputation till his death. He was one of the founders in 1656 of the Fraternity of Painters at the Hague, and was elected its first dean. His portraits are numerous in Holland, and include many of his most distinguished contemporaries. His most celebrated picture is an allegorical figure of Peace, over the fire-place of the great room of the States-General of Holland, with which the States were so pleased that in addition to a liberal payment to the artist, they voted a sum of 1000 florins to the person who served as his model. A portrait by him of Charles II., painted before his restoration, was engraved by H. Danckers.

HANSEMAN, DAVID JUSTUS LUDWIG, a German economist and politician, was born at Finkenwerder, near Hamburg, July 12th, 1790. His father, a Protestant pastor, apprenticed him to a commercial firm in Westphalia, and the experience thence obtained enabled David to establish himself as a wool merchant at Aix-la-Chapelle. As a successful and influential trader he founded a fire insurance company in 1824, and in subsequent years became member of the Tribunal of Commerce, of the Chamber of Commerce, and of the Diet of Rhenish Prussia. In 1830 he headed the party of constitutional reformers; in 1834 founded a society for the encouragement of handicrafts; in 1838 was president of the Chamber of Commerce at Aix-la-Chapelle. He fostered the construction of railways both as a capitalist and a writer. Four of his publications are on this subject, viz., 'Die Eisenbahnen und deren Actionärn in ihrem Verhältniss zum Staat,' 1837; 'Preussens wichtigste Eisenbahnfrage,' 1837; 'Kritik des Preussischen Eisenbahngesetzes von 1838,' 1841; and 'Ueber die Ausführung des Preussischen Eisenbahnsystems,' 1843. Hanseman retired from business in 1840, to devote himself to political life. In 1845 he was elected member of the Diet, and took an active part in the advocacy of political and administrative reforms. During a few months in 1848 he was Minister of Finance, but the discomfiture of the liberals led to his retirement. As a member of the Upper Chamber he opposed the Frankfurt scheme for a German empire, expressing his preference for a Federal Government based on a liberal constitution. Some of his writings relate to this subject, of which two were 'Die deutsche Verfassungsfrage,' 1848; and 'Die deutsche Verfassung vom 28 März, 1849,' 1849. When governor of the Bank of Prussia, he established a discount bank at Berlin. On this subject he wrote in 1854 an introduction to 'Das Statut der Discontogesellschaft.' In 1861 he published a pamphlet, 'Ueber die Einführung des deutschen Handelsgesetzbuches,' and edited the 'Verhandlungen des Handelstages in Berlin vom 20 Februar bis 2 März.' He died at Schlangenbad, August 4th, 1864.

* **HANSEN, PETER ANDREAS**, a Danish astronomer, was born at Tondern, in Schleswig, December 8th, 1795. After being engaged for a time under Schumacher, on the trigonometrical survey of Holstein, he became assistant to the same astronomer at the Altona Observatory. In 1825 he received the appointment of director of the Seeberg Observatory, near Gotha. Hansen has been a voluminous contributor to the scientific journals, which contain more than one hundred papers by him, ranging from 1822 to 1863 or later. They relate to almost every

branch of astronomy, and to many important researches connected with barometrical pressure, chronometrical determinations of longitude, the reflecting angles of prisms, the theory of probabilities, &c. The papers were originally published chiefly in the 'Astronomische Nachrichten,' the Transactions of the Academy of Sciences of Saxony, and the Memoirs of the Royal Astronomical Society of London. His separate works comprise the following:—'Methode mit dem Fraunhoferschen Heliometer Beobachtungen anzustellen,' 1827; 'Untersuchungen über die gegenseitigen Störungen des Jupiter und Saturn,' 1831; this paper was crowned by the Berlin Academy, for the light it threw on the perturbations of the exterior planets; it aided in suggesting those later calculations which led to the discovery of the planet Neptune. 'Fundamenta nova investigationis orbitæ veræ, quam Luna perlustrat, quibus annexa est solutio problematis quatuor corporum breviter exposita,' 1838. 'Ermittelung des absoluten Störungen in Ellipsen von beliebiger Excentricität und Neigung,' 1843; this, a kind of general theory of perturbations in elliptical orbits, was translated into French by Mauvais, in 1845. 'Theorie des Æquatorials,' 1854. 'Theorie der Pendelbewegung,' 1854 (crowned by the Academy of Sciences of Saxony). 'Auseinandersetzung einer zweckmässigen Methode zur Berechnung der absoluten Störungen der kleinen Planeten,' 1856—9, another of his contributions to the general theory of reciprocal planetary perturbations. Great value is attached by astronomers to Hansen's Lunar Tables, 4to, published in French, 1853—57, under the auspices of the Royal Society of Sciences of Copenhagen. The English Government presented Hansen with 1,000*l.*, in recognition of the value of these Tables for practical purposes. Other works by him are, 'Theorie der Sonnenfinsternisse und verwandter Erscheinungen,' 1858; 'Darlegung der theoretischen Berechnung der in den Mondtafeln angewandten Störungen,' 1862—4; and 'Geodätische Untersuchungen,' Leipzig, 1865. Professor Hansen superintended the construction of the new Observatory at Erfurt, in 1859.

* **HANSTEEN, CHRISTOPHER**, a Norwegian astronomer and physicist, was born at Christiania, September 26th, 1784. In 1802 he went to Copenhagen with a view to studying law, but natural inclination led him to mathematics. While employed as a teacher at Hillerød, an incident drew his attention to the science with which his subsequent labours were chiefly associated. A large terrestrial globe was brought to the school, constructed by the Cosmographical Society at Upsal, on which two south magnetic poles, one strong and the other weak, were marked, with lines of magnetic direction tending towards them. This had been prepared from the observations of Captain Cook and other navigators in the South Seas. Hansteen conceived the idea of extending the researches to the northern hemisphere. In 1814 he was appointed professor of mathematics at Christiania. In 1819, after a laborious examination of all obtainable observations, and the preparation of a chart showing the magnetic direction and dip at numerous places, he published 'Untersuchungen über den Magnetismus der Erde.' It was translated by Hansen from the Swedish MS., and published in German. This work attracted much attention, especially in England. It led to the recording of magnetic observations in all expeditions of a scientific character. Hansteen was the first to trace out the magnetic equator; and in 1821 he discovered the diurnal variation of magnetic intensity. After travelling in various parts of Europe, he found that his researches would be wanting in completeness unless he knew the magnetic condition of the vast region of Siberia. Aided by the countenance of the King of Sweden, and by funds from the Norwegian parliament, he spent the years 1828—30 mainly in Siberian travel. The scientific results were published in various journals and transactions. The fatigues and perils suffered were the subject of 'Reiseerinnerung aus Sibirien,' published in 1854 in German. A French translation of this work, 'Souvenirs d'un Voyage en Sibérie,' was published in 1856. The observations, tables, and charts were collected in 1863, in a quarto volume entitled 'Resultats magnetischer Beobachtungen auf einer Reise nach dem östlichen Sibirien.' In 1833 Hansteen was appointed director of the new observatory near Christiania, to which, at his suggestion, a magnetic observatory was added in 1839. He filled, at various periods, the offices of professor of mathematics at Christiania University, professor of applied mathematics at the military school of artillery and engineers, director of the topographical survey and map of Norway, and president of the commission on weights and measures. In the last-named office he introduced numerous improvements of great value. In 1835 appeared his 'Lærebog i Plangeometrie;' and in 1836—38 his 'Lærebog i

Mechaniken,' since become recognised text-books on their respective subjects. Some of his works were published in Latin, of which one is 'De Mutationibus quas subit momentum virgæ magneticæ, partim ob temporis, partim ob temperaturæ mutationes,' 1842. Many of his scientific works were published at the expense of the Norwegian government, such as his account of the observatory, 'Beschreibung und Lage der Universitäts-Sternwarte in Christiania.' The scientific journals and transactions contain above 150 papers by Hansteen; they relate to astronomy, mathematics, magnetism, &c., and give the results of more than half a century of research. Many of them originally appeared in the 'Magazin for Naturvidenskaberne,' which journal he founded in conjunction with Maschmann and Lund in 1823, and of which he was for several years joint editor. Two separate works by him have more recently appeared in French, 'Observations de l'Inclination Magnétique, faites pendant les Années 1855 à 1864,' Brussels, 1865; and 'Sur les Variations Séculaires du Magnétisme,' Brussels, 1865. Hansteen is a corresponding member of the French Institute, and foreign member of the Royal Society.

HARDING, JAMES DUFFIELD [E. C. vol. iii. col. 287]. This distinguished painter in water-colours died on the 4th of December, 1863, aged 65.

HARDWICK, PHILIP, R.A. [E. C. vol. iii. col. 291]. From about the date to which the above memoir is brought down, increasing illness caused Mr. Hardwick to withdraw almost entirely from active professional practice. His latest important building was the Roman Catholic Cathedral, Limerick, completed in 1860, but not under his personal superintendence. In 1861 Mr. Hardwick resigned the offices of treasurer and trustee of the Royal Academy, and in 1868 became Honorary Retired Academician. He died at his residence, Westcombe Lodge, Wimbledon Common, on the 28th of December, 1870, in his 79th year. Mr. Hardwick was elected a fellow of the Royal Society in 1831; he was also a fellow of the Society of Antiquaries and the Geological Society.

* HARDY, RIGHT HON. GATHORNE, M.P., &c., of Hemsted Park, Staplehurst, Kent, the third and youngest son of the late John Hardy, Esq., of Dunstall, in Staffordshire, who was M.P. for Bradford, was born at that town on the 1st of October, 1814. He was educated at Shrewsbury and at Oriel College, Oxford, where he took his B.A. degree as a second-class in classics in 1836, and proceeded M.A. in due course. In 1866 he was admitted to the honorary degree of D.C.L. He was called to the bar by the Society of the Inner Temple in 1840; and in July, 1847, carried on an unsuccessful contest for the parliamentary representation of the borough of Bradford. He entered the House of Commons as member for Leominster in February, 1856, and continued to represent that constituency until July, 1865, when, being returned for Leominster and also for the University of Oxford, which then rejected Mr. Gladstone, he elected to sit for the University. In Lord Derby's second administration he held the office of Under Secretary of State for the Home Department, from February, 1858, to June, 1859; and when the Conservative party returned to power in July, 1866, he was appointed to the presidency of the Poor Law Board, which office, on the resignation of Mr. Walpole in May, 1867, he exchanged for that of Secretary of State for the Home Department. In December, 1868, he resigned with the other members of the Disraeli administration. Mr. Hardy is a D.L. and J.P. for the West Riding of Yorkshire, and is also a magistrate for Kent, having been for several years—up to October, 1867, when he resigned—chairman of the West Kent quarter sessions. His chief political achievement is his carrying, in conjunction with Mr. R. Anstruther Earle, at that time parliamentary secretary to the Poor Law Board, of the "Metropolitan Poor Law Act" of 1867.

HARDY, PETER, F.R.S. [E. C. vol. iii. col. 292]. This very able mathematician and actuary died April 23rd, 1863, aged 50.

* HARDY, SIR THOMAS DUFFUS, Knt., Deputy Keeper of the Public Records, was born in Jamaica in 1804. The son of Major Hardy, of the Royal Artillery, he was educated with a view to the public service, and in 1819 was appointed junior clerk in the Record Office, then held in the Tower of London. Here he distinguished himself by application to his duties, by skill in deciphering ancient documents and estimating their value, and by breadth and accuracy of learning. He rose by regular gradations in the office, was entrusted to edit, and superintend the publication of, several volumes of important records; on the death of Sir Francis Palgrave, in 1861, was nominated

by the Master of the Rolls to succeed him as Deputy Keeper of the Public Records, and in 1870 received the honour of knighthood.

Sir Thomas Hardy's publications connected with the Record, comprise—'Rotuli Litterarum Clausarum in Turri Londinensi asservati,' vol. i. (1204—1224), folio, 1833, vol. ii. (1224—1227), 1844: the introductory 'Report on the Close Rolls to the Commissioners of the Public Records of the Kingdom,' being also published separately; 'Rotuli Litterarum Patentium in Tur. Lond. asservati' (1201—1216), fol. 1835, the elaborate Introduction being also published separately; 'Rotuli Normannæ in Tur. Lond. asservati,' royal 8vo, 1835; 'Rotuli de Oblatis et Finibus in Tur. Lond. asservati, tempore Regis Johannis,' 8vo, 1835; 'Rotuli Chartarum in Tur. Lond. asservati' (1199—1216), fol. 1837; 'Rotuli de Liberte ac de Misis et Præstitis, Regnante Johanne,' 8vo, 1844; 'Modus tenendi Parliamentum: an Ancient Treatise on the Mode of Holding the Parliament in England,' Latin and English, 8vo, 1846; 'Monumenta Historica Britannica,' vol. i. fol. 1848: this great work planned and prepared by Mr. H. Petrie, Keeper of the Records in the Tower of London, was after his death "finally completed for publication, and with an Introduction, by Thomas Duffus Hardy, Assistant Keeper of Records;" 'Fasti Ecclesiæ Anglicanæ . . . corrected and continued from 1715 to the present time,' 8vo, 1854; 'Descriptive Catalogue of Manuscripts relating to the History of Great Britain and Ireland,' vol. i. (anterior to the Norman Invasion), 8vo, 1862, vol. ii. (1066—1200), 1865; vol. iii. (1201, &c.). This last is, as far as it has yet been carried, quite exhaustive in treatment, and a model of brevity, perspicuity and accuracy: to the historical student it is invaluable. Sir Thomas Hardy is also the author of Reports to the Master of the Rolls 'Upon the Carte and Carew Papers,' 1864, and 'Upon the Documents in the Archives and Public Libraries of Venice,' 1866, and of a valuable 'Syllabus, in English, of Rymer's Fœdera,' vol. i. (Will. I.—Edw. I.), 8vo, 1869. Outside his special department Sir Thomas Hardy has written 'A Catalogue of Lords Chancellors, Keepers of the Great Seal, Masters of the Rolls, and principal officers of the High Court of Chancery,' 8vo, 1843; 'Memoirs of the Rt. Hon. Henry Lord Langdale,' 2 vols. 8vo, 1852; and a 'Review of the Present State of the Shaksperian Controversy,' 8vo, 1860.

HARDY, SIR THOMAS MASTERMAN, a distinguished naval officer, was born at Martin's Town, near Dorchester, April 5th, 1769. In 1781 he entered the royal navy as a midshipman, and during a long professional career he served in a very large number of ships in succession. He was first in the *Helena*, 14 guns; cruised in the Channel, in 1790, in the *Hebe* frigate, and afterwards in the *Tisiphone*; joined the *Amphitrite* in the Mediterranean, under Lord Hood, in 1793; became lieutenant in the *Meleager* under Nelson in the same year; served in *La Minerve* in 1796 at the battle of St. Vincent; and was promoted to the rank of commander in 1797 for gallantry in a boat expedition, during which he captured a 16-gun brig under the walls of Vera Cruz. He next served in succession in the *Mutine*, the *Vanguard*, the *Foudroyant*, the *Princess Charlotte*, the *Namur*, the *St. George*, the *Isis*, and the *Amphion*; and when Nelson took the command of the Mediterranean fleet in 1803, Hardy went with him as captain of the flag-ship *Victory*. Hardy, who was Nelson's favourite captain and most trusted friend, was with his chief at his death, received his wishes, and on him devolved the painful duty of bringing home the dead body of Nelson in the *Victory* from Trafalgar. In 1806 Hardy was created a baronet for his services. He next served in the *Samson*, 64 guns, and the *Triumph*, 74, and in 1809 was transferred to the *Barfleur*, 98 guns. In 1812 he was on the North American station in the *Ramilies*. On the conclusion of peace he held a sort of honorary command of the royal yacht *Princess Augusta*, at Deptford; but in 1818 went to sea again in the *Superb*, and for six years commanded the South American squadron. After this he served in the *Wellesley*, *Sibylle*, and *Pyramus*. During an active service of thirty-six years Hardy had witnessed, and in most cases taken part in, the capture of no less than fifty-seven line-of-battle ships. In 1830 he was appointed a lord of the admiralty, and in 1834 was made governor of Greenwich Hospital, which office he retained till his death, on the 29th of September, 1839.

* HARGRAVES, EDMUND HAMMOND, known by his connection with the discovery of gold in Australia, was born at Gosport, Hampshire, in 1816, his father being a lieutenant of militia. Between the years 1830 and 1834 he was at sea, making voyages to various parts of the world. In 1834 he settled in Australia, married, and became a farmer and stock-rearer. In

1849 he went to California, and worked as a gold-digger. Here it was that he was struck with a certain analogy between the auriferous rocks of California and a range of hills he had seen in the interior of Australia; and on this point he wrote a letter to a friend in Australia, on the 5th of March, 1850, in which he said:—"I am very forcibly impressed that I have been in a gold region in New South Wales, within three hundred miles of Sydney; but unless you know how to find it you might live for a century in the region, and know nothing of its existence." Returning to Australia in 1851, and having his thoughts bent on this matter, he set out on horseback, and sought in the region near the river Macquarie. He washed a little gold out of some sand, and formed an opinion that the precious metal might be found along seventy miles or more of that river. He thereupon addressed a letter to the Colonial Secretary at the seat of government, offering to point out the spot if a bonus or present of 500*l.* were given to him—any further compensation being left to the discretion of the government and legislature. The Colonial Secretary declined to award a sum, but expressed a belief that the legislature would act liberally if the information proved to be valuable to the Colony. On April 30th, Mr. Hargreaves named several places in Bathurst district, where gold could be found. So successful was the find, that within one year from that period gold to the value of 4,000,000*l.* was exported from Australia. Mr. Hargreaves received in all a reward of 10,000*l.* from the New South Wales government; a gold cup, worth 500*l.*, purchased by public subscription, and the office of Commissioner of Crown lands. He returned to England in 1854, and in 1855 published 'Australia and its Gold Fields.'

Hargreaves will continue to be popularly known as the original discoverer of gold in Australia; but in point of fact Sir Roderick Murchison had, in 1841 and subsequently, publicly stated his belief that gold existed in Australia, and in 1848 addressed a formal letter on the subject to the then Secretary of State for the Colonies; while in 1839 Count Strzelecki had actually found gold in the Vale of Clwydd, but was enjoined strict secrecy by Sir George Gipps, lieutenant-governor of New South Wales, and in 1841 and 1849 small quantities of gold were found by other parties: in fact the knowledge that gold existed could not have been kept secret much longer, but Mr. Hargreaves came to the investigation with the advantage of his Californian experience, and was able to put the discovery forward in so practical a shape that to ignore it longer was impossible. (See E. C. Geographical Div. vol. i. col. 697, for a more detailed statement of the discovery.)

HARGREAVE, CHARLES JAMES, was born near Leeds, in December, 1820. He was educated at Bramham College, distinguished himself at University College, London, and took the degree of LL.B., with honours, in the University of London. From 1843 to 1849 he was Professor of Jurisprudence in University College. Having acquired a great reputation at the Equity Bar, he was appointed in 1849 a Commissioner of the Encumbered Estates Court in Ireland, in which capacity his patience, learning, and impartiality secured for him the respect and confidence of the practitioners in his Court. He became a Fellow of the Royal Society in 1844. In the Transactions for 1848, 1850, 1858, are some remarkable papers on Differential Equations (which received a Royal Medal), and also on Linear Equations of Differentials and of Differences. He also contributed to the Philosophical Magazine, between 1847 and 1864, and prepared a work on the Resolution of Algebraic Equations, which was printed after his death. This event took place at Bray, county Wicklow, April 23, 1866. His constitution seems to have been destroyed by his junction of two severe intellectual pursuits.

HARGREAVES, JAMES, inventor of the Spinning Jenny, was born of humble parents at Stanhill, near Blackburn. He employed himself and his family in domestic spinning and weaving, with the aid of the very simple apparatus known in those days. Until 1760 cotton had always been carded or combed out by means of hand-cards, a kind of brushes studded with teeth or spikes; but he greatly expedited the process by inventing a carding machine, in which the cards were set upon a revolving cylinder. A much more important improvement, however, bore relation to the process of spinning. Although he had often tried to spin with two or three spindles at once, holding the yarns between his fingers, he was baffled by having the spindles side by side horizontally. According to the received story, one of his children upset the spinning-wheel at which he was at work. Hargreaves's attention was called to the fact that, while the thread was still in his hand, the wheel rotated for a time horizontally, and the spindle vertically. The idea at once

suggested itself to his mind that a spinning apparatus, capable of spinning two or more threads at once, might be constructed. He set to work, and produced what he called the *Spinning Jenny*. It had eight spindles, which were made to revolve by means of bands from a horizontal wheel. By various improvements the number of spindles was increased to eighty, and the wheel placed vertically. Hargreaves and his family kept the secret for a time, and worked at the Jenny with good results. But the neighbours, finding that he worked up much more than the usual allowance of cotton, suspected the cause, broke into his cottage, and destroyed the machine. Again and again did poor Hargreaves try, but was always frustrated by his jealous neighbours, who were hostile alike to the carding machine and to the Spinning Jenny. He removed to Nottingham in 1768, erected a spinning mill, and took out a patent for his Jenny. He now had a new set of enemies, the manufacturers, who used his machines without paying him any royalty or patent fee. Refusing 3000*l.* for his patent, offered to him by a company, he had the mortification to find the patent declared invalid, on the ground that he had sold many of the machines before the patent was obtained. During the rest of his life Hargreaves carried on a small trade as a yarn manufacturer, in partnership with a Mr. Jones, and died in April, 1778. Although Arkwright's spinning-machine was far more important than Hargreaves's Spinning Jenny, it would be satisfactory to know that the latter, like the former, brought fortune to its inventor; but such was not the case. The share of Hargreaves in the partnership was valued at only 400*l.* at the time of his death; and his family were left in very poor circumstances. Nearly seventy years afterwards Sir Robert Peel gave 250*l.* out of the Royal Bounty Fund to the youngest and only surviving daughter; and this was the sole national recognition of the services rendered by Hargreaves.

HARRIS, REV. JOHN, D.D. [E. C. vol. iii. col. 303], was born on the 8th of March, 1802; he died on the 21st of December, 1856, shortly after the publication of the memoir above referred to. His 'Posthumous Works,' chiefly sermons and addresses, were published in two volumes, 8vo, 1857, under the editorial care of the Rev. Philip Smith.

HARRIS, THADDEUS WILLIAM, entomologist, was a native of Dorchester, Massachusetts, where he was born Nov. 12, 1795. He graduated at Harvard College in 1815; studied medicine under Dr. Amos Holbrook, of Milton Hill, whose daughter he married; and practised in that village until his appointment as librarian of Harvard College in 1831. From that year until his death on Jan. 16, 1856, he resided at Cambridge. When young he acquired a taste for natural history, but as he had no books, he was compelled to obtain his knowledge by observation. He did much to foster the culture of his favourite science in Harvard College by giving instruction on botany and zoology, and by organising a local natural history society. He gave most attention to entomology, and wrote upwards of 50 papers, although only 19 are enumerated in the Royal Society's 'Catalogue of Scientific Papers.' Most of his literary contributions were published in out-of-the-way places, such as local newspapers, amongst others the 'New England Farmer,' 'Hovey's Horticultural Magazine,' the 'Massachusetts Plowman,' 'Cambridge Chronicle,' &c. In 1837 he was appointed one of the commissioners for making a botanical and zoological survey of Massachusetts, one result of which was his 'Systematic Catalogue of the Insects of Massachusetts,' 8vo, 1832, in which he enumerated 2350 species; and another was the work by which he is best known, namely, a 'Report on Insects injurious to Vegetation,' 8vo, 1841, in which most of his scattered papers are embodied. A second edition appeared in 1842, and a third in 1862.

HARRIS, SIR WILLIAM SNOW [E. C. vol. iii. col. 303]. This electrician died at Plymouth, January 22, 1867, in his 75th year. He was the only son of Thomas Harris, of Plymouth, solicitor, whose family had settled in that town as early as the year 1600. He was educated first at the Grammar School of Plymouth, after which he entered the medical profession, and completed his studies in Edinburgh. He began practice as a militia surgeon, and afterwards became a general practitioner in Plymouth, but his love of electricity interfered with his practice.

He contrived his system of lightning conductors in 1820, and after his marriage in 1824 he devoted himself to the cultivation of science. He showed great tact and ingenuity in improving and constructing apparatus, and his papers in the 'Phil. Trans.' for 1834, 1836, and 1839, contain various examples of ingenuity and delicate manipulative skill. In the obituary notice of

Harris, contributed by Mr. Tomlinson to the 'Proceedings of the Royal Society' (xvi. 1868), it is remarked that Harris was not satisfied with the attainment of his end by *any* means, but the means themselves were the subject of long and patient thought and repeated trials, until the best means possible under the circumstances had been hit upon. This care in the selection and improvement of apparatus might seem to an ordinary observer to be often superfluous, but it led to success, and to the thorough understanding of the conditions of success; so that the ultimate failure of an experiment in Harris's hands became next to impossible. But with all this love of apparatus, and of its minute details, Harris had none of the spirit of a mere mechanical artist; he knew that the best instrument does the best work under the guidance of the best mind. But Harris's ingenuity was by no means confined to his apparatus. There was not a room in his house, from the attic to the kitchen, that did not bear marks of an original mind. He converted the ceiling of his children's nursery into a planetarium, and the floor into a compass-card. He did not disdain to invent a child's toy, or to rectify a defect in his ingenious kitchen-range.

In 1835 he received the Copley Medal of the Royal Society, and in 1839 delivered the Bakerian Lecture. During many years he laboured, under many disadvantages, to get his system of lightning-conductors adopted by the navy. In 1843 he published his work on Thunder Storms, and endeavoured by means of separate pamphlets, as well as by papers in the Nautical Magazine, to diffuse information respecting damage by lightning. "He was always on the watch for an illustrative example, and having once got the trace, never gave it up until he had tracked it to the ship's log, deposited in Somerset House, or obtained an account from the captain, or one of the officers of the ship that had been struck." At length, in 1847, his plan was fully adopted; he was knighted, and a grant of 5,000*l.* was made to him by Government, in addition to an annuity of 300*l.* which he had already enjoyed some years.

Harris contributed the Manuals of Electricity, Magnetism and Galvanism to Weale's Rudimentary Series. He was nearly always engaged in some work of research, and also spent much time in the cultivation of music.

In August, 1861, in returning from an excursion in his yacht, he was seized with an attack of iritis, which did not yield to medical treatment during some months. In 1862 he had to undergo two operations, but he lost the sight of one eye, and the vision of the other was impaired. Recovering somewhat from this illness, he became anxious to complete a work, the materials for which had been accumulating during many years. This was a complete Treatise on Frictional Electricity, the first portion of which was printed under the supervision of the author, with the assistance of Mr. Tomlinson, who, after the author's death, completed the treatise, from the papers left by the author, and also added a biographical notice to the work, which was published in October, 1867.

The following summary of Harris's scientific character is from the Royal Society Notice, already referred to:—"Harris's sympathies were with the Bennetts, the Cavendishes, the Singers, the Voltas of a past age. Frictional electricity was his *forte*, and the source of his triumphs. He was bewildered and dazzled by the electrical development of the present day, and almost shut his eyes to it. He was attached too closely and exclusively to the old school of science to recognize the broad and sweeping advance of the new. He was not conscious even of being behind his age when he presented to the Royal Society in 1861 an elaborate paper on an improved form of Bennett's discharger, and still less in 1864, when he discussed the laws of electrical distribution, and still relied upon the Leyden jar and the unit-jar. Although Sir W. Harris's powers as a scientific inquirer cannot be reckoned as on a par with those of some of his great contemporaries, he was highly ingenious and inventive, a clear thinker, and a suggestive writer. He did his work well, and left his mark on the science of his day; and while some of his labours will be forgotten and others be absorbed and blended with the branch of physical science that he cultivated, still there are many points in Harris's character as a man, and in his habits as a philosopher, which will be dwelt on with pleasure and profit."

HARTLIB, SAMUEL, "the great promoter of husbandry during the times of the Commonwealth," and son of the King of Poland's merchant, came over to England, according to Warton's account, about 1640; and in the year following published 'A briefe Relation of that which hath been lately attempted to procure ecclesiastical Peace amongst Protestants,' 4to, London,

1641, a work expressive of his sympathy with the schemes then promulgated for a union amongst the Protestant Churches. Although extensively engaged in commercial pursuits, he found time for the cultivation of literature and for the society of scholars; and also to concern himself in the establishment of what was afterwards called the Royal Society. He was a man of much practical wisdom and public spirit, and evinced so thorough an interest in the work of education that Milton addressed to him his tractate on that subject, written about 1644. Sir William Petty also addressed to him his 'Advice for the Advancement of some particular Parts of Learning.' He was himself the author of some theological and educational treatises; but his reputation at present chiefly depends upon his activity in furthering the interests of British agriculture. For his service in this direction he was made a pensioner of the Commonwealth; and when, after the Restoration, his public services seemed to be forgotten, he spoke of himself, in a petition to the House of Commons, as having exerted himself for thirty years and upwards in procuring "rare collections of MSS. in all parts of learning, which he had freely imported, transcribed, and printed, and sent to such as were most capable of making use of them; also, the best experiments in husbandry and manufactures, which by printing he hath published for the benefit of this age and posterity." The success of this petition is unknown; as are also the time, place, and manner of his death. His works include, 'The Discourse of Husbandry used in Brabant and Flanders, showing the wonderful Improvement of Land there, and serving as a Pattern for our Practice in this Commonwealth,' 4to, London, 1650; 'His Legacie; or, an Enlargement of the Discourse of Husbandry,' &c., 4to, London, 1652; 'The Compleat Husbandman; or, a Discourse of the whole Art of Husbandry, both forraign and domestick * * * unto which is added a particular Discourse of the Naturall History and Husbandry of Ireland. [With various Letters on the same subject, collected and edited by Samuel Hartlib], 4to, London, 1659; 'Considerations tending to the happy accomplishment of England's Reformation in Church and State,' 4to, 1647; and the 'Reformed Commonwealth of Bees, with the reformed Virginian Silk-worm,' 4to, London, 1655.

HARVEY, GABRIEL, a lawyer and poet, known as the friend of Spenser, to whom he addressed, with the signature of "Hobynoll," a set of verses generally prefixed, with others, to the 'Faerie Queene,' was born at Saffron Walden, in Essex, about the year 1545. He is said by his antagonist, Nash, probably with more malice than truth, to have been the son of a rope-maker. He was educated at Christ's College and at Pembroke Hall, Cambridge; became a fellow of Trinity Hall, and served as proctor of the University in 1582. He took the degrees of B.A. and M.A. in due course; and, having graduated as LL.D., was admitted, July 13th, 1585, to the degree of D.C.L. at Oxford, by incorporation. He practised as an advocate in the Prerogative Court of Canterbury, in London. He was embroiled in quarrels with Nash, Greene, and others, who overwhelmed him and his partizans with abuse as "false prophets, weather-wizards, fortune-tellers, poets, philosophers, orators, historiographers, mountebanks, ballad-mongers," &c. These compliments were repaid by Harvey in kind, and the story of his literary disputes is given in Isaac Disraeli's 'Calamities of Authors.' The first two or three of the epithets just quoted have reference to the astrological studies to which Harvey was addicted, and which he turned to account in the compilation of almanacs, which were much in esteem in the reign of Elizabeth. It is probable that his life was prolonged until the year 1630, at which time he was, according to Wood ('Fasti Oxonienses') "at least 85 years of age, if not 90."

His works comprise 'Rhetor: vel Oratio de Natura, Arte, et Exercitatione rhetorica,' 4to, London, 1577; 'Ciceronianus: vel Oratio post Reditum habita Cantabrigiæ,' 4to, London, 1577; 'Harveii Gratulationum Valdensium, Libri quatuor, ad illustrissimam augustissimamque Principem Elizabetham, Angliæ, Franciæ, Hiberniæ, Regiam longe serenissimam atque optatissimam,' 4to, London, 1578, which is a collection of epigrams, in Latin and Greek, upon the Queen, by Harvey himself, and by others, Englishmen and foreigners. The second book consists of epigrams on the Earl of Leicester; the third, of epigrams on Lord Burghley; and the fourth, on the Earl of Oxford and Christopher Hatton; 'Three proper and wittie familiar Letters: lately passed between two Universitie men; touching the Earthquake in Aprill last, and our English reformed Versifying. With the Preface of a Well-willer to them both,' 4to, London, 1580, reprinted in vol. ii. of 'Ancient Critical Essays'; 'Four

Letters, and certain Sonnets: especially touching Robert Greene, and other parties by him abused: but incidentally of diverse excellent Persons, and some matters of note. To all courteous Mindes, that will vouchsafe to Reading,' 4to, London, 1592, and in vol. ii. of 'Archæica,' 'A new Letter of notable Contents: with a straunge Sonet intituled "Gorgon," or the wonderful Yeare,' 4to, London, 1593, and in vol. ii. of 'Archæica,' and 'Pierce's Supererogation: or a new Prayse of the old Asse. A Preparative to certain larger Discourses intituled Nashes S. Fame,' 4to, London, 1593, and in vol. ii. of 'Archæica.'

* HARVEY, SIR GEORGE, President of the Royal Scottish Academy, was born in 1806, at St. Ninian's, near Stirling, Fifeshire. He was apprenticed to a bookseller, but occupied every spare hour in drawing, and when, in 1824, he was permitted to enter the Trustees' Academy as a student, he made rapid progress. From the first his pictures, referring chiefly to events connected with the history of the Covenanters, were popular with his countrymen; and when the Scottish Academy was founded in 1826, Harvey, though not yet of age, and a very immature artist, was invited to join it as an associate, and in 1829 he was elected full member. The range of Sir George Harvey's works is shown by the titles of some of the more important: 'Covenanters Preaching' (1830), a picture that did more than any other perhaps to extend his reputation; and which was followed at intervals by 'Covenanters' Baptism' and 'Covenanters' Communion.' Other Scottish subjects were 'The Battle of Drumclog,' 'The Duke of Argyll an hour before his execution,' 'Quitting the Manse,' 'Dismissal of a Village School,' 'Highland Funeral,' 'Sabbath in the Glen,' and 'The Penny Bank.' He has painted several English subjects, connected with the history of the Reformation and the persecution of the Puritans, as 'The First Reading of the Bible in the Crypt of St. Paul's,' 'Bunyan in Bedford Jail,' and 'Bunyan and his Daughter selling laces at the door of Bedford Jail.' But whilst most of his pictures relate to church history or social piety, he has occasionally painted portraits and landscapes: thus in the Royal Academy Exhibition of 1870, he had a 'Portrait of Mrs. Napier,' and a view of 'Glen Falloch.' On the death of Sir J. Watson Gordon, in 1864, Mr. Harvey was elected to succeed him as president of the Royal Scottish Academy, and in 1867 he received the honour of knighthood.

HARVEY, WILLIAM [E. C. vol. iii. col. 311]. This graceful designer and amiable man died at his residence, Prospect Lodge, Richmond, Surrey, on the 13th of January, 1866. During the last few years of his life he made comparatively few drawings on wood, his attention having been a good deal directed to painting in oil, and particularly to landscape painting, an art in which he would probably have excelled had he commenced the practice earlier.

HARVEY, WILLIAM HENRY, botanist, was born at Summerville (the country house of his parents), near Limerick, February 5, 1811. He was the youngest of eleven children. His love for botany was acquired from an old lady who used to teach him the names of the flowers in the garden; and throughout the whole of his after life he manifested a child's love for natural objects. In 1824 he went to the Ballitore School, Kildare, and there his tastes were fostered by Mr. White, the conductor of the school and a botanist, and by Mr. Sulist, the French master, between whom and himself an intimate friendship arose. In 1826 he found several shells which, as he himself states at the time, Turton even had never seen. This indicates that at this early age he had made considerable advance in his knowledge of the native fauna. In 1827 he left school, and after some time he settled down in his father's office; but he devoted all his leisure hours to botanising with his cousins. In 1829 he became acquainted with J. Bicheno, then secretary to the Linnean Society. Frequent excursions into the country enabled him to form a large herbarium, comprising numerous rare plants. One of these was *Hookeria luteo-virens*, found at Killarney, but which had not been previously recorded as Irish. By means of this he introduced himself to Sir W. J. Hooker, who, recognising his merits, helped him by corresponding with him, sending him books which he required, giving him parcels of *Algae* from all parts of the globe to examine, by asking him to describe the *Confervæ* for the 'British Flora' which Hooker was then publishing, and by introducing him to the more eminent English cryptogamists of the time. In 1834 his father died, an event which somewhat unsettled him, as he had no aptitude for business, and had a longing to explore the world as a botanist, but without any prospect of fulfilling his wish. In 1835 his brother was appointed treasurer to the Cape of Good Hope

colony. He accompanied his brother, and reached the colony in September, 1835. In March of the following year his brother was compelled to return to England on account of ill health, and Harvey resolved to be his companion, but his brother died long before the ship reached home. The appointment thus left vacant was offered to himself, and accepted; and in October, 1836, we find him back again at the Cape. In 1838, being in declining health, he obtained leave of absence, which was occupied in visiting his friends at home, and in visiting Italy. His third residence in the colony brought on a renewal of his complaint, so that he was compelled to throw up his appointment in 1842. For some time after this he had no settled employment, until he was appointed curator of the herbarium of Trinity College, Dublin. In 1848 he was appointed professor of botany to the Royal Dublin Society, and in 1856 he succeeded Dr. Allman as professor of botany at Trinity College. In 1849 and 1850 he gave a course of lectures on *Algae* before the Lowell Institute at Boston, and took the opportunity of visiting many places and naturalists in the United States. A longer excursion was subsequently made to the southern hemisphere for the purpose of collecting seaweeds for the college herbarium. It occupied him from August, 1853, to October, 1856. During the whole time of his connection with Trinity College he was a most assiduous worker, frequently commencing at 5 o'clock in the morning, and continuing his labour, with a few brief intervals, till 11 or 12 o'clock at night. Towards the latter part of his life his health was very much broken. He died at Torquay, May 16, 1866. Most of his books and papers deal with cryptogamic plants, which formed the chief object of his attention throughout life. His works include 'Genera of South African Plants,' 8vo, Cape Town, 1838, second edition, 1865; 'A Manual of the British *Algae*,' 8vo, London, 1841, second edition, 1849; 'Phycologia Britannica,' 4 vols. 4to, 1846—51, containing 350 plates; 'Nereis Australis,' 8vo, 1847; 'The Seaside Book,' 16mo, 1849, fourth edition, 1857; 'Nereis Boreali-Americana,' first published in vols. iii., v., and x. of 'Smithsonian Contributions to Knowledge,' but afterwards collected into a single volume; 'Phycologia Australica,' 5 vols. 8vo, 1858—63; 'Thesaurus Capensis,' 1859, and 'Flora Capensis,' written in conjunction with Dr. Sonder, of which only three volumes have been published. Most of his papers were contributed to Hooker's 'Journal of Botany,' 'Annals and Magazine of Natural History,' and to the 'Natural History Review,' of which last he was one of the conductors. A memoir of Harvey, mostly made up from his own letters, was published in 1869.

HAUSSMANN, JOHANN FRIEDRICH LUDWIG, a German mineralogist and geologist, was born at Hanover, February 22, 1782. After studying at Brunswick and Göttingen, and filling various government appointments in connection with the mines of Brunswick and Westphalia, he became a professor at Göttingen, in 1811, which post he retained till his death, December 26, 1859. Haussmann spent much time in exploring various parts of Europe, from Norway and Sweden on the north to Italy and Spain on the south. He wrote a large number of papers and books on minerals and rocks. The most noteworthy are the 'Handbuch der Mineralogie,' 3 vols. 8vo, Göttingen, 1813; 2nd ed. 1828—1847; and 'Reise durch Skandinavien in der Jahren 1806 und 1807,' 5 vols. 8vo, 1811—1818. His papers as given in the Royal Society's 'Catalogue of Scientific Papers,' are 128 in number. Most of them are printed in the publications of the scientific associations of Göttingen, of one of which, the 'Studien des Göttingischen Vereins Bergmännischer Freunde,' 8vo, vols. i.—vii. (1824—1856), he was the editor.

* HAUSSMANN, GEORGE EUGÈNE, BARON, was born at Paris, March 27th, 1809. After studying law, and qualifying as an advocate, he entered government service at an early age. In 1831 he was appointed Secretary-General of the Department of Vienne; after this he was sous-préfet successively at Issengeaux, Nérac, St. Giron, and Blaye; and then Secretary-General of the Department of the Gironde. In 1849 he was préfet of the department of the Var; and afterwards in those of the Yonne and the Gironde. These municipal and departmental offices prepared him for that in which his fame has been derived, viz., préfet of the department of the Seine, in which Paris is situated; this office was given to him in 1853. One of his first works was the establishment, in 1854, of a kind of bread bank, to produce an approximation to equality in the price of flour in scarce years and abundant years; a scheme which is stated to have been attended with beneficial results. He then set about numerous improvements in Paris, which employed large bodies of workmen, involved the expenditure of vast sums of money, and supplied

Paris with an unrivalled series of magnificent streets and buildings. He transformed the Bois de Boulogne and the Bois de Vincennes into parks; prolonged the Rue de Rivoli far eastward of its former limit; erected sumptuous hotels, mansions, and shops along the route; constructed many new Boulevards, especially the noble Boulevard de Sebastopol; made several public gardens and squares; transformed the Canal St. Martin into a promenade; cleared the spaces round numerous public monuments; built the great central markets; built or rebuilt more than a dozen bridges over the Seine, and several churches and monumental fountains; reconstructed the Théâtre Lyrique, the Gaieté, and the Cirque Impériale; built the magnificent new Opera House; reconstructed the Hôtel Dieu: built or rebuilt many hospitals and asylums; and opened the *banlieu* or suburb of Paris into the city, thereby rendering the whole of it one city of over a million and a half of souls. These works were so costly, that after numerous sums had been spent on them, a great loan of 250,000,000 francs (10,000,000*l.*) was raised in 1865. The prefecture had raised much money by a kind of bonds or loan notes beyond the powers sanctioned; dealings with the Crédit Foncier Company came to light; and the whole matter occupied much attention on the part of the press. A new loan for 260,000,000 francs was contracted in 1869, but not without violent discussions and strong opposition in the legislature. Baron Haussmann caused to be prepared a 'Histoire Générale de Paris,' which appeared in 1866 and subsequent years, in 4to, illustrated with plates and maps; the materials were derived from a vast collection of historical and archaeological documents; a special service was established for it in the Hôtel de Ville; and a Museum of Parisian antiquities formed at the Hôtel Carnavalet. He was created Senator in 1857, Grand Cross of the Legion of Honour in 1862, member of the Académie des Beaux-Arts in 1867, and Member of the Imperial Council of Public Instruction. He retired from the prefecture in January, 1870, soon after M. Emile Ollivier became Minister.

HAVELOCK, MAJOR-GENERAL SIR HENRY, K.C.B. [E. C. vol. vi. col. 1003]. In the above memoir the narrative of Havelock's career was brought down to the date of his successful march to Lucknow; and it is added that "as a reward for his eminent services he was created (September, 1857) a major-general in the British army, his promotion bearing date July 30, 1857; made a baronet and raised to be a Knight-Commander of the Bath; and, in accordance with a royal message to both houses of parliament, voted a pension of 1000*l.* a year for life." Havelock was, however, to hear but in part of these national recognitions of his rare merits. He received intelligence of his promotion; but before the baronetcy was gazetted he had ceased to care for earthly honours.

On entering Lucknow Havelock resigned the command-in-chief to Sir James Outram. The British troops, though strong enough to bring succour to their beleaguered countrymen, were not sufficiently strong to force their way back through the rebel army, and carry with them the sick and the wounded, the women and the children; and they in fact became in their turn shut up within the fortress. Sir Colin Campbell arrived before Lucknow with a new relieving army on the 11th of November. After a series of short but sanguinary encounters, in which Havelock afforded important aid, the British became masters of the entire city. Havelock was active in superintending the arrangements for the homeward march, when he was stricken with dysentery, and died on the morning of the 24th of November, 1857. The grief throughout the camp was deep and general, for Havelock was as much beloved as a man as he was esteemed as a soldier. In England his death was regarded as a national loss. In parliament the Premier, the Secretary of State for India, and the Commander-in-Chief of the army, bore warm testimony to his services, and expressed their deep regret for his death, and the same sentiments were expressed on behalf of the public by many of the great municipal corporations. The pension of 1000*l.* a year, which had lapsed by his decease, was renewed to his widow, and the baronetcy which Sir Henry was to have received was transferred to his son, who was further granted a pension of 1000*l.* a year. 'A Memoir of Sir Henry Havelock, K.C.B.,' by his brother-in-law, Mr. J. C. Marshman, appeared in 1860.

HÄVERNICK, HEINRICH ANDREAS CHRISTIAN, a biblical critic and commentator, from whose zeal, learning, and ability much was yet expected when he died prematurely in the year 1846, was for some time a tutor (Privatdocent) in the University of Rostock, afterwards professor of theology in the Imperial University of Dorpat, and subsequently ordinary professor of theology in the University of Königsberg. The principal

works which he left are—a Commentary on the Book of Daniel, 'Commentar über das Buch Daniel,' 8vo, Hamburg, 1832, and a New Critical Enquiry, &c., 'Neue Kritische Untersuchungen über das Buch Daniel,' 8vo, Hamburg, 1838; 'Handbuch der historisch-kritischen Einleitung in das Alte Testament,' 3 vols. 8vo, Erlangen, 1836—49, partly translated into English by Dr. W. L. Alexander, and forming one of the volumes of 'Clark's Foreign Theological Library,' as 'A General historico-critical Introduction to the Old Testament,' 8vo, Edinburgh, 1852, and partly by Professor A. Thomson, for the same series, as 'An historico-critical Introduction to the Pentateuch,' 8vo, Edinburgh, 1850; Commentary on the Prophet Ezekiel, 'Commentar über den Propheten Ezechiel,' 8vo, Erlangen, 1843; and Lectures on the Theology of the Old Testament, 'Vorlesungen über die Theologie des Alten Testaments,' 8vo, Erlangen, 1848, a work of posthumous publication, which was brought out under the editorial care of Dr. H. A. Hahn, and which contained a Preface by Dr. J. A. Dörner, professor of theology at Bonn.

HAVILAND, JOHN, architect, was born December 15, 1792, at Gundenham Manor, near Taunton, Somersetshire. He was a pupil of Mr. Elmes, and superintended the erection of a church and other buildings designed by that gentleman; then went to Russia with a view of entering the Imperial corps of engineers, but in 1816 availed himself of an offer to proceed to the United States. Having obtained the commission to erect the Pennsylvania Western Penitentiary at Pittsburgh, he adopted what was known as the radiating principle, which, though admitted in theory, had previously been only imperfectly carried out in practice. The advantages of the system were so evident that Haviland was directed to design a still larger and more costly structure, the Eastern Penitentiary, on the same plan. He was afterwards employed to erect penitentiaries for the States of Rhode Island, Missouri, and New Jersey, besides several state prisons, and came to be known as the Prison Architect of America. The celebrity obtained by his prisons led several European Governments to send commissioners to inspect them, and their reports as to the facilities afforded by the radiating system for the classification, superintendence, and discipline of the inmates caused a very general adoption of the principle in most subsequent structures of the class. Mr. Haviland erected many other important buildings, including the United States Mint, and the State Lunatic Asylum, and Deaf and Dumb Asylum, at Philadelphia; the United States Naval Asylum, Norfolk, Virginia; the Halls of Justice (better known as the Tombs), New York; and several churches and town-halls. Most of these have received and deserve high commendation for convenience and constructive skill, but their merits as works of art are open to question. Mr. Haviland continued to the close of his life to enjoy the esteem and confidence of his adopted countrymen, while his professional ability met with due recognition in Europe by his election to the honorary membership of the Royal Institute of British Architects, and of similar institutions on the continent. He died at Philadelphia on the 28th of March, 1852.

* HAWKINS, BENJAMIN WATERHOUSE, eminent for his skill as a draughtsman of animals, and for his life-size representations of the larger and more remarkable of the extinct vertebrates, was born in London, February 8, 1807. He received his art instruction from Mr. Behnes, the sculptor, and acquired his facility in drawing animals from a close study of them during a residence of more than five years and a half at Knowsley Park, where the Earl of Derby had a fine zoological collection. The numerous life-size models of the *Iguanodon*, *Pterodactyle*, and other remarkable creatures in the grounds of the Crystal Palace at Sydenham were made by him during 1852 and three or four subsequent years. Still more recently he has modelled some of the extinct genera of the United States, such as *Laelaps* and *Hadrosaurus*. His lectures on geology and zoology have acquired considerable popularity. His literary works consist chiefly of artistic studies on the forms of animals, in which he has shown a keen appreciation of the relation between form and function. Amongst others, may be mentioned his plates in Gray's 'Gleanings from the Menagerie at Knowsley Hall,' fol. 1850; the plates in an 'Elementary Atlas of Comparative Osteology,' fol. 1864, by himself and Professor Huxley; 'A Comparative View of the Human and Animal Frame,' fol. 1860; 'The Artistic Anatomy of the Horse,' 8vo, 1865; and 'The Artistic Anatomy of Cattle and Sheep,' 8vo, 1868.

HAWKINS, JOHN ISAAC, an ingenious and fertile inventor, was born at Taunton, Somersetshire, March 14, 1772. He went to America at an early age, and studied medicine at Jersey

College, Pennsylvania, but soon turned his attention to the application of science to useful purposes. One of his first inventions was a charcoal filter for separating chemical and mechanical impurities from water. Returning to England, he patented a machine for taking profile likenesses, of all dimensions from life-size downwards. He patented and manufactured many novel improvements in pianofortes, and invented a musical instrument called the claviole, or finger-keyed viol, having singular contrivances for imitating the sounds of several different instruments. In 1808 he associated himself with Mr. Vesey in a scheme for driving a tunnel under the Thames. Cylinders of brick, set in roman cement, were to be sunk in the river, and placed in excavations made in the river bed; when they had settled down at the required depth, they were to be covered in at the top, and opened at the side to establish a communication. Such was the scheme, but failure of a joint-stock company's funds defeated it in an early stage. Mr. Hawkins applied his knowledge of the filtering powers of charcoal to the refining of sugar, and several years of his life were devoted to the erecting and fitting up of sugar refineries at home and abroad. His familiarity with engineering (which gained him admission to the Institution of Civil Engineers in 1824) enabled him to introduce two or three novelties in building construction. He was one of the first to use whole timbers for scaffolding, in 1827. For many years he was a patent agent and consulting engineer. A pentagraph for copying letters, ever-pointed pencils, and gold pens with hard iridium nibs, were among the objects to which his inventive talent was directed. He once said, in relation to himself, "The Creator has constituted me an inventor, and I consider every useful invention given me as a commission from Him in trust for the benefit of mankind." He went to America in 1848, and died there on the 28th of June, 1855.

* HAWKSHAW, JOHN, civil engineer, was born at Leeds, in 1811. On leaving the Leeds Grammar School, he was articled to Mr. Charles Fowler, a civil engineer employed at that time in the construction of turnpike roads in Yorkshire. On the completion of his articles he became assistant to Mr. Nimmo, government engineer for many public works in Ireland. After Mr. Nimmo's death Mr. Hawkshaw took the management of the engineering and machinery at the Bolivia Copper Mines in South America. On his return to England from America he entered upon those works as a railway engineer which have since occupied the chief portion of his attention. The Manchester and Bolton, the Lancashire and Yorkshire, and other important lines in the North of England, were constructed by him. The Penarth harbour and dock, near Cardiff, the long bridge at Londonderry, and the extensive new docks at Hull, were of his construction. His most recent work of this class is the new South Dock of the East and West India Docks system, Blackwall, completed by him in 1870 at a cost of about 620,000*l*. On the Continent he has constructed the Riga and Dunaberg and the Dunaberg and Vitebsk railways; in the colonies the Government railways in Mauritius; while in the East he has been consulting engineer to the Madras and the Eastern Bengal railway companies. One work by Mr. Hawkshaw, among the most costly ever constructed in proportion to its length, was the extension of the South-Eastern Railway from London-bridge station to Charing-cross, with a branch to Cannon-street: it included the construction of two broad railway bridges over the Thames, and two terminal stations with roofs of noble span and elevation. He is engineer of the Government harbour of refuge at Holyhead, and has been employed by the War Office on the Spithead forts. When an irruption took place at the sluice near St. Germain's, in the fenny district of Norfolk, he was called in by the Commissioners of the Middle Level to repair the injury. In doing this he successfully substituted siphons for the fallen sluice. He was a member of the royal commission appointed to inquire into the sewerage and drainage of the metropolis; he was chosen in 1860 as a referee to decide between rival schemes for the supply of the City of London with water; and he has been much employed as a consulting engineer by the Government. In 1870 he brought forward a scheme for a railway tunnel from Dover to Calais, under the English Channel; but this and all other schemes for the same purpose have been placed in abeyance by the Franco-German war of 1870-71. Mr. Hawkshaw, who is a fellow of the Royal Society, and member of the Institution of Civil Engineers, besides numerous professional papers in the 'Proceedings' of the last-named body, has written a 'Description of the Fossil Trees found in the Excavations for the Manchester and Bolton Railway,' 1839; 'Notice of the Fossil Footsteps in the New Red Sandstone Quarry at Lymm,

in Cheshire,' 1842; and 'Some Observations on the Present State of Geological Enquiry as to the Origin of Coal,' 1843.

HAWKWOOD, SIR JOHN, a general in the English service, and a soldier of fortune, was born about the year 1320, at Sible Hedingham, in Essex, where his father, Gilbert Hawkwood, was a tanner. "This John," says Fuller ('Worthies of England'), "was first bound apprentice to a Taylor in the City of London, but soon turned his needle into a sword, and thimble into a shield, being pressed in the service of King Edward the Third for his French wars, who rewarded his valour with knighthood." Having only his courage and sword for a patrimony, he passed for the poorest knight in the army; and, after the conclusion of the treaty of Bretigni, in 1360, finding his fortune too small for peace, associated himself with a certain corps called "Les Tard Venus," or "Magna Comitiva," which was made up of soldiers of fortune who found it necessary to invent some way of supporting their retainers, either by pillage and marauding, or by taking service as mercenaries for whatever state was willing to engage them. Sir John Hawkwood (Giovanni della Guglia, or John of the Needle) became notorious by the exploits he performed in France in the way of the sack and plunder of towns; and became so formidable that he was in a position to levy black mail from the whole surrounding country. After some time he repaired to Italy, where, having, according to Machiavelli, "long served the Pope and others," he was finally engaged by the Signory of the republic of Florence. After the peace which supervened by the death of Giovanni Galeazzo, duke of Milan, in 1391, Hawkwood, with a band of a thousand men, was the only mercenary retained in the Florentine service, in which he continued until his death, on the 6th of March, 1394, when he was buried with great splendour in the church of St. Reparata. An equestrian representation of him, probably a portrait, although sometimes described as a statue, was put up to his memory by a public decree; whilst a cenotaph was erected to him in the church of his native place, which still perpetuates his memory. Friends and foes were unanimous in regarding Hawkwood as one of the greatest soldiers of his time; and, though a mercenary, he was remarkable for the faithfulness and honour of his engagements. He founded an English hospital at Rome, for the entertainment of poor travellers; and his representatives in England founded two chantries for prayers for his soul, and the souls of John Oliver and Thomas Newenton, Esquires, his military companions. His earlier exploits in love and war are celebrated in a romantic volume, entitled, 'The Honour of the Taylors: or the famous and renowned History of Sir John Hawkwood, Knight. Containing his many rare and singular Adventures, witty Exploits, heroick Achievements, and noble Performances. Illustrated with Pictures, and embellished with Verses and Songs, wonderfully pleasant and delightful,' 4to, London, 1687, a work which is said to have suggested to Sir Walter Scott his romance of 'Quentin Durward.'

HAWTHORNE, NATHANIEL [E. C. vol. iii. col. 320]. Actively occupied in the duties of his consulship, Mr. Hawthorne contributed nothing to literature during his residence in Liverpool. A visit to Italy gave occasion to his writing 'Transformation,' which appeared in 1860, and displayed, if not quite the power of his earlier writings, much of his characteristic grace of thought and style. Shortly after his return to America he published 'Our Old Home,' 2 vols. 8vo, 1863, an account of England written in a morbid querulous tone and temper. He was at this time in a bad state of health, and he continued to suffer till his death, which occurred at Plymouth, New Hampshire, on the 19th of May, 1864. He had begun a new novel, but lived to complete but a small portion of it, which was published a few months after his death, under the title of 'Pansie.' An occasional diary and note-book, extending from the age of twenty-three to forty-one, and containing the germs of several stories which he purposed writing, appeared under the title of 'Passages from the American Note-Books of Nathaniel Hawthorne,' 2 vols. 8vo, 1868. The 'Passages from the English Note-Books of Nathaniel Hawthorne,' 2 vols. 8vo, 1870, though somewhat gloomy in temperament, are free from the unpleasant querulousness which disfigured 'Our Old Home,'—but they were written for personal use, not for publication.

HAY, DAVID RAMSAY [E. C. vol. iii. col. 321]. Mr. Hay, who was born in March, 1798, died at Jordan Bank, Edinburgh, on the 10th of September, 1866.

* HAYEZ, FRANCESCO, Italian painter, was born in Venice, of Flemish parents, in 1791. He was a pupil of Magiotto, and in 1804 entered the Academy of Painting, Venice. His success there led to his being sent to Rome in 1810, where

he formed the acquaintance of Canova, who rendered him much assistance in his studies. Partly, perhaps, from this influence, partly from the prevalent tendency of Italian art, Hayez's early pictures were classical in subject, and academic in character. Indeed, he never in his long career wholly threw off the academic manner, though he was regarded by his partial countrymen as not only a great original painter, but as the head of a new school. His 'Laocoon' gained the first prize at the Academy, Milan; in 1820 he removed to that city, and there he has ever since resided. For several years he has been professor of historical painting at the Milan Academy. His works are chiefly historical, and often of large dimensions, but he has also painted many portraits. His best known works are 'Ajax,' 'Romeo and Juliet,' 'Bathsheba,' 'The Two Foscari,' 'Peter the Hermit preaching the First Crusade' (his finest work), 'Alberic de Romano' (his most elaborate composition), and 'The Taking of Jerusalem,' which, with a portrait of himself, he sent to the International Exhibition of 1862. The characteristics of Hayez as a painter are elevation of style, purity of design, and richness and force of colour, but over all is the fatal blight of imitative feebleness.

HAYTER, SIR GEORGE, principal painter in ordinary to the Queen, was born in London in 1792. The son of Mr. Charles Hayter, a well-known teacher of drawing, and author of treatises on 'Drawing' and on 'Perspective,' very popular in their day, though now forgotten, he received a careful artistic training, and won when very young two medals in the Royal Academy. His father did not, however, wish him to become an artist, and he entered the navy as a midshipman in 1808, but, disliking the sea, he in the following year commenced his professional career at Southampton as a miniature painter. In this line he met with considerable success. His father was teacher of drawing to the Princess Charlotte: he thus probably obtained an introduction at Claremont, and in 1815 was appointed miniature painter in ordinary to Princess Charlotte and Prince Leopold. In 1816 he went to Rome, where his copies in oil from the works of the great masters were much admired, but he also painted some original pictures, the principal being 'Christ and the Tribute Money,' which secured his election as member of the Academy of St. Luke. Returning to London towards the end of 1819, he established himself in Wimpole-street as an historical and portrait painter. In the latter capacity he met with a large amount of royal and fashionable patronage. But though his likenesses were good, the expressions favourable, the costumes unexceptionable, the execution neat, and the manner courtly, he had no claim to rank among the great masters of portraiture, and after retaining a foremost professional standing for some years, his popularity declined even in aristocratic circles. In 1826 he made a second visit to Italy, where he stayed some time, painted one or two historical pictures and the portraits of several illustrious personages, and was elected a member of the academies of Venice, Florence, Parma, and Bologna. On his return from Italy he made a rather prolonged stay in Paris, where he painted the portraits of Charles X., Louis Philippe, and various distinguished persons. Hayter had given instruction in painting to the Princess Victoria, and on his return to London received a commission to paint her portrait. Shortly after her accession to the throne he was appointed principal portrait painter to her Majesty, and in 1841 historical painter in ordinary to her Majesty, shortly after which he received the honour of knighthood. His historical works include 'The Meeting of the First Reformed Parliament,' purchased by the government for the National Portrait Gallery, 'Marriage of the Queen and Prince Albert,' 'Coronation of Queen Victoria,' 'The Trial of Lord William Russell' (familiar to every one by the engravings), 'The Trial of Queen Caroline,' and 'Joseph Interpreting the Chief Baker's Dream.' To the exhibition of the Royal Academy in 1838 he contributed 'A Portrait of Her Most Gracious Majesty Queen Victoria, seated on the Throne in the House of Lords, painted by Her Majesty's Command for the City of London,' and 'The Right Hon. Lord Melbourne, First Lord of the Treasury,' but his name does not, we believe, occur in any subsequent catalogue. The Royal Academy of London was less appreciative of his merits than the academies of Italy. Sir George Hayter died at his residence, Marylebone-road, on the 18th of January, 1871, aged 78.

HAYWARD, or HAYWARDE, SIR JOHN, an English historian, of whose earliest years nothing is certainly known, was probably born shortly after 1560, at Felixstow, a small town on the coast of Suffolk, or in its immediate neighbourhood. His education was completed at Cambridge, where he took the degree

of Doctor of Civil Law. Removing to London, he practised as an attorney in the ecclesiastical courts. Towards the close of the reign of Elizabeth, when both court and country were disquieted by the question of the succession to the throne and the intrigues of the Earl of Essex, Hayward published, with a dedication to that nobleman, his first work, entitled, 'The first Part of the Life and Raigne of King Henrie the iiiii., extending to the end of the first yeare of his Raigne,' 4to, London, 1599, reprinted in 8vo, London, 1642, with Sir Robert Cotton's 'Short View of the long Life and Raigne of Henrie iii.,' prefixed. The principal events upon which Hayward's work dwelt were the misgovernment of a sovereign and his advisers; the unauthorised return to England of Henry of Lancaster, and the unbounded popularity by which he was borne onwards to the throne. These circumstances, conjoined with the fact of the extremely adulatory style of the dedication, were sufficient to excite the jealousy and anger of Elizabeth. The author of the work—which was characterised by the lawyers concerned in the trial of the Earl of Essex as having been "written on purpose to encourage the deposing of the Queen"—was committed to prison, and would have been subjected to very severe treatment had not Lord Bacon used his wit, tact, and benevolence in mitigation of the royal displeasure. Although he escaped the rack, Hayward was subjected to an imprisonment which continued until some time after the death of his ambitious patron, in 1601, and, probably, until the death of the Queen. His pen, at least, was set free by the accession of James I., and he published a political treatise, in which he championed the king's claim to the throne, with the title of 'An Answer to the first Part of a Conference concerning Succession, published not long since under the name of R. Dollman,' 4to, London, 1603, which was reprinted as 'The Right of Succession asserted against the false Reasonings and seditious Insinuations of R. Dolman, alias Parsons, and others,' 8vo, London, 1683. Hayward's next production was a skillful exposition of the advantages likely to accrue from a legislative union of the two kingdoms, and called 'A Treatise of Union of the two Realmes of England and Scotland,' London, 4to, 1604. In 1610 he was appointed one of the two historiographers, Camden being the other, of the College at Chelsea, which was, however, never permanently established. In the summer of 1612, at the instigation of Prince Henry, his patron, he wrote 'The Lives of the three Normans, Kings of England: William the First, William the Second, Henrie the First,' 4to, London, 1613, which was reprinted in the Harleian Miscellany, part in vol. ii. p. 438, &c., and the remainder in vol. ix. p. 264, &c. The same request of the Prince of Wales produced also from Hayward the 'Annals of the first four yeares of the Reign of Queen Elizabeth,' which was edited for the Camden Society, by John Bruce, Esq., F.S.A., from a manuscript in the Harleian collection, and published in 4to, London, 1840. The death of Prince Henry put an end at once to both "the endeavours and the hopes" of Hayward; who, in default of a patron for his historical labours, turned his attention to the production of several devotional works, which commanded great popularity, and were often reprinted. Such were 'The Sanctuarie of a troubled Soule,' 12mo, London, 1616, &c.; 'David's Teares: or, an Exposition of the Penitential Psalms,' 8vo, London, 1622, 4to, 1623, 1625, &c.; and 'Christ's Prayer on the Crosse for his Enemies,' 8vo, London, 1623. On the 5th of August, 1616, Hayward was admitted a member of the College of Advocates in Doctors' Commons; in 1617 unsuccessfully applied to be incorporated in his law degree at Oxford; and on the 9th of November, 1619, received the honour of knighthood. He was a successful practitioner, and attained considerable professional eminence, as well as amassed considerable wealth. He died on the 27th of June, 1627. Besides the works already mentioned, Sir John Hayward wrote a treatise 'Of Supremacie in Affaires of Religion,' 4to, London, 1624; and a work, of posthumous publication, of greater interest and pretensions than any of his preceding ones, entitled, 'The Life and Raigne of King Edward the Sixt,' 4to, London, 1630, 12mo, 1636, &c., and reprinted in Kennet's 'Complete History of England,' vol. ii. p. 273, &c.

* **HAYWOOD, WILLIAM**, Chief Engineer and Surveyor to the Corporation of the City of London, was born in 1821. He received his professional education under Mr. George Aitchison, who was architect and resident surveyor to St. Katharine's Dock Company, and was much engaged in dock and warehouse engineering. Mr. Haywood became, in 1846, engineer and surveyor to the Commissioners of Sewers in the City of London, a post which he has occupied to the present time (1871). The duties that devolve upon that office are very varied, seeing that

the Commissioners discharge all the usual functions of an Improvement Board, a Highway Board, a Local Board of Health, and a Burial Board; and their engineer has had to plan and construct works of a diversified kind. In 1851, Mr. Haywood, in conjunction with the late Mr. Frank Forster, designed a plan of main drainage and interception of the sewage on the Middlesex side of the Thames; and in 1854 was employed with Mr. Bazalgette in developing that larger scheme which has since been finished in regard to the High Level and Middle Level, though not the Low Level Sewers. In 1857 he laid out the City of London Cemetery at Little Ilford, one of the largest in the kingdom. In 1861 he built the court-house for the Commissioners of Sewers at Guildhall. While superintending all the arrangements connected with the drainage, paving, cleansing, &c., of the City, Mr. Haywood gradually developed the scheme for the Holborn Viaduct, the most important and best arranged work of its kind yet constructed in this country, which was finished in 1869, and opened by the Queen in person. In addition to the ordinary difficulties of such a work, constant attention had to be paid to arrangements necessary for carrying on the operations without interrupting the two great streams of traffic, east and west, north and south. The subway system is more completely carried out here than in any other part of the metropolis; effective arrangements having been made for the pneumatic tube, for sewers, gas pipes, water pipes, and telegraphic wires beneath the roadway. Mr. Haywood has been largely consulted by commissions and parliamentary committees on matters relating to town improvements, street traffic, city railways, suburban railway communications, pavements, drainage, gas supply, water supply, &c. His printed reports on some of these subjects afford information not easily obtained in other quarters. One of them, a report in relation to the traffic of the City, and the possible means of improving the accommodation for it, was presented to the Improvement Committee of the Court of Common Council in 1867; in the fifty folio pages of text and the accompanying coloured plans, valuable details of various kinds are given, and an excellent scheme laid down for improving the great line of thoroughfare from east to west through the metropolis. Mr. Haywood is a Member of the Institution of Civil Engineers, and a Fellow of the Royal Institute of British Architects.

HEAD, THE RIGHT HON. SIR EDMUND WALKER, BART., K.C.B. [E. C. vol. iii. col. 326]. Sir Edmund Head retained the Governor-Generalship of Canada till 1861. On his return to England, he was appointed, 1862, a Civil Service Commissioner. He had been sworn in a member of the Privy Council in 1857, and in 1860 created a Knight Commander of the Order of the Bath. He died at his residence, Eaton-square, London, on the 28th of January, 1868. Sir Edmund Head was an excellent classical and general scholar, an admirable public servant, and an accomplished gentleman. He had received the honorary degree of D.C.L. at Oxford and LL.D. at Cambridge, and was a Fellow of the Royal Society. His son John, mentioned in the original memoir as his heir, was accidentally drowned in Canada in 1859, and the baronetcy consequently is extinct.

* **HEBERT, AUGUST ANTOINE ERNEST**, a popular French painter, was born at Grenoble (Isère), November 3rd, 1817. In 1835 he went to Paris, in order to study law, but gave more attention to art, and, after working some time in the atelier of David D'Angers, completed a picture of 'Tasso in Prison,' which was purchased from the exhibition by the Government. By the advice, and with the aid of Paul Delaroche, he competed for and won the grand prize of the École des Beaux-Arts, which entitled him to study in Rome. Having remained his five years' term at the Medici Villa, and sent home 'Odaliques' and other pictures, he spent two or three years in other Italian cities, and on his return to Paris, contributed to the Salon of 1848 several Italian subjects which were very well received, but the work which first secured general regard was his 'Mal' Aria,' 1850, the celebrity of which, as was said a few years later, led M. Hebert to seek as diligently after disease as other men seek after health. Certainly there is a morbid, unwholesome colour and feeling in most of his pictures, though his countrymen consider him a great colourist. His more celebrated later works include 'Le Crescenza,' 'Les Fienaroles,' 'Le Jeune Fille au Puits,' 'Rosa Nera à la Fontaine,' painted for the Empress Eugénie, and sent by her to the International Exhibition of 1862, where also was 'Les Cervarolles (États Romains),' sent by the Emperor from the Luxembourg. M. Hebert is an accomplished artist, refined in style, learned in

BIOG. DIV.—SUP.

design, and skilful in execution, but essentially artificial and Parisian. He has received medals of the first class (genre historique) in 1851 and 1855, and was created knight of the Legion of Honour in 1853.

HÉBERT, JACQUES RENÉ, known to his companions during the stormy period of the first French revolution as 'Le Père Duchesne,' was born at Alençon, in 1755. Obscure in family, and almost uneducated, he went to Paris at an early age, and obtained a situation as check-taker at the Théâtre des Variétés; but this, as well as another situation under a medical practitioner, he lost through dishonesty. He was in a state of abject poverty when the revolution broke out in 1789. He plunged eagerly into the vortex, and had ability enough to write pamphlets of the most inflammatory kind, which at once made him a hero in the eyes of the populace, and obtained for him ready admission into the revolutionary clubs. There happened at that time to be a moderately liberal journal in course of publication by Lemaire, who called himself 'Le Père Duchesne.' The clubs proposed to establish a rival to it under the same name, to advocate more violent action, and Hébert undertook the editorship. His writing was so abusive of the Court and the aristocracy, and so ferocious, filthy, and blasphemous, that it hit the depraved taste of the *sans culottes*, and obtained for him the above sobriquet. After the events of the 10th of August and the 2nd of September he was made a syndic. On the 24th of May, 1793, he was arrested by order of the Convention, on the motion of the Girondists, and charged with a scheme for assassinating such of the members as were opposed to his extreme violence. He was defended by Marat in the Convention, and was acquitted on the 27th. Furious against the Girondists, he joined the fiercer party in the Convention in bringing them to the scaffold; then affected for a time a little moderation, but soon broke out again into violent writing, and defied the Convention. He was one of the interrogating commissioners against the hapless Queen Marie Antoinette—an office in which his brutality disgusted even Robespierre. With Chaumette, Pache, and Anacharsis Clootz, he inaugurated atheism, and converted the Church of Notre Dame into a temple of reason. Robespierre and Danton, seeing that Hébert was endeavouring to make the clubs and the communes more powerful than the Convention, suspended for a time their own feud, and joined to crush him. On the 13th of March, 1794, he was denounced from the tribune, and on the following night was arrested with 19 others of his party (known as Hébertists). They were speedily tried, found guilty of crimes against the Convention and the republic, and guillotined on the 24th. Hébert was perhaps the least worthy of all the prominent actors in the revolution, brutal alike in language and conduct, and, whilst inveighing coarsely against all luxury and refinement in others, luxurious and selfish in his own personal habits during his brief tenure of magisterial office.

HEDWIG, JOHANN, botanist, was born December 8, 1730, at Kronstadt, in Transylvania. He studied at Leipzig, where his taste for botany was so decided that he was employed in classifying and arranging the plants in the herbarium belonging to the university of that city. On leaving Leipzig he settled as a doctor at Chemnitz, in Saxony, and took up the study of the grasses and cryptogamous plants. In 1781 he returned to Leipzig, and after filling some medical posts, he became professor of botany and director of the botanical gardens in connection with the university in 1789. He died at Leipzig, February 7, 1799. He was one of the most eminent cryptogamists of his day, and his works did much towards advancing our knowledge of mosses, ferns, and other allied groups of plants. He was an excellent observer with the microscope, which instrument he employed largely in his researches. His more important publications are: 'Fundamentum Historiæ Naturalis Muscorum frondosorum,' 2 vols. 4to, Leipzig, 1782—83; 'Species Muscorum frondosorum,' 4to, 1801, to which a supplement has been added since his death; 'Descriptio et adumbratio microscopico-analytico Muscorum frondosorum, etc.' 4 vols. folio, Lipsiæ, 1787—97; 'Theoria generationis et fructificationis plantarum cryptogamicarum Linnæi,' 4to, Petropoli, 1784, Lipsiæ, 1798; 'Abbildungen neuer und zweifelhafter cryptogamischen Gewächse, nebst ihrer analytischen Geschichte,' 4 vols. folio, Lipsiæ, 1785—95; and 'Sammlung seiner zerstreuten Abhandlungen und Beobachtungen über botanisch ökonomische Gegenstände,' 2 vols. 8vo, Leipzig, 1793—97.

* **HEFFTER, AUGUST WILHELM**, a distinguished German lawyer, was born on the 30th of April, 1796, at Schweinitz, and having studied law at the Universities of Leipzig and

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Berlin, became in 1820 assessor of the court of appeal at Cologne, and subsequently was appointed to a judicial function at Düsseldorf. Whilst at the latter place he produced his treatise on the Judicial Organisation of the Athenians, &c., 'Die athenaische Gerichtsverfassung, ein Beitrag zur Geschichte des Rechts, insbesondere zur Entwicklung der Idee des Geschworenengerichtes in alter Zeit,' 8vo, Cologne, 1822, a work which had the effect of procuring his appointment in 1824 as professor of law at the University of Bonn, from which he received his doctor's degree. He performed the duties of this office for six years, after which he was appointed to a similar position at the University of Halle, which he exchanged in 1833 for a chair in the faculty of law at Berlin.

Dr. Heffter's principal works are his *Institutions of Roman and German Civil Law*, 'Institutionen des römischen und deutschen Civil-Processes,' 8vo, Bonn, 1825, second edition, entirely recast, and entitled 'System des römischen und deutschen Civil-Processrechts,' 8vo, Bonn, 1843; *Outline of Lectures on the ancient and modern Public Law of Germany*, 'Grundriss zu Vorlesungen über altes und neues deutsches Staatsrecht,' 8vo, Bonn, 1827; *Thoughts on the Introduction of the Prussian Code in the Prussian Rhine-Provinces*, 'Gedanken über die Einführung der allgemeinen Preussischen Gesetzgebung in den Preussischen Rheinprovinzen,' 8vo, Bonn, 1827; *Contributions to the Law of the States and Princes of Germany*, 'Beiträge zum deutschen Staats- und Fürstenrecht,' 8vo, Berlin, 1829; an edition of the *Institutes of Gaius*, 'Gaii Institutionum Commentarii quatuor,' 12mo, Berlin, 1830; *Manual of the Criminal Law of Germany*, &c., 'Lehrbuch des gemeinen deutschen Criminalrechts, mit Rücksicht auf die nicht exklusiven Landesrechte,' 8vo, Halle, 1833, second edition, 1840, sixth edition, 8vo, Brunswick, 1857; *Right of Succession of Illegitimate Children*, &c., 'Die Erbfolgerechte der Mantelkinder, Kinder aus Gewissenssehen, aus putativen Ehen, und der Brautkinder bei Lehen und Familienfideicommissen,' &c., 8vo, Berlin, 1836; 'Das europäische Völkerrecht der Gegenwart,' 8vo, Berlin, 1844, third edition, 1855, fourth edition, 1861, French translation, from the third German edition, by M. Jul. Bergson, entitled 'Le Droit international public de l'Europe,' 8vo, Berlin, 1857; *Civil Process, or the legal Proceedings in civil Actions within the operation of the common Law of the Prussian States*, 'Civil-Prozess, oder das gerichtliche Verfahren bei bürgerlichen Rechtsstreitigkeiten im Gebiete des allgemeinen Landrechts für die Preussischen Staaten,' &c., 8vo, Berlin, 1856.

* HEFFTER, MORITZ WILHELM, a German historian and archaeologist, and elder brother of the subject of the preceding notice, commenced life as rector of the College of Torgau, which he left in 1824 for Brandenburg, where, in 1831, he was appointed conrector, and in 1839 was promoted to be a professor. He has been concerned in the production of various works in geography and philology, and has likewise produced a treatise on the Ancient Religion of Rhodes, 'Die Götterdienste auf Rhodus im Alterthume,' 3 parts, 8vo, Zerbst, 1827—29—33; *History of Brandenburg*, &c., 'Geschichte der Chur- und Haupt-Stadt Brandenburg, von den frühesten bis auf die neuesten Zeiten,' 3 parts, 8vo, Potsdam and Brandenburg, 1838—40; *Mythology of the Greeks and Romans*, 'Die Mythologie der Griechen und Römer,' &c., 5 parts, 8vo, Brandenburg, 1845—49; *Rivalry of the Germans and the Slaves*, &c., 'Der Weltkampf der Deutschen und Slaven seit dem Ende des 5 Jahrhunderts,' &c., 8vo, Hamburg and Gotha, 1847; *Religion of the Greeks and Romans, the ancient Egyptians*, &c., 'Die Religion der Griechen und Römer, der alten Aegypter, Indier, Perser und Semiten,' 8vo, Brandenburg, 1848, new edition, Leipzig, 1854.

HEIBERG, JOHAN LUDWIG [E. C. vol. iii. col. 338], died at Paris on the 25th of August, 1860.

HEIDELOFF, CARL ALEXANDER VON, German Gothic architect, was born at Stuttgart, February 2, 1788. The son of Victor Peter Heideloff (born 1757, died 1816), a well-known sculptor and architect of that city, he early commenced his artistic studies under the guidance of his father, and at the Art Academy under Dannecker and Scheffhauer. His predilection for mediævalism in art was early manifested, and being appointed architect, and later conservator of the monuments of his native city, he was able to exhibit his knowledge of the Gothic style in the construction of the tomb of the last Prince-Bishop of Bamberg, Albert Dürer's fountain, the altar in St. Sebald's, the restoration of the portal of the Frauenkirche, and the rebuilding of the Jakobikirche. Heideloff travelled widely in order to examine the remains of mediæval art, and was considered one of the most accomplished Gothic architects of Germany. From

1822 till his retirement with the rank of emeritus-professor in 1854, Heideloff was professor in the Polytechnic school of Nürnberg, and laboured diligently in advancing his architectural opinions. The substance of his teaching and the results of his investigations and experience were for the most part embodied in his numerous publications. Among the more important of these are—'Entwürfe zu einem neuen Theater-Gebäude in Nürnberg,' folio, Nürnberg, 1829; the series of introductions to the several styles of architecture, 'Der kleine Grieche,' 16mo, 1836; 'Der kleine Byzantiner,' 12mo, 1837; 'Der kleine Altdeutsche (Gothic), oder Grundzüge des alt-deutschen Baustyles,' 8vo, 1849—52, a clear and useful summary of German Gothic; 'Die Lehre von Vignola's Säulenordnungen in Zusammenstellung mit jenen des Palladio, Serlio, Cataneo, Branca, Scamozzi, und einigen römischen Antiken,' folio; 'Die Bauhütte des Mittelalters in Deutschland,' 4to, 1844; 'Die Ornamentik des Mittelalters,' 4to, 1843—52, also with English text; 'Architektonische Entwürfe und ausgeführte Bauten im byzantinischen und altdeutschen Style,' 8vo, with fol. atlas of plates, 1850, &c., besides other works undertaken in conjunction with F. Müller and with G. Neumann. Besides the restorations and buildings already mentioned, Heideloff erected the handsome château of Reinhardtsbrunn, the castles of Landsberg and Altenstein, the small castle of Rosenberg by Bonn, and restored the mortuary chapel at Lichtenstein, and the chapel of the castle of Rheinstein; the churches of St. Lorenz and St. Sebald in Nürnberg, and the cathedral at Bamberg. His latest work was the restoration of the Ritterkapelle at Hassfurt, at which place he died on the 26th of September, 1865.

HEIM, FRANÇOIS JOSEPH, French historical painter, was born at Belfort (Haut-Rhin), December 16, 1787; studied art in the central school, Strasbourg, where at the age of 15 he carried off the first prize; went to Paris, and entered the atelier of Vincent and the Académie, where he obtained the second grand prize in 1806, and the first in the following year. This freed him from military service, and entitled him to study at Rome. The pictures which he sent from Rome were purchased for the museums of Strasbourg and Bordeaux, and on his return to Paris he secured a gold medal of the first class at the Salon of 1812. Thenceforward his pencil was devoted to the grand style, and his vast canvases met with unbounded admiration and envied places in palaces and churches. Such were 'Le Martyre de St. Julienne et son Fils,' &c., for the church of St. Gervais, and 'Le Roi distribuant les Récompenses au Salon de 1824,' 'La Prise du Temple de Jerusalem par les Romains,' bought for the Luxembourg, and 'St. Hyacinthe ressuscité un Jeune Homme,' for Notre Dame. Official patronage descended richly on M. Heim. He was commissioned to paint, among other things, a ceiling of the Musée Charles X. at the Louvre, and represented on it 'Le Vésuve personnifié recevant de Jupiter le feu qui doit consumer Herculanum et Pompéi,' a number of allegorical figures in other apartments, and a composition symbolising 'La Renaissance des Arts en France,' in the Galerie Française. For Versailles he painted 'Louis Philippe recevant au Palais-Royal les Députés de 1830,' and 'Le Champ de Mai du 1^{er} Juin, 1815.' He also decorated la Chapelle des Ames du Purgatoire at the church of St. Sulpice and some other churches. His chief commission, however, was the decoration of the Salle des Conférences of the Chamber of Deputies. This comprised four large compositions from French history; allegorical figures of Prudence, Justice, &c., with others symbolising Agriculture, the Industrial and Fine Arts, &c.; and a dozen medallion portraits of great French jurists and legislators. But with all his grand works, Heim was almost forgotten, or only spoken of ironically by those who remembered his existence as 'Le Pere Heim,' when the exhibition of a collection of his pictures and drawings at the Exposition of 1855 revived his fame, and he was again spoken of as one of the great artists of France. The revival, it may be feared, was but temporary. Heim was a bold and skilful artist, drew admirably, composed well, and painted with a great deal of vigour. But his art was essentially acedemical, a thing of the past which is not likely to be galvanised into lasting vitality. M. Heim was a member of the Institute, into which he was elected in 1829, and an officer of the Legion of Honour, 1855. He died at Paris, October 2, 1865.

* HELMERSEN, GREGOR VON, a distinguished Russian geologist, was born September 29, 1803, near Dorpat, at the university of which place he was educated. While still a youth he had explored many parts of the Volga, and in 1828 he took part in a scientific expedition which the Russian government sent out to

explore that river. In 1830 he was appointed mining engineer, and was ordered by the government to make a general survey of the southern portion of the Ural mountains. About this time he became acquainted with Humboldt, who recommended him to acquire an idea of the state of science in Europe by a residence at Freiburg and Heidelberg. In 1833 he explored the Altai mountains, and in 1834 he carried out an extensive survey of the mineral productions of Asiatic Russia. In 1835 he was appointed professor of geology at the School of Mines at St. Petersburg, and in 1865 he was raised to the post of director of the Mining Institute of St. Petersburg. While holding these posts he has made repeated excursions into various parts of Russia, and has contributed largely to our knowledge of the geology of that country. In conjunction with K. E. von Baer, he has conducted the series of volumes entitled 'Beiträge zur Kenntniss der Russischen Reiches und der angränzenden Länder Asiens,' 8vo, St. Petersburg, 1839—58. He has contributed to several of the volumes, while two are entirely by himself, viz., vol. x., entitled 'Reise nach dem Ural und der Kirgisenstepe in 1833—35,' 1841; and 'Reise nach dem Altai im Jahre 1834,' 8vo, 1848, forming vol. xiv. In conjunction with M. Hoffmann, he wrote 'Geognostische Untersuchungen des Südruralgebirgs,' 8vo, Berlin, 1831. We have also from him 'Geologische Bemerkungen auf einer Reise in Schweden und Norwegen,' 4to, St. Petersburg, 1858, and an elaborate work in Russian on coal formations, published in 1864. Numerous articles on the geology of Russia have also been furnished by him to the scientific periodicals of St. Petersburg.

*HELMHOLTZ, HERMANN LUDWIG FERDINAND, physiologist, was born at Potsdam, August 31, 1821. His studies were mainly prosecuted at Berlin. In 1848 he obtained a professorship at the Academy of Fine Arts at Berlin, and after filling the physiological chair at Königsburg for six years, and that at Bonn for three, he finally settled at Heidelberg as professor of physiology in 1858. He is especially remarkable for his thorough knowledge of both physics and physiology; hence most of his enquiries are of an experimental nature, and in most of them he has manifested the highest ingenuity in contriving instruments and mechanical arrangements whereby the problems under investigation may be solved. As a few illustrative cases, the following may be noticed:—He ascertained that the motor nerves of a frog transmit an electrical current at the rate of from 80 to 126 feet per second, and that the muscle requires an appreciable time, one or two-hundredths of a second, to respond to the stimulus, the time being longer in proportion to the weight or force which the muscle has to overcome. His theory of acoustics was the result of a very recondite investigation. A simple primary or fundamental note is the lowest tone produced by a body all of whose parts vibrate in unison. Such notes are rarely produced. In musical instruments the note is of a compound nature, consisting of the fundamental note in conjunction with the harmonic notes which respond to it. The nature of the combination constitutes the quality of the note or its *timbre*. In the case of the human voice he finds that the vowels (German) consist of the same fundamental note, each vowel being distinguished by its *timbre*. When they are sung close to a piano whose wires are free to vibrate, the vocal sounds are analyzed into their primary and secondary notes. He conceives that a similar analysis is effected by the auditory apparatus, thus enabling us to distinguish the differences between the same note when played on different instruments. His more important publications are 'Ueber die Erhaltung der Kraft,' 8vo, Berlin, 1847; 'Handbuch der Physiologische Optik,' 8vo, Leipzig, 1856-66; 'Die Lehre von den Ton-empfindungen als physiologische Grundlage für die Theorie der Musik,' 8vo, Brunswick, 1862; 'Die Mechanik des Gehörknöchelchens und des Trommelfells,' 8vo, 1869; and 'Populäre wissenschaftliche Vorträge,' 1871. He has also written a large number of papers upon the same or kindred subjects.

HENDERSON, ALEXANDER, a Scottish divine and ecclesiastical leader, was born at Criegh, in Fifeshire, about the year 1583, and was educated at the University of St. Andrew's, where he so distinguished himself that soon after taking his M.A. degree, he was appointed regent or professor of philosophy. At this period of his life he was an adherent of the Episcopal party in the Church; and was preferred by Archbishop Gladstones to the living of Leuchars in his native county. In a few years he became a convert to presbytery, in favour of which he made his first public stand on the occasion of the passing of the Five Articles of Perth, in August, 1618. For his opposition to these Articles, he was summoned, with two other ministers, before the Court of

High Commission in St. Andrew's, August, 1619, on the charge of publishing a book proving the nullity of the Perth Assembly. They defended themselves so well as to escape with threats and a caution against future offences. For about 18 years after this period, Henderson lived retired, occupying himself chiefly with the spiritual affairs of his parish, until the issue of a proclamation which forced the use of the Liturgy or Service-Book on the Church of Scotland, without having been submitted to the presbyteries, and without the sanction of the General Assembly. Hereupon he went to Edinburgh to present a petition to the Privy Council against the measure, and succeeded in procuring its suspension until the pleasure of the King should be taken. His majesty was unyielding, and Henderson became at once the head and the right hand of the party of Nonconformists, whose memorials and petitions he drew up, and whose measures he suggested and directed. He remodelled the National Covenant of 1580 and 1581; and it was first exhibited for public signature on the 28th of February, 1638, in the Grey Friars' Church, Edinburgh, where an immense number of enthusiastic Covenanters bound themselves by a vow to extirpate Popery and Prelacy from the three Kingdoms. He was unanimously chosen Moderator of the General Assembly which the king allowed to be convened on the 21st of November, at Glasgow, and the result of which was the overthrow of Episcopacy. Henderson now accepted a call to a church in Edinburgh, where he was soon advanced to be first or King's Minister, without, however, receding from his position "at the head of the Church as now once more reformed." In 1639 he was one of the commissioners deputed by the Scottish army, then encamped on Dunse Law, to treat with the king, who, with his forces, had taken post at the Birks, a plain on the English side of the Tweed, within three or four miles of Berwick; and on the 31st of August, in the same year, he presided, in his clerical capacity, at the opening of the Scottish Parliament. In 1640 he was made Rector of the University of Edinburgh, the discipline of which he fortified, and the interests of which he advanced to such an extent as to ensure his annual re-election until his death. He accompanied the Scottish Commissioners to London, whence, after a stay of nine months, during which he was honoured with a private and cordial conference with the king, he returned to Edinburgh in July, 1641, and was immediately chosen again to the Moderatorship of the General Assembly. In August following the king visited Edinburgh, whither he repaired, in prospect of the civil war then on the eve of breaking out, in order to conciliate the chiefs of the Presbyterian party, and nominated Henderson to a royal chaplaincy, the duties of which office kept the latter in constant attendance upon his majesty. In 1642, after the beginning of hostilities, Henderson was one of the commissioners who visited London with the view of effecting a reconciliation between Charles and his English subjects. Returning disappointed from this mission, he was once more, in 1643, chosen Moderator to the General Assembly; and was soon afterwards sent to take part in the Assembly of Divines at Westminster. He remained in London for three years, during which time he assisted largely in the preparation of the public formularies of the religious union between the three Kingdoms. His biographer claims that he had a principal hand in "proposing and partly framing the Confession of Faith, the Larger and Shorter Catechisms, the Directory or Platform of Church Government and Worship, and also in forwarding the metrical version of the Psalms still used in Scottish churches."

In 1645 he was appointed to assist the Commissioners of the Scottish and English Parliaments to treat with the king at Uxbridge; and finally was deputed to negotiate with the latter, when his fortunes had reached a crisis, at Newcastle, where he arrived on the 15th of May, 1646, and maintained a written discussion with the king on religious and ecclesiastical subjects. The series of papers, eight in number, which passed between them, from the 29th of May to the 15th of July, five of them being by the king, and three by Mr. Henderson, was published with the title of 'The Papers which passed at Newcastle betwixt His Majesty and Mr. Alexander Henderson, concerning the Change of Church Government, A.D. 1646,' 8vo, London, 1649, and reprinted in vol. iv. of the first collection of 'Somers' Tracts.' Henderson had been in feeble health at the outset of this discussion, and he returned by sea to Edinburgh, only to die there on the 19th of August, 1646, praying in his last moments for a "happy conclusion to the great and wonderful work of Reformation." He was buried in Grey Friars' churchyard, where his nephew erected a monument to his memory,

which, with others in memory of the leading Covenanters, being demolished after the Restoration, was replaced at the Revolution.

Literary remains of a life so largely devoted to action and administration are scanty; and it suffices to mention that on the 28th of May, 1643, Henderson preached a Fast Sermon before the House of Lords; a Fast Sermon before the House of Commons on the 27th of December following; and a Thanksgiving Sermon before both Houses on the 18th of July, 1644, all of which were separately published. A small work of posthumous issue was entitled 'The Declaration of Mr. Alexander Henderson, Principall Minister of the Word of God at Edinburgh, and Chiefe Commissioner from the Kirk of Scotland to the Parliament and Synod of England: made upon his Death-bed,' 4to, London, 1648. His principal biography is entitled the 'Life and Times of Alexander Henderson,' 8vo, Edinburgh, 1836, by John Aiton.

HENFREY, ARTHUR, F.R.S. [E. C. vol. vi. col. 1004.] Professor Henfrey died on the 7th of September, 1859, in his 40th year. He was born at Aberdeen on the 1st of November, 1819.

* HENGSTENBERG, ERNST WILHELM, an eminent German divine and commentator, was born on the 20th of October, 1802, at Fröndenberg, and after receiving his preparatory education from his father, who was the minister of that parish, proceeded to the University of Bonn, where he applied himself chiefly to philosophy and the oriental languages. He signalled his proficiency in the latter by the production of a Latin translation of the 'Moallakah' of Amrualkais, one of the principal Arab poets of the 6th century, which obtained a prize from the Bonn Academy, and was published in 8vo, Bonn, 1823. He followed up this work with a translation in German of Aristotle's 'Metaphysik,' 8vo, Bonn, 1824; and, having completed his studies in theology, became a tutor (Privatdocent) in that faculty at Berlin, in which university he became extraordinary professor in 1826, ordinary professor in 1828, and received the degree of D.D. in 1829.

The principal works of Dr. Hengstenberg, who has been long known as a leader of the orthodox school, are his 'Christologie des Alten Testaments, und Commentar über die Messianischen Weissagungen der Propheten,' 3 vols. 8vo, Berlin, 1829—35, second edition, greatly improved, 1854—57, English translation, by R. Keith, 'Christology of the Old Testament, and a Commentary on the Predictions of the Messiah by the Prophets,' 3 vols. 8vo, 1835—39, of which the first volume was published at Alexandria, and the others at Washington, and of which an Abridgment was published by T. K. Arnold, 8vo, London, 1847. A more complete version, from the second German edition, of which the first two volumes were translated by Theodore Meyer, and the third and fourth by James Martin, appeared as part of 'Clark's Foreign Theological Library,' in 4 vols. 8vo, Edinburgh, 1854—58; Contributions for an Introduction to the Old Testament, 'Beiträge zur Einleitung ins Alte Testament,' 3 vols. 8vo, Berlin, 1831—39, portions of which were published in English in a volume entitled 'Dissertations on the Genuineness of Daniel and the Integrity of Zechariah, translated by the Rev. B. P. Pratten; and a Dissertation on the History and Prophecies of Balaam,' translated by J. E. Ryland, 8vo, Edinburgh, 1848, and in two other volumes, translated by J. E. Ryland, and entitled 'Dissertations on the Genuineness of the Pentateuch,' 2 vols. 8vo, Edinburgh, 1847; 'Die Bücher Moses und Aegypten,' 8vo, Berlin, 1841, English translation, by R. D. C. Robbins, with additional Notes by W. Cooke Taylor, and forming Part iii. of the new series of the 'Biblical Cabinet,' with the title of 'Egypt and the Books of Moses: or the Books of Moses illustrated by the Monuments of Egypt,' 12mo, Andover (U.S.), 1843; 'Commentar über die Psalmen,' 4 vols. 8vo, Berlin, 1842—45, second edition, 1849—52, English translation, by Patrick Fairbairn and J. Thomson, entitled 'Commentary on the Psalms,' 3 vols. 8vo, Edinburgh, 1844—48, of which the first volume formed a portion of the 'Biblical Cabinet: or hermeneutical, exegetical, and philological Library,' and the other two, of 'Clark's Foreign Theological Library; Commentaries on the most important and most difficult parts of the Pentateuch, 'Erläuterungen über die wichtigsten und schwierigsten Abschnitte des Pentateuches,' vol. i. 8vo, Berlin, 1842; 'Die Offenbarung des heiligen Johannes für solche die in der Schrift forschen erläutert,' 2 vols. 8vo, Berlin, 1849—51, second edition, 1861—62, English translation, made by the Rev. Patrick Fairbairn, for 'Clark's Foreign Theological Library,' and entitled 'The Revelation of St. John, expounded for those who search the Scriptures,' 2 vols. 8vo, Edinburgh 1851—52; 'Ueber den Tag des Herrn,' 8vo, Berlin,

1852, English translation, by J. Martin, 'The Lord's Day,' 8vo, London, 1853; The Sacrifices of Holy Scripture, 'Die Opfer der heiligen Schrift,' 8vo, Berlin, 1852, a discourse delivered before the Evangelical Alliance, and reproduced in the 'Evangelische Kirchenzeitung,' a periodical founded and edited by Dr. Hengstenberg in 1827; an Exposition of Solomon's Song, 'Das Hohelied Salomonis ausgelegt,' 8vo, Berlin, 1853; several other discourses delivered at meetings of the Evangelical Alliance, as, for instance, 'Der Prophet Iesaias. Ein Vortrag auf Veranstaltung des Evangelischen Vereins für Kirchliche Zwecke gehalten am 12. März, 1854,' 8vo, Berlin, 1854; 'Ueber das Buch Hiob. Ein Vortrag,' &c., 8vo, Berlin, 1856; and 'Der Prediger Salomo. Ein Vortrag,' &c., 8vo, Berlin, 1858, of which an English translation, by D. W. Simon, was published as a 'Commentary on Ecclesiastes, with other Treatises,' 8vo, Edinburgh, 1860; a Discourse on the Exordium of St. John's Gospel, 'Ueber den Eingang des Evangeliums St. Johannis. Ein Vortrag gehalten auf der Berliner Pastoral-Conferenz,' 8vo, Berlin, 1859; 'Das Evangelium des heiligen Johannes erläutert,' 3 vols. 8vo, Berlin, 1861—63, English translation, in 'Clark's Foreign Theological Library,' entitled 'Commentary on the Gospel of St. John,' vol. i. 8vo, Edinburgh, 1865, a work of which an English translation, by Messrs. Murphy, appeared with the title of 'The Prophecies of the Prophet Ezekiel elucidated,' 8vo, Edinburgh, 1869; and several Sermons preached on special subjects and occasions, and various academical discourses.

* HENLE, FRIEDRICH GUSTAV JAKOB, physiologist and anatomist, was born at Fürth, in Franconia, July 9, 1809. He studied medicine at Heidelberg and Bonn, obtaining his medical degree at the latter place in 1835. He then went to Berlin, and after serving in some minor capacities, he became professor in the university in 1837. In 1840 he was appointed to the chair of anatomy and physiology at Zurich; in 1844 to a similar chair at Heidelberg; in 1849 he became director of the anatomical institute at the last-named place; and in 1852 he succeeded Langenbeck at Göttingen. His work has consisted largely of dissertations on general anatomy, investigations into the minute microscopical structure of the tissues, and pathological researches. We may cite, amongst other works, his 'Handbuch der allgemeinen Anatomie,' 8vo, Berlin, 1841; and 'Handbuch der systematischen Anatomie des Menschen,' 3 vols. 8vo, Brunswick, 1855, 1856, in general anatomy; and his 'Handbuch der rationellen Pathologie,' 2 vols. 8vo, Brunswick, 1846—52, second edition, 1855; and 'Pathologische Untersuchungen,' 8vo, Berlin, 1840. He has also written 'Vergleichende Anatomie der Kehlkopf,' 8vo, Leipzig, 1839, in which he traces the relative development of the larynx in the different species of vertebrates. He is one of the editors of the 'Zeitschrift für rationelle Medicin,' which commenced in 1844, and still exists. In 1838 he published in Müller's 'Archiv für Anatomie' a 'Bericht über die Fortschritte der physiologischen Pathologie und pathologischen Anatomie in den Jahren 1836—37.' He has contributed or edited similar reports which have since appeared from time to time either in anatomical journals or as separate publications. The last is a 'Bericht über die Fortschritte der Anatomie und Physiologie im Jahr 1868,' 1869.

HENLEY, JOHN, an eccentric Anglican divine, commonly known as 'Orator Henley,' was born on the 3rd of August, 1692, at Melton Mowbray, of which parish his father, the Rev. Simon Henley, was vicar, in succession to his maternal grandfather, the Rev. John Dowel. He was educated successively at the Grammar-schools of Melton and Oakham; and about the year 1709, when, in addition to his classical attainments, he had already made some progress in Hebrew, was entered of St. John's College, Cambridge. Whilst an undergraduate he addressed a letter, dated from his college, February 3rd, 1712, to the 'Spectator,' which, subscribed with the pseudonym of Peter de Quir, abounds with "quaintness and local wit." His independence of mind made him uneasy under the discipline of the University. "He was impatient," says Mr. Westead, his friend and biographer, "that systems of all sorts were put into his hands ready carved out for him, and that he incurred the danger of losing his interest, as well as incurring the scandal of heterodoxy and ill principles, if, as his genius led him, he freely disputed all propositions, and called all points to account, in order to satisfy and convince his own reason. It shocked him to find that he was commanded to believe against his judgment, in points of logic, philosophy, and metaphysics, as well as religion; and that a course of mathematics was the least, if any, part of the usual academical education." Upon taking his degree of B.A., he was invited by the trustees of the Melton school, to become at first

the assistant, and afterwards the head master of that institution, which he raised from a state of decline to great celebrity. He was ordained deacon by Dr. Wake, at that time Bishop of Lincoln; and made a priest, after proceeding M.A., by Bishop Gibson, Wake's successor. Whilst at Melton, where with other duties, he conjoined that of assistant curate—he produced an historical Poem in four Books, of some merit and popularity, entitled 'Esther, Queen of Persia,' 8vo, London, 1714; and commenced a philological work, entitled 'The Complete Linguist: or, an universal Grammar of all the considerable Tongues in Being,' 2 vols. 8vo, London, 1719—21, in which he analysed the rationale of ten languages, and which he published with a dedication to the Duke of Newcastle. Resigning his clerical and scholastic functions at Melton, he repaired to London, the bearer, it is said, of above thirty letters of recommendation from the most considerable men in the county of Leicester, both of the clergy and the laity. His eloquence soon attracted attention in the metropolis, and Dr. Burscough, afterwards Bishop of Limerick, appointed him to be his assistant preacher in the Chapels of Ormond Street and Bloomsbury. Whilst holding this office he published 'Apotheosis. A Funeral Oration sacred to the Memory of John, Duke of Marlborough,' 8vo, London, 1722; 'A Translation of the Epistles of the younger Pliny,' and of De Vertot's 'Critical History of the Establishment of the Bretons among the Gauls, and of their Dependence upon the Kings of France and Dukes of Normandy,' 8vo, London, 1722. In 1723 he was presented by Lord Chancellor the Earl of Macclesfield to the rectory of Chelmondiston, in Suffolk, which he was allowed to serve by a curate, until Dr. Long, Bishop of Norwich, moved by representations made to Mr. Henley's disadvantage, insisted upon his residence. Hereupon he resigned both his country rectory, and a lectureship which he held in the city; and in the following year, on Sunday, July 3rd, 1726, opened an "Oratory" in Newport Market, which he licensed under the Toleration Act as a Dissenting meeting-house. He took this step, however, without joining any existing sect, and endeavoured to place himself at the head of a society of Henleyarians, to be composed of those who should become his followers. He drew up, for the use of his congregation, a formulary comprising three services for the morning, and one evening service, which he caused to be published as 'The Primitive Liturgy for the use of the Oratory,' 8vo, London, 1726, &c., and which discarded the Nicene and Athanasian creeds. For these symbols were substituted two creeds taken from the Apostolical Constitutions; and he adopted, for the current "Gloria Patri," the heterodox one which ran, "Glory be to the Father *through* the Son and *in* the Holy Ghost," a form which he maintained to have been used by "the first Fathers, at latest till the beginning of the first age." As to the sacrament, he vindicated its weekly and even daily administration by the medium of unleavened bread and mixed wine, which he deemed so essential to the rite, that without them he asserted the ceremony was no sacrament at all. Henley lectured on Sundays in theology, and on Wednesdays upon political and miscellaneous topics. His dissatisfaction with what he thought the defective and confined training of Oxford and Cambridge, led to his conceiving the idea of incorporating with his system an enlarged course of liberal education under a corps of competent professors, of whom he should be the president; so that it has been claimed for him that he projected a London University, although the scheme had to wait for a century for its realisation. Welstead says of Henley that he had "the assurance to frame a plan, which no mortal ever thought of; that he singly executed what would sprain a dozen of modern Doctors of the tribe of Issachar; that he had success against all opposition; that he challenged his adversaries to fair disputation, without any offering to dispute with him; worked, read, and studied twelve hours a day, and yet appeared as untouched by the yoke as if he never wore it; composed three dissertations each week, on all subjects however uncommon, treated in all lights and manners, by himself, without assistance; taught in one year what schools and Universities taught in five; was not terrified by cabals, or menaces, or insults, or the grave nonsense of one, or the frothy satire of another." Satire and accusation were, indeed, abundantly levelled against him. Pope ridiculed his "gilt tub," and gave him a place in the 3rd Book of the 'Dunciad,' in the well-known passage beginning,

"Imbrowned with native bronze, lo! Henley stands,
Tuning his voice and balancing his hands."

The clergy impeached Henley's moral character, but he averred that their imputations were as false as they were malignant; and

when his mode of delivery was stigmatised as theatrical, he replied that he had adopted it before he had ever seen a theatre, and asked, as there were enough of religious dormitories in the metropolis, why should he be blamed for providing one place of worship where people were kept awake? That he violated the sense of decorum of the age, both in his preaching and in the advertisements which he habitually caused to be inserted in 'The Daily Advertiser,' is notorious; but many of the anecdotes which have obtained currency about him are apocryphal. Admission to his orations was procured by the payment of a shilling; and he had medals struck for that purpose, which represented a star rising to the meridian, with the motto, "Ad Summa," and below, "Inveniam viam aut faciam." For some time he was the editor of a weekly paper called the 'Hyp Doctor,' set up to ridicule the arguments of the 'Craftsman,' and in the interest of Sir Robert Walpole, from whom Henley received an allowance of 100*l.* a year; upon the withdrawal of which in 1746, he became a violent opponent of the government, and was in consequence made the subject of an arrest and short detention. He died on the 14th of October, 1756, leaving behind a career and a character which still await a discriminating biographer.

Besides the works already mentioned, Henley produced 'The Orator's Miscellany,' 8vo, London, 1731; 'The Oratory Magazine,' 8vo, London, No. 3, 1748; several numbers of 'Oratory Transactions,' 8vo, London, 1728, &c., of which numbers 4, 5, and 6, were entitled respectively 'The Butchers' Lecture,' 'Milk for Babies,' and 'An Oration on grave Conundrums and serious Buffoons, justifying Burlesque Teaching,' &c., and various sermons, orations, lectures, and translations.

HENNING, JOHN, Scotch sculptor, was the son of a carpenter at Paisley, where he was born May 2nd, 1771. He followed his father's trade, received no instruction in art, and made no attempt to design till he was in his twenty-ninth year, when the sight of some wax medallions led him to try to imitate them. Some likenesses of his fellow-workmen in this manner were seen by Mr. J. Monteith of Glasgow, who was so much struck with their merit, that he persuaded Henning to go with him to Glasgow, and there found him so many sitters, that he was readily induced to adopt modelling as a profession. From Glasgow he went to Edinburgh with good introductions, and modelled portraits of Scott, Dugald Stewart, Jeffrey, Brougham, and other celebrities. Anxious to acquire a little regular instruction he came to London in 1811, and obtained permission from Fuseli, then keeper, to draw in the life-school of the Royal Academy, but on taking his place he was ignominiously expelled on the ground of not having been regularly admitted. The Elgin Marbles were then being exhibited in London, and Henning availed himself of the permission to draw from them. The Princess Charlotte to whom he showed his sketches, proposed to him to model a group from the Panathenaic Frieze, in ivory, restoring the lost members. His effort was liked, and he received commissions for other groups from the Duke of Devonshire, the Marquis of Lansdowne, and other patrons of art. He now resolved to make a copy (reduced and restored) of the entire frieze—a task that occupied him 12 years, but which was carried out with a really remarkable degree of success. For the rest of his life Henning was well employed, but he executed little original work. The reliefs on the gate at Hyde Park corner, and those on the façade of the Athenæum Club, are, perhaps, his boldest efforts. He also made numerous small reliefs from Raffaele's Cartoons and Transfiguration. He will be chiefly remembered, however, as a remarkable example of a wholly self-taught sculptor, and one who did not commence his career of self-instruction till of an age when many artists have achieved eminence. He died in April, 1851, at the ripe age of 80.

*HENRY, JOSEPH, an American experimentalist in physical science, was born at Albany, in the State of New York, December 17th, 1797. After a rudimentary education, he established himself as a watchmaker in his native city; but by the year 1826 he had advanced to the position of professor of mathematics in the Albany Academy. In the following year he commenced his experiments in electricity, which were continued through a considerable number of years. In 1832 he was appointed professor of natural philosophy in the College of Princeton, New Jersey. In 1837 he paid a visit to England. In 1846 he was elected secretary of the Smithsonian Institution at Washington. Mr. Henry is the author of 'Contributions to Electricity and Magnetism,' 4to, 1839. He has also contributed a great number of articles to the 'Transactions of the Albany Institute,' 'Silliman's Journal,' the 'Journal of the Franklin Institute,' and the 'Transactions of the American Philosophical

Society.' In those papers he treats of electricity and electro-magnetism, capillary attraction, phosphorescence, the colours of soap bubbles, the velocity of projectiles, the spots on the sun, the corpuscular hypotheses, heat, the perception of sound, the theory of imponderables, the conservation of force, &c. Some of his countrymen claim for him discoveries in relation to electro-magnetic machines, and to electric telegraphs, which are controverted in Europe.

HENSEL, WILHELM, German historical and portrait painter, was born at Trebbin, Prussia, July 6, 1794. He was educated as an engineer, served in the army from 1813 to 1815, and whilst at Paris had his enthusiasm so stimulated by the works of art collected there, that he resolved, on his return to Berlin, to study with a view to becoming a painter. Whilst carrying out his purpose he maintained himself by designing for the booksellers. In 1825, he went as an academy pensioner to Italy, and whilst there painted a large picture of 'Christ and the Woman of Samaria.' On his return to Berlin in 1828, he was appointed professor in the Art Academy, and Court painter, and received the order of the Red Eagle. His most famous pictures are, 'Christ before Pilate,' and 'The Duke of Brunswick at the Ball the night before Waterloo.' Several of his works are in the royal galleries and churches of Prussia, and some are in the collections of the Queen, the Earl of Ellesmere, and other English magnates. Hensel's reputation as an historical painter is not likely to be lasting. His compositions display learning and correctness, but they are of the careful and somewhat pompously pedantic type which characterises the Prussian school. His portraits, and especially the series of distinguished contemporaries which he drew for engraving, are valuable for the fidelity of the likenesses. Hensel was a liberal in youth, and published, in conjunction with W. Müller, a patriotic poem; but on the occurrence of the disturbances of 1848, he distinguished himself by his royalistic activity. He was killed by an omnibus accident, November 26, 1861.

HENSLOW, REV. JOHN STEVENS [E. C. vol. vi. col. 1005], was born at Rochester, in Kent, Feb. 6, 1796. The short summary of his life already given requires but little addition, although much might be said as to his labours as a naturalist and as a minister. Henslow's eminence as a worker did not depend upon his scientific investigations or even his teaching on scientific subjects so much as on his constant endeavour to forward the discovery of truth by assisting others, and to ameliorate the mental and moral conditions of his fellow-men. He used science as a means of attaining these ends. He died May 16, 1861. Fuller details respecting him are given in a 'Memoir of the Rev. J. S. Henslow,' by the Rev. L. Jenyns, 1862, to which is appended a list of all his writings arranged in chronological order.

HERAPATH, WILLIAM [E. C. vol. vi. col. 1006]. After a short illness, Mr. Herapath died at his residence, Old Park, Bristol, on the 13th of February, 1868, in his 72nd year.

* **HERBERT, JOHN ROGERS, R.A.** [E. C. vol. iii. col. 391.] Mr. Herbert completed his great picture, 'Moses bringing the Tables of the Law from Mount Sinai,' in the principal committee-room of the House of Lords, in the summer of 1864. He had been engaged on it, though not of course continuously, for fifteen years: the actual time spent on it, he himself says, was, "on the fairest computation," six years and a half. It is the largest, and by general consent, the most important mural painting of a biblical subject which has been executed in England in the present century. It is usual to speak of it as a fresco, but it was really painted on a fresco ground (*intonaco*) in water-glass, the same vehicle, but with some difference in the manipulation, as that in which Mr. Maclise painted his two great pictures, the 'Meeting of Wellington and Blücher after the Battle of Waterloo,' and the 'Death of Nelson,' in the adjacent gallery. Mr. Herbert's picture is the result of the most conscientious study, and executed with infinite care. Its treatment is severely realistic and literal; as a consequence it is by most people felt to be deficient in the grandeur, solemnity, and impressiveness that seem proper to such a scene and subject. Whilst engaged on his masterwork and since, Mr. Herbert has painted few easel pictures: 'Mary going with haste to the Mountainous Country,' painted for the Queen in 1860; 'The Sower of Good Seed,' exhibited in 1865; 'St. Edmund,' 1867; 'St. Mary Magdalen at the Tomb of Our Lord,' 1869, are the more important. He has, besides, exhibited some studies of North African and Egyptian scenery and character.

HERBERT OF LEA, RIGHT HON. SIDNEY, LORD [E. C. vol. iii. col. 392]. On the resignation of Lord Derby's ministry, June 1859, Mr. Herbert (he was not then a peer), re-

turned to office under Lord Palmerston, as Secretary of State for War, with a seat in the Cabinet. Thenceforward he devoted all his strength and energy to a reorganisation of the army. Earnest and unceasing as were his labours, he was but very partially successful in respect of its general administration, but he happily succeeded in effecting great improvements in the sanitary arrangements, and in raising to some extent its moral tone. He also sought to put the military service on a better footing, and did much to encourage the volunteer movement. But his strength was overtaken. Towards the close of 1860 his health was grievously impaired, and in the hope that he might, if spared the long hours and turmoil of the House of Commons, be able to continue in the post in which he had won general esteem, he was, in the beginning of 1861, raised to the peerage, with the title of Lord Herbert of Lea. But the relief came too late. His death, which occurred on the 2nd of May, 1861, caused widespread regret. His memory has been honoured by a bronze statue by Foley, erected in front of the War Office, Pall Mall; and a marble statue in the market place, Salisbury. A Herbert Convalescent Hospital has been erected at Bournemouth, and as a mark of the value attached to his measures for improving the health of the soldiers, the new military hospital, Woolwich, in the erection of which he had taken great interest, has been named the Herbert Hospital.

HERMANN, JOHANN GOTTFRIED JAKOB VON, German philologist, was born at Leipzig on the 28th of November, 1772, and received his early education at the hands of Ilgen, afterwards rector of Pforta, under whom he made such progress in classical studies that at fourteen years of age he was already fit for the university. In compliance with the wish of his father, he devoted some time to the study of law at Leipzig, but his chief attention was given to classical literature, in which he was encouraged and guided by his relative, F. W. Reiz. In 1793 he repaired to the University of Jena, but returned, after six months' residence, to Leipzig, where he became, in 1794, an academical tutor, in 1798 extraordinary professor of philosophy, and in 1803 ordinary professor of elocution, with which he conjoined in 1809 the duties of the chair of poetry. In these offices he continued till his death on the 31st of December, 1848, having throughout his academical career been remarkable for the clearness, precision, and popularity of his lectures, by which he had materially helped to form successive generations of able teachers. He founded the Hellenic Society of Leipzig in 1799; received in 1815 the decoration of the Order of Merit, which was some time after followed by letters of nobility; in 1834 became director of the philological seminary; and in 1835 was admitted a foreign associate of the French Académie des Inscriptions et Belles-Lettres. With Hermann originated valuable reforms in the method of Greek grammatical instruction; and he is especially known for his editions of the ancient writers, particularly of the Greek tragedians, and for the controversies in which his theories and assertions involved him with Böckh, Ottfried Müller, and other philologists. His more miscellaneous labours in the field of classical literature comprise 'De Metris Poetarum Græcorum et Romanorum, Libri III,' 8vo, Leipzig, 1796; 'Observationes Criticæ in quosdam Locos Æschyli et Euripidis,' &c., 4to, Leipzig, 1798; 'De Emendanda Ratione Græcæ Grammaticæ, pars prima,' &c., 8vo, Leipzig, 1801, of which no further part was published; 'De Metrorum quorundam Mensura rhythmica Dissertatio,' &c., 4to, Leipzig, 1805; 'De Dialecto Pindari Observationes,' &c., 4to, Leipzig, 1809; 'De Præceptis quibusdam Atticistarum Dissertatio,' &c., 4to, Leipzig, 1810; 'De Æschyli Glaucis Dissertatio,' 4to, Leipzig, 1812; 'De Versibus spuris apud Æschylum Dissertatio,' 4to, Leipzig, 1814; 'Elementa Doctrinæ Metricæ,' 8vo, Leipzig, 1816, English translation, by J. Seager, entitled 'Hermann's Elements of the Doctrine of Metres, abridged, translated,' &c., 8vo, London, 1830; 'De Mythologia Græcorum antiquissima Dissertatio,' 4to, Leipzig, 1817; 'De Historiæ Græcæ Primordiis Dissertatio,' 4to, Leipzig, 1818; 'Epitome Doctrinæ Metricæ. In usum Scholarum,' 8vo, Leipzig, 1818; a Letter to Creuzer on the Character and Treatment of Mythology, 'Ueber des Wesen und die Behandlung der Mythologie,' &c., 8vo, Leipzig, 1819; 'De Sogenis Aeginetæ Victoria Quinquentii Dissertatio,' &c., 4to, Leipzig, 1822; 'De Æschyli Niobe Dissertatio,' 4to, Leipzig, 1823; 'De Emendationibus per transpositionem Verborum Dissertatio,' 4to, Leipzig, 1824; 'De Æschyli Philoctetæ Dissertatio,' 4to, Leipzig, 1825; a criticism on Professor Böckh's Treatment of Greek Inscriptions, 'Ueber Herrn Professor Böckh's Behandlung der Griechischen Inschriften,' 8vo, Leipzig, 1826; 'De Æschyli Prometheus Soluto Dissertatio,' 4to, Leipzig, 1828; 'De Particula &, Libri

IV. 4to, Leipzig, 1831; a Criticism of K. O. Müller's *Eumenides* of *Æschylus*, &c., 'Rescension von Herrn K. O. Müller's *Eumeniden* des *Æschylus*. Mit Zusätzen,' 8vo, Leipzig, 1835; 'De Græca Minerva, Dissertatio,' &c., 4to, Leipzig, 1837; the Universe from a geographical point of view: a manual for elementary schools, 'Die Weltkunde aus dem Standpunkte der Erdbeschreibung. Ein Hilfsbuch für Volksschullehrer,' &c. 8vo, Merseburg, 1838; 'Opuscula,' 7 vols. 8vo, Leipzig, 1827—39; 'De Hippodromo Olympiaco Dissertatio,' 4to, Leipzig, 1839; 'Oratio in tertiis sacris secularibus receptæ a Civibus Lipsiensibus reformatæ par M. Lutherum Religionis,' 4to, Leipzig, 1839; and 'Oratio in quartis Festis secularibus Artis typographicæ habita,' 4to, Leipzig, 1840.

HERMANN, KARL FRIEDRICH, a distinguished German philologist and archæologist, was born on the 4th of August, 1804, at Frankfurt-am-Main, and after receiving his earlier education at his native place and at Weilburg, repaired successively to the Universities of Heidelberg and Leipzig for the study of philosophy, in which faculty he took his doctor's degree whilst still in his 20th year. In the same year he visited Italy for the purpose of archæological investigation; and having returned to Germany, became tutor in the University of Heidelberg in 1826, from which he was called in 1832 to undertake the chair of philology at Marburg. With the duties of this office he conjoined, from the year 1833, the second keepership of the university library, and the directorate of the philological seminary. In 1842 he migrated to Göttingen, where he remained as professor of classical eloquence and director of the philological seminary until his death on the 8th of January, 1856.

The works of Hermann comprise a critical edition of Lucian's treatise, 'De conscribenda Historia,' 8vo, Frankfurt, 1828; 'Questionum de Jure et Auctoritate Magistratum apud Athenienses Capita duo,' 8vo, Heidelberg, 1829; A Word on the Relation of modern speculative Philosophy to classical Archæology, 'Ein Wort über des Verhältniss der neuern speculativen Philosophie zur classischen Alterthumsforschung,' 8vo, Heidelberg, 1829; 'Lehrbuch der griechischen Staatsalterthümer, aus dem Standpunkte der Geschichte entworfen,' 8vo, Heidelberg, 1831, 1836, 1840, &c., English translation, entitled 'A Manual of the Political Antiquities of Greece historically considered,' 8vo, Oxford, 1836; 'Progymnasmatæ ad Aristophanis Equites Schediasmatæ tria,' 4to, Marburg, 1835; 'Disputatio de Vestigiis Institutorum Veterum, imprimis Atticorum, per Platonis de Legibus Libros indagandis,' 4to, Marburg, 1836; 'Disputatio de Socratis Magistris et Disciplina juvenili,' 4to, Marburg, 1837; 'Disputatio de sacris Coloni et Religionibus cum Cædipi Fabula conjunctis,' 4to, Marburg, 1837; 'Questionum Cædipodearum Capita tria,' 4to, Marburg, 1837; History and System of the Platonic Philosophy, 'Geschichte und System der Platonischen Philosophie,' 8vo, Heidelberg, first volume, 1839; 'Vindicium Platoniarum Libelli duo,' 4to, Marburg, 1840; 'Antiquitatum Laconicarum Libelli quatuor,' 4to, Marburg, 1841; 'Disputatio de Distributione Personarum inter Histriones in Tragediis Græcis,' 8vo, Marburg, 1841; 'Disputatio de Hippodamo Milesio ad Aristotelis Politicæ,' 4to, Marburg, 1841; 'Disputatio de Satiræ Romanæ Auctore ex Sententia Horatii Serm. 1. 40. 66,' 4to, Marburg, 1841; Compendium of Greek Antiquities, 'Lehrbuch der griechischen Antiquitäten,' 3 vols. 8vo, Heidelberg, 1841—52, and 8vo, Heidelberg and Göttingen, 1855, &c.; 'Lectiones Persianæ,' 3 parts, 8vo, Marburg, 1842; On the Lunar System of the Greeks and the Results of their latest Researches, 'Ueber griechischen Monatskunde und die Ergebnisse ihrer neuesten Bereicherungen,' 4to, Göttingen, 1844; Lectures on Archæology, or History of the Art of classical Antiquity, 'Schema akademischer Vorträge über Archæologie, oder Geschichte der Kunst des classischen Alterthums,' 8vo, Göttingen, 1844; 'Symbolæ ad Doctrinam Juris Attici de Injuriarum Actionibus,' 4to, Göttingen, 1847; an Essay on the Studies of the Greek Artists, 'Ueber die Studien der griechischen Künstler,' 8vo, Göttingen, 1848, reprinted, as some other of Hermann's works were, from the 'Göttinger Studien,' 1847; a Selection of Discourses, &c., 'Gesammelte Abhandlungen und Beiträge zur classischen Litteratur und Alterthumskunde,' 8vo, Göttingen, 1849; 'De Partibus Animæ immortalibus secundum Platonem,' 4to, Göttingen, 1850; 'Disputatio de Thrasyllo Grammatico et Mathematico,' 4to, Göttingen, 1852; Six Academical Lectures, 'Sechs akademische Reden,' 8vo, Göttingen, 1852; 'Vindiciæ Juvenalianæ,' 4to, Göttingen, 1854; 'Disputatio de Socratis Accusatoribus,' 4to, Göttingen, 1854; On the Principles and the Application of Criminal Law in Greek Antiquity, 'Ueber Grundsätze und Anwendung des Strafrechts

im griechischen Alterthume,' 4to, Göttingen, 1855; On the artistic sentiment of the Romans and their place in the History of ancient Art, 'Ueber den Kunstsinne der Römer und deren Stellung in der Geschichte der alten Kunst,' 8vo, Göttingen, 1855; and a work of posthumous publication, on the History of Greek and Roman Civilisation, which was brought out under the editorial care of Karl Gustav Schmidt, with the title of 'Culturgeschichte der Griechen und Römer,' &c., 2 vols. 8vo, Göttingen, 1857—58.

HÉROLD, LOUIS JOSEPH FERDINAND, a French musical composer, was born at Paris, January 28th, 1791. His father, a professor of the pianoforte, placed him in 1806 in the class of Adam at the Conservatoire de Musique, where in 1810 he received a prize for pianoforte playing. After studying harmony under Catel, and composition under Méhul, he obtained in 1812 the first grand prize for musical composition at the Institute, his subject being a cantata called 'Mademoiselle de la Vallière,' which entitled him to study in Italy. His first work, a two-act opera, 'La Gioventù di Enrico Quinto,' had a slight success. Returning to Paris in 1815, he composed the operas 'Charles de France' and 'La Clochette,' and assisted Boieldieu in 'Les Rosières.' In 1818 he wrote the music to a three-act comedy, 'Premier Venu,' and in 1819 new music to the old opera 'Les Troqueurs.' He now became for a time accompanist at the Opéra Italien; again visited Italy, and in 1823 composed 'Le Muletier' and 'Læsthenie,' and assisted Auber in the music for 'Vendôme en Espagne.' These were followed by 'Le Roi René,' 'Le Lapin Blanc,' and 'Marie,' the last of which met with considerable success. On resigning the post of accompanist, he became master of the chorus at the Opéra Italien, and composed the music for several ballets, including 'Astolphe et Jocunde,' 'La Somnambule,' 'Lydie,' and 'La Belle au Bois Dormante.' At length, in 1831, appeared his 'Zampa,' which had a decided and immediate success both in France and Germany. After taking part with others in composing the opera 'Marquise de Brinvilliers,' he composed 'Le Pré aux Clercs' in 1832. When he died, on the 19th of January, 1833, he left behind him the MS. of an opera 'Ludovic,' which was brought out by Halévy in 1834. Hérold composed three sonatas and seven capriccios for the pianoforte, a pianoforte rondo for four hands, sixteen rondos and divertissements, seven fantasias, and numerous variations and minor pieces; but his fame rests on his 'Zampa' and 'Le Pré aux Clercs,' which exhibit much original power, and appear to have taken a permanent place among French operas. 'Zampa' was brought out in an English form in London in 1870; its overture is especially in favour as an orchestral composition.

* HERRICH-SCHAFER, GOTTLIEB AUGUST WILHELM, entomologist, was born at Ratisbon, in Bavaria, and learned natural history from his grandfather and Professors Döllinger, Tiedemann, and Klug. In 1825 he was appointed to a position in connection with the judicial court of his native place. He is known as one of the highest authorities in Germany on all subjects in connection with *Lepidoptera*, but he has also a general reputation as an entomologist. He has published several works of an elaborate and expensive nature, such as 'Nomenclator Entomologicus,' 2 vols. 8vo, Ratisbon, 1835—40; 'Systematische Bearbeitung der Schmetterlinge von Europa,' 1843—1857; 'Synonymia Lepidopterorum Europæ,' 4to, 1856; 'Systematisches Verzeichniss der Europäischen Schmetterlinge,' 8vo, 1861; 'Sammlung neuer oder wenig bekannter ausser-europäischen Schmetterlinge,' 8vo, 1850, and still in progress. He has also written some other books, and a few papers in entomological journals.

HERTZ, HENRIK [E. C. vol. iii. col. 409]. This favourite Danish poet died at Copenhagen on the 25th of February, 1870, in his 72nd year.

HERTZEN, ALEXANDER [E. C. vol. iii. col. 409]. Herten remained for some years longer in London, editing his journal the 'Kolokol' (the Bell), which for a time had great influence with liberal Russians everywhere, though it was the special organ of the extreme republican refugees who had made London their headquarters. Gradually, however, his countrymen grew tired of his politics, and when he became the advocate of the Poles, they grew tired of him, and he was as extravagantly condemned as he had once been lauded. Herten withdrew to the neighbourhood of Geneva, and the 'Kolokol' ceased to sound. Two works which he published before leaving England attracted much notice, 'Mémoires de l'Impératrice Catherine, écrits par Elle-même,' London and Paris, 1868, and 'Le Monde Russe et la Revolution,' translated into French by M. H. Delaveau, 3 vols.,

18mo, Paris, 1860—62. Subsequently he wrote 'La Nouvelle Phase de la Littérature Russe,' Paris, 1864, and 'Le Vieux Monde et la Russie,' which appeared in the same year and place. Herten was in the habit of spending a portion of the year in Paris, and he died in that city on the 21st of January 1870.

HERVEY, JOHN, BARON HERVEY, of Ickworth, in Suffolk, a courtier and man of letters, son of John, first Earl of Bristol, was born on the 13th of October, 1696, and was educated at Westminster and at Clare Hall, Cambridge, where he graduated as a nobleman, taking his M.A. degree in 1715. After the death of his half brother, Carr, Lord Hervey, he succeeded to the courtesy title. He entered the House of Commons as member for Bury; and in 1730 was appointed vice-chamberlain to King George II., and a member of the Privy Council. He was for many years the faithful servant and friend of Queen Caroline; and is known also as the friend of Lady Mary Wortley Montagu, and as the antagonist of Pope, who characterised Lord Hervey as "Sporus," and launched against both his most unmeasured and abusive satire. In 1733 Lord Hervey was summoned by writ to the House of Lords, and was appointed Lord Privy Seal in 1740, an office which he vacated in 1742. His constitution and frame were excessively delicate, and he died, after having been long a helpless invalid, on the 8th of August, 1743.

Lord Hervey was a partisan and apologist of Sir Robert Walpole; and in that capacity was credited with an attack on Pulteney, afterwards Lord Bath, which appeared under the title of 'Sedition and Defamation displayed: in a Letter to the Author of the "Craftsman,"' 8vo, London, 1731, and which provoked from Pulteney a 'Proper Reply to a late Scurrilous Libel,' &c., in which Hervey was described as "a thing below contempt," whilst his personal appearance was ridiculed in the grossest terms. A duel was the result; and Hervey was slightly wounded, escaping more serious injury by the opportune slipping of his foot when on the point of being run through by his adversary's sword. Afterwards it transpired that Hervey was not the author of the 'Letter' which had given offence to Pulteney, who declared that he would never again renew the quarrel either in speech or writing.

Lord Hervey was a man of great and varied accomplishments, and if his tact and prudence had not made him so necessary at court, it is probable that he might have played a more prominent part in the sterner arena of political life. He contributed to Middleton's 'Life of Cicero' the translations of the passages from Cicero which occur in that work; and he carried on a special correspondence with Middleton, which was afterwards "published from the original MS." with the title of 'Letters between Lord Hervey and Dr. Middleton concerning the Roman Senate,' 4to, London, 1778. But the most important and valuable of Lord Hervey's works is one which has been praised as offering the most intimate portraiture of a court that has ever been presented to the English people. It was left by the author in manuscript, and long remained in that state in the possession of his family, by whom it was jealously guarded, owing to an injunction given in his will by the Earl of Bristol, Lord Hervey's son, that it should not see the light until after the death of King George III. It was at length published with the title of 'Memoirs of the Reign of George the Second, from his Accession to the Death of Queen Caroline.' By John, Lord Hervey. Edited from the Original Manuscript at Ickworth, by the Right Hon. John Wilson Croker, LL.D., F.R.S.' 2 vols. 8vo, London, 1848. The poems of Lord Hervey were published in a volume entitled 'Poetical Works of J. Hammond and Lord Hervey,' &c., 12mo, 1818.

HERVEY, THOMAS KIBBLE [E. C. vol. iii. col. 411]. Mr. Hervey died on the 17th of February, 1859. A collected edition of the 'Poems of Thomas Kibble Hervey.' Edited by Mrs. T. K. Hervey, with a Memoir, was published at Boston, Massachusetts, in 1867.

HESS, HEINRICH HERMANN JOSEPH, BARON VON, an Austrian general, was born at Vienna, March 17, 1788. In 1806 he joined an infantry regiment as ensign, and was employed with the staff, and on trigonometrical operations. He served as a lieutenant during the campaign of 1809 under the Archduke Charles, and distinguished himself at the battles of Aspern, Wagram, and Leipzig, but resumed his scientific employments on the conclusion of peace. In 1813 he was made staff captain; in 1814 was sent on a military mission to Piedmont; in 1815 was raised to the rank of major at the head-quarters of Prince Schwartzburg; and after the war took a post at the ministry of war. In 1822, he became lieutenant-colonel, and military commissioner to Turin; and in 1829, colonel. In 1831 he was with Radetzky as

general quartermaster in Lombardy; became major-general in 1834; served as military attaché at Berlin and elsewhere, and was promoted to the rank of field-marshal lieutenant in 1842. As quartermaster-general to the army of Italy under Radetzky in 1848, he contributed greatly to the success of the campaign against the Piedmontese, the strategic movements culminating in the victory at Novara having been planned by him. He also conducted the masterly retreat from Milan. He signed the armistice with the Piedmontese, and was soon afterwards decorated with the orders of Leopold, Maria Theresa of Austria, and St. George of Russia. In 1849 he was made a Baron, Feldzugmeister, and chief of the Emperor's staff. After fulfilling military missions to Warsaw, Berlin, and St. Petersburg, he commanded two army corps in Hungary, Galicia, and Transylvania in 1854, employed in watching the movements of the Russians during the Crimean war. Upon the defeat of the Austrian forces at Magenta, June, 1859, Hess was summoned to take the place of Giulay, but he was too late to turn the tide of success. Solferino was the result of his tactical movements. The Emperor Francis-Joseph showed his satisfaction with Hess's efforts by naming him field-marshal in the following month, July 12, 1859. He was nominated, in 1861, member of the Upper House of the Reichsrath, where he distinguished himself by his steadfast advocacy of conciliatory and liberal measures. In 1862, he was created chancellor of the order of Leopold. He died on the 13th of April, 1870. Full of years and honours, the most widely-esteemed man in Austria, he was decreed a public funeral on the most magnificent scale, the Emperor and the chief notabilities of the empire taking part in the ceremony. The regiment he commanded is "to bear his name for ever."

HESS, HEINRICH MARIA VON, a distinguished German historical painter, son of the line engraver K. E. C. Hess (b. 1755, d. 1828), was born at Düsseldorf, April 19, 1798. When the Düsseldorf Academy and Gallery were removed to Munich, 1806, Karl Hess followed them, taking his family with him. Heinrich, like his brothers, took to art as a matter of course, pursuing diligently, under his father's guidance, the curriculum of the Munich Academy. His predilection for religious art was carefully fostered, and at the age of 18 he had produced a 'Holy Family,' which was highly commended. In 1821 the King of Bavaria, Maximilian-Joseph, sent him to Rome to complete his studies. He remained there five years, made the acquaintance of Thorwaldsen, and other distinguished artists, and painted for the King a large picture of 'Apollo and the Muses on Mount Parnassus,' which excited great enthusiasm when it was exhibited in Munich. On his return to Munich, Hess was made professor of painting in the Academy. The example of Cornelius, and the influence of the Crown Prince, had developed a strong feeling for mural fresco painting, and Hess especially devoted himself to this branch of art. One of his earliest important commissions was an extensive series of frescoes on gold grounds, in the Allerheiligen Court chapel: these were lithographed by J. B. Müller, and published at Munich, 46 plates, imp. folio, 1837—41. A still more important work was the entire decoration of the basilica of St. Boniface, executed 1835—50, for King Ludwig. The pictures comprise a vast Gloria, Virgin, and Saints in the tribune, 12 large designs on the sides of the chapel, illustrative of the legend of St. Boniface, and 36 smaller ones above, representing events in the lives of saints and martyrs, together with numerous medallions and much subsidiary ornament. In both these series, however, as in most of his works, whilst the designs were made by Hess, much of the actual painting on the wall was done by his scholars and assistants—a practice generally adopted by the Munich fresco painters. Lithographs of the 12 frescoes illustrating the life of St. Boniface were published at Munich, oblong folio, 1862. His oil paintings are not numerous, but there are several in the Pinacothek, the palace at Schleissheim, and elsewhere. Hess had some reputation as a portrait painter. He has likewise designed a large number of painted glass windows; for several years he held the post of director of the royal painted glass works, Munich, and it is in a great measure owing to his influence that a school of glass painters was formed whose characteristic is the pictorial style, as distinguished from the mediæval mosaic manner adopted in England. Hess was elected corresponding member of the French Institute in February, 1862, and died on the 30th of March, 1863.

* HESS, PETER, elder brother of Heinrich von Hess, was born at Düsseldorf, July 29, 1792, and studied art in the Munich Academy. Two years' service in the Bavarian army during the campaign of 1813—15, rendered him familiar with military details, and on the return of peace he made the painting of

battle-fields his specialty. Of these he has painted a great number, many of them of large size and filled with figures and martial paraphernalia, and so successfully, that he has been commonly designated the German Horace Vernet. He accompanied Prince Otho to Greece in order to paint his entry into Athens as king of Greece, at the head of the Bavarian troops. In 1839 he went to Russia, by invitation of the Emperor, to paint a series of pictures of the chief events of the war of 1812, in which the Russian troops were engaged. For King Maximilian of Bavaria he painted the Battle of Leipzig, his largest and most important picture. For King Ludwig he painted the walls of the Banquet Hall of the Royal Palace with battle-pieces, and prepared a series of 39 cartoons of scenes in the great war of liberation, which were painted in encaustic by assistants, on the arcades of the Hofgarten. Peter Hess is court-painter and member of the academies of Munich, Berlin, Vienna, and St. Petersburg. A selection from his pictures, lithographed by Fr. Hohe, was published at Munich in 1825.

* HEUGLIN, THEODOR VON, zoologist, was born at Hirschlanden, Württemberg, March 24, 1824. Early in life he qualified himself for his subsequent career by making extensive excursions through Europe, with a view chiefly to studying zoology. In 1850 he explored the countries bordering both sides of the Red Sea. In 1852 he was attached to the Austrian consulate at Khartoum, and later he himself became the consul. His residence there for some years enabled him to form an excellent collection of the vertebrate fauna of the Nile basin. In 1856 he made scientific journeys through the contiguous parts of Europe, Asia, and Africa. In 1860 he undertook a more arduous enterprise, viz., a search for E. Vogel, in the prosecution of which he travelled up the Nile valley into Nubia and Abyssinia. The result of his journeys has been a large addition to our knowledge of the fauna of North-Eastern Africa, and probably no one has a more intimate acquaintance with the birds of that region. His scientific papers mostly deal with the geography and zoology of the regions visited by him. They are published in *Petermann's 'Mittheilungen'*, the '*Journal für Ornithologie*,' edited by Cabanis, and in the '*Nova Acta physico-medica Academiæ Cæs. Leopoldino-Carolinæ Naturæ Curiosorum*.' He has also written several separate works, the more important of which are '*Reisen in Nordostafrika*,' 8vo, Gotha, 1857; '*Systematische Uebersicht der Vögel Nordostafrikas*,' 8vo, Vienna, 1855; and '*Reisen in Abessinien*,' 1868.

HEYWOOD, SIR BENJAMIN, BART., was born 12th December, 1793. He was the eldest son of Nathaniel Heywood, banker, of Manchester. His mother was the daughter of Dr. Thomas Percival, author of *Medical Ethics*, who became a fellow of the Royal Society in 1765, at the age of twenty-five. On leaving school, Benjamin completed his studies in the University of Glasgow, and in 1811 entered the bank at Manchester. In 1824 the Manchester Mechanics' Institution was founded, and Mr. Heywood was elected president, which office he held during twenty years. On his retirement, his addresses were collected and published. In 1831 Mr. Heywood was elected one of the members for Lancaster, to support the Government measure of Reform, but parliamentary life did not suit his health, and on the dissolution after the passing of the Reform Act, in 1832, he retired from public life. Mr. Heywood earnestly supported the formation of the Manchester Statistical Society, and conducted an inquiry into the condition of the working classes in Manchester, the results of which in 1834 were laid before the statistical section of the British Association at Edinburgh. On the accession of Her Majesty, in 1837, Mr. Heywood was created a baronet. In 1843 he was elected a fellow of the Royal Society; and on two occasions, when the British Association met at Manchester, he filled the office of vice-president. He died on the 11th August, 1865.

* HILDEBRAND, BROR EMIL, Swedish archaeologist, was born, February 12th, 1806, at Fleröhop in Calmar, where his father was engineer in mines. He completed his education at the University of Lund, where he took his doctorate in philosophy in 1826. Three years later he distinguished himself by the publication of his '*Numismata Anglo-Saxonica Musei Regii Academiæ Lundensis ordinata et descripta*,' 3 parts, Lund, 1829. This was followed by an essay on the history of Swedish money, '*Upplysningar till Sveriges Mynthistoria*,' 5 parts, 1831-32. In the latter year he was appointed to arrange and describe the coins in the Royal Museum, Stockholm, and in 1846 published, as one of the results of his labours, '*Monnaies Anglo-Saxonnes du Cabinet Royal de Stockholm, toutes trouvées en Suède, classées et décrites*,' &c., 1846. In 1836 and following years, he

BIOG. DIV.—SUP.

was appointed keeper of the royal medals, of the medals, &c., of the bank, and guardian of the national antiquities; secretary and editor of the Society for the Publication of Scandinavian Historical Documents, and perpetual secretary (1837) of the Stockholm Academy. He is also a member of the Academies of Copenhagen, Berlin, &c. Besides the above works, and those issued by the Scandinavian Publication Society, he has published '*Minnespenningar öfver enskilda Svenska Män och Quinnor*,' with 21 lithographic plates, 8vo, Stockholm, 1860; '*Svenska Sigiller från medeltiden*,' fol. Stockholm, 1862, &c.

* HILDEBRANDT, FERDINAND THEODOR, an eminent German historical painter, was born at Stettin, July 2, 1804, and studied in the Berlin Art Academy under W. Schadow, whom he accompanied to Düsseldorf in 1826, and to Italy in 1830. Subsequently he worked with Cornelius in Munich, but eventually settled in Düsseldorf. Here he gradually emancipated himself from the system of his former masters Schadow, Overbeck, and Cornelius, formed a new style, and became the acknowledged head of a new school, known as the Düsseldorf, or Naturalistic school, which has exercised a marked influence on the younger painters of Germany, and also, though in a far less degree, on the painters of the rest of Europe. Its leading characteristic is, as the name implies, that of a more direct imitation of nature than prevailed among the other contemporary schools of historical art in Germany, but the great Düsseldorf master has his own idealistic theory, and in colour, as well as in design, departs often widely from the simplicity and modesty of Nature. Still, as compared with the painters under whom he learned his art, he may be said to have adopted a freer and less conventional manner, a warmer tone of colouring, and a greater variety of character and expression. Several of his earlier subjects were derived from Shakspeare, as '*Lear and Cordelia*,' 1826, and '*Romeo and Juliet*,' 1827, and in his latter years he has recurred to the same text-book, in '*Othello relating his Adventures*,' 1848, one of his most admired works, and '*Cordelia and Kent*,' 1859. But he has also painted largely from the German poets, from German history, and from the Scriptures. Many of his pictures have been engraved or lithographed, and he has illustrated Reinick's '*Liederbuch*,' and one or two other works.

* HILDRETH, RICHARD, an American writer, was born at Deerfield, in Massachusetts, June 28th, 1807; graduated at Harvard University in 1826, and was admitted to the bar in 1830; but adopted literature as a profession. He wrote for the '*Boston Magazine*' and the '*New England Magazine*,' and in 1832 became editor of the '*Boston Atlas*' newspaper. In 1834, while in the Southern States, he wrote an anti-slavery novel, '*Archy Moore*,' subsequently known in England as the '*White Slave*.' In 1836 he translated Jeremy Bentham's '*Traité de Legislation*' from the French, and also wrote a *History of Banks*, in which he advocated free banking. In the following year he wrote against the schemes then agitating for the annexation of Texas to the slave states. He continued to write against slavery, published his '*Despotism in America*' in 1840, and edited two anti-slavery journals in Demerara. A '*Letter on Miracles*,' a '*Theory of Morals*,' and an attempt to apply the inductive method to a '*Theory of Politics*,' are among his publications; but his largest complete work is a '*History of the United States*,' 6 vols. 8vo, 1849-56, bringing down the narrative to the end of Monroe's first presidency in 1820. Written with less vehemence of style, and perhaps displaying somewhat inferior literary power, it is yet a fairer and more trustworthy work than Bancroft's, though it is not likely to win so wide a popularity. In 1854 Mr. Hildreth added a chapter on the legal basis of slavery, as a supplement to his work on '*Despotism in America*.' His '*Japan as it was and is*' appeared in 1855, and he has since written on a variety of subjects for newspapers, magazines, and cyclopædias. For a time he was American consul at Trieste.

HINCKS, REV. EDWARD, D.D., was the son of the Rev. T. Dex Hincks, LL.D., minister of the Presbyterian church, Cork, and afterwards professor of the Hebrew and Oriental languages in the Belfast Theological Academy. Edward Hincks was born at Cork in August, 1792, and after a careful preparatory training under his father, entered Trinity College, Dublin, where he graduated optime in mathematics and languages in 1812, and obtained a fellowship the following year. Having taken orders in the Established Church, he received the college living of Ardrea, and in 1826 was promoted to the rectory of Killeleagh in the diocese of Down, which he held till his death, December 3rd, 1866. The fact of his not having received any other promotion, notwithstanding his European reputation and high personal character, has been ascribed to the earnestness with

X X

which he advocated a reform in the Irish established church, and a larger and more liberal system of education. Dr. Hincks was an excellent oriental scholar, and published a Hebrew Grammar which has been recommended by competent judges. But it was in the field of Egyptian and Assyrian translation, and especially the latter, that his laurels were chiefly won. As Mr. Layard observed in the introduction to his great work, 'Nineveh and its Remains,' "It is to Dr. Hincks we owe the determination of the numerals, the name of Sennacherib on the monuments of Kouyunjik and of Nebuchadnezzar on the bricks of Babylon—three very important and valuable discoveries." But he also threw much light on the grammar of the language, on the use of phonetics in writing, on cuneiform writings generally, and on the history and chronology of the people, and in various ways did much to smooth the path for subsequent investigators. All Dr. Hincks's views have not met with acceptance by Assyrian scholars, but of the value of his researches and the soundness of his judgment there is no difference of opinion. Most of Dr. Hincks's investigations were published in the 'Transactions of the Royal Irish Academy,' but he also communicated several important papers to the British Association, and articles and letters to the 'Journal of Sacred Literature,' the 'Athenæum,' &c., besides an elaborate 'Report to the Trustees of the British Museum respecting certain Cylinders and Terra-cotta Tablets, with Cuneiform Inscriptions,' 8vo, London, 1854; a valuable essay 'On the Polyphony of the Assyrio-Babylonian Cuneiform Writing: a Letter to Professor Renouf,' 8vo, Dublin, 1863, &c.

HIRSCHVOGEL, AUGUSTIN, a celebrated old German painter and engraver, born at Nürnberg in 1506, was the son of Veit Hirschvogel, a noted glass-painter of that city (born 1461; died 1523). Augustin Hirschvogel himself painted on glass and in enamel as well as in oil, and used the dry-point with considerable facility. He lived for some time at Vienna. His etchings, which are very numerous, embrace scripture subjects, ancient mythology and history, genre, portraits, and landscapes, the last in particular displaying much originality and spirit. He died in 1580.

(Nagler; Bartsch, ix. 170; Passavant, i. 231, iii. 257.)

HITCHCOCK, EDWARD [E. C. vol. iii. col. 436]. A short time before his death at Amherst, February 27, 1864, Mr. Hitchcock resigned the presidency of Amherst College, but continued to give instruction in geology and natural history. In 1856 he undertook the geological survey of Vermont, a task which occupied him some years, and in which he was assisted by his sons, E. Hitchcock, jun., and C. H. Hitchcock, and by A. D. Hagen. The results were published under the title of 'Report on the Geology of Vermont, descriptive, theoretical, economical, and scenographical,' 2 vols. 4to, 1861. His last work was his 'Reminiscences,' published just before his death. His son, C. H. Hitchcock, has written reports addressed to the government, descriptive of his survey of the state of Maine.

HITTORF, JACQUES IGNACE [E. C. vol. iii. col. 437]. This eminent architect and able writer lived just long enough to complete the concluding volume of his 'Sicilian Antiquities,' a task on which he had set his mind, and for which he had made a recent visit to Italy. His last important architectural work, scarcely completed at his death, was the vast terminus of the Chemin de Fer du Nord, the most original and one of the noblest structures of its class yet erected. As member of the Institute he wrote several papers, which appeared in the recent volumes of the proceedings; among others, biographical and critical notices of C. F. Schinkel, 1857; of L. Visconti, 1859; and of Sir Charles Barry, 1860; 'Notes on the Ruins of Agrigento,' 1859, and an elaborate 'Mémorial upon Pompeii and Petra,' 1866; in which he sought to show the close similarity between the fresco decorations of the baths, &c., at Pompeii, and the carvings on the rock-façades in the valley of Petra. M. Hittorf died on the 25th of March, 1867.

HOBBS, WILLIAM FISHER, a scientific agriculturist, was born at White Colne, Essex, in 1809. He learned the general routine of farming under his father; then familiarised himself with sheep farming in Leicestershire, and with grazing in Suffolk; and finally took a lease of a farm of 500 acres near Coggeshall. He gained the first prize for cereals at the first meeting of the Royal Agricultural Society at Oxford. His wheat came early into great repute. He was accustomed to offer a bonus of 1s. to his harvestmen for every ear of wheat containing 100 grains or more. On one occasion one man brought six ears averaging 107 grains each. These grains he sowed separately; and found not only that the best ears were the most prolific, but that the largest and best-formed grains yielded the

best products. Coming into possession of an ample fortune in 1844, he redoubled his exertions for the improvement of agriculture, giving a fair trial to all the new machines, and the various chemical manures and composts. Instead of being frightened, as many of the Essex farmers were, with the prospect of ruin when the Corn Laws were repealed, he made his farm at Boxted Lodge more and more what a scientific farm should be; and contributed more than any other man to the extension of sound principles of agriculture in his county, and very much to their general diffusion throughout England. In grazing he introduced the improved breed of Essex pig, sometimes known as the "Fisher Hobbs Pig." He was vice-president of the Royal Agricultural Society, associate of the Institution of Civil Engineers, member of the Council of the Smithfield Club, and member of the committee of the Farmers' Club. He represented the Royal Agricultural Society at the Paris Exhibition in 1855, and acted as jurymen in the Section on Agriculture. Mr. Hobbs died October 11th, 1866.

* HOCHSTETTER, FERDINAND VON, geologist, was born at Esslingen, April 30, 1829. He studied theology at Tübingen, but had a decided leaning towards natural history pursuits. In 1853 he went to Vienna, and there acquired such a thorough knowledge of geology, that he soon obtained an appointment in connection with a scientific commission appointed by the Austrian Government to explore Bohemia. In 1856 he was elected to a special professorship in the University of Vienna, but when the "Novara" was commissioned to make a journey round the world for scientific purposes, he obtained the post of geologist. The voyage began in 1857 and terminated in 1859. On his return he was made professor of mineralogy and zoology at the Polytechnic Institute of Vienna. He has written numerous papers, partly for the scientific publications of Vienna, partly for Petermann's 'Mittheilungen,' and partly for some other journals. They principally relate to the geology of Bohemia and of New Zealand. His more important publications relate to the latter country. When the 'Novara' was at New Zealand the authorities of that colony were particularly anxious to secure the services of a competent geological surveyor to examine certain areas in order to ascertain their value as coal-fields. They induced Hochstetter to undertake the task, and the main result was an excellent report on the geology and palæontology of a portion of New Zealand, which formed part of the series of volumes illustrative of the 'Novara' expedition. It forms two volumes, the first published in 1865, the second in 1867. The geological portion is by Hochstetter, but the palæontology is mainly contributed by Unger, Sues, Karrer, Stoliczka, Stache, and Jäger. In 1867 an English edition appeared in a somewhat reduced form under the title of 'New Zealand: its Physical Geography, Geology, and Natural History.' In 1869 he published a report, 'Ueber der Erdbeben in Peru am 13 Aug., 1868,' etc., in which he gives details as to the remarkable series of waves which this earthquake generated in the Pacific Ocean; and by a comparison of the rates at which the waves travelled in various directions he ascertained approximately the average depths of most parts of that ocean.

HOEVEN, JAN VAN DER, zoologist, was born at Rotterdam, Feb. 9, 1801. In 1819 he entered the University of Leyden, where he became a pupil of Sandifort, the professor of human anatomy and physiology. The Academy of Ghent had proposed a prize question on the use of comparative anatomy in the classification of animals, and the essay which he sent won the prize in 1820. In the following year he obtained a prize offered by the University of Utrecht for an essay on the ear, which the judges stated showed an extraordinarily wide knowledge of anatomy and natural science generally. In 1822 van der Hoeven graduated doctor in the mathematical and natural history sciences, and in 1824 he had that of medicine conferred upon him. For a short while after leaving the university he was unsettled, spending a few months at Paris, where he became acquainted with Cuvier, Latreille, Strauss-Durckheim, and others, practising as a physician at Rotterdam, and lecturing on physics. In 1826 he became extraordinary professor in the University of Leyden, and in 1835 ordinary professor, while his connection with the university only ceased with his death on March 10, 1868. His most important book was his 'Handboek der Dierkunde,' 2 vols. 8vo, Leyden, 1828—1833; second edition, 1849—1850. It was translated into English by Professor Clark, and published in 1856—58. There is also a German translation. His 'Philosophia Zoologica,' 1864, is also a highly valuable work, being a quintessence of zoological knowledge. Amongst his papers are monographs on *Cryptobranchus Japonicus*, *Ornitho-*

rynchus paradoxus, *Nautilus Pompilius*, and *Menobranchus*. As an anthropologist and craniologist he may be ranked alongside of Blumenbach, Morton, and Retzius. His principal anthropological works are 'Bijdragen tot de natuurlijke geschiedenis van den Negerstam,' 4to, 1842; 'Catalogus craniorum diversarum gentium,' 8vo, 1860; and amongst the same class of papers may be mentioned his 'Bijdragen tot de natuurlijke geschiedenis van den Mensch,' which forms a series of memoirs in the 'Tijdschrift voor Natuurlijke Geschiedenis en Physiologie' for the years from 1834 to 1839. This last-named periodical was edited by himself and De Vriese from 1834 to 1845. Accounts of his life have been given by Dr. Harting in a paper read before the Royal Society of Amsterdam in 1868, and by Dr. J. Barnard Davis, in the 'Journal of the Anthropological Society,' vol. vii. pp. lxxii—ciii (1869).

* HOFFMANN VON FALLERSLEBEN, AUGUST HEINRICH, a German poet and philologist, was born at Fallersleben, in the district of Lüneburg, in Hanover, on the 2nd of April, 1798, and received his early education at Helmstadt and Brunswick. He entered the University of Göttingen in 1816, and migrated in 1819 to that of Bonn. At first a student of theology, his acquaintance with the brothers Grimm, which commenced in 1818, determined him finally to the cultivation of general literature, and especially of German philology. After the production of his edition of the fragments of Otfried, 'Bonner Bruchstücke von Otfried,' &c., 4to, Bonn, 1821, he travelled in the Rhineland and in Holland for the purpose of investigating and collecting the antiquities of the popular speech and poetry. For some time he resided at Berlin, and in 1823 was appointed keeper of the university library at Breslau, which office he resigned in 1838. He became extraordinary professor of the German language and literature in the same university in 1830, and ordinary professor in 1835. One of his collections of poems, entitled Unpolitical Songs, 'Unpolitische Lieder,' 2 vols. 8vo, Hamburg, 1840—41, second edition, 1842, gave such offence by the republican spirit and tendency with which it was charged, that on the 20th of December, 1842, he was deprived of his academical office by a special royal decree. He now commenced a course of travel, which embraced Germany, Switzerland, and Italy, everywhere investigating the traditions of the people, and making collections of their songs and ballads. In 1845 he settled at Mecklenburg, and in 1848 was recalled to Prussia, and allotted a pension. He married in the year following, and for some time lived a retired life on the banks of the Rhine, first at Vingerbrück, and afterwards, 1851, at Neuwed. Repairing to Weimar in 1854, he became the editor of the 'Weimarische Jahrbuch,' Hanover, 1854—57, and in 1860 received from the Duke of Ratibor the appointment of librarian at his palace of Korvei, on the Weser.

The works of Dr. Hoffmann comprise a Collection of Old High German Glosses, 'Althochdeutsche Glossen, gesammelt und herausgegeben,' &c., 4to, Breslau, 1826; Old High German, according to the Wolfenbüttel Manuscripts, 'Althochdeutsches aus Wolfenbüttel Handschriften, herausgegeben,' &c., 8vo, Breslau, 1827; 'Hortæ Belgicæ,' 8vo, Wratisslau and Leipzig, 1830, &c.; Quarryings for the History of the German Language and Literature, 'Fundgruben für Geschichte deutscher Sprache und Litteratur,' 2 vols. 8vo, Breslau, 1830—37; Science of German Manuscripts, &c., 'Handschriftenkunde für Deutschland. Ein Leitfadens zu Vorlesungen,' 8vo, Breslau, 1831; History of German Hymns down to the time of Luther, &c., 'Geschichte des deutschen Kirchenliedes bis auf Luthers Zeit. Ein Literarhistorischer Versuch. Mit einer Musikbeilage,' 8vo, Breslau, 1832, third edition, 2 parts, 8vo, Hanover, 1861; 'Bartholomäus Ringwaldt und Benjamin Schmolck. Ein Beitrag zur deutschen Literar-Geschichte des XVI. und XVIII. Jahrhunderts,' 8vo, Breslau, 1833; a Fragment of an unknown German Poem, 'Merigarto. Bruchstück eines unbekannten deutschen Gedichtes aus dem XI. Jahrhundert, herausgegeben,' &c., 8vo, Prague, 1834; Original Poems, 'Gedichte,' 2 vols. 12mo, Leipzig, 1834: a New Collection, 'Gedichte. Neue Sammlung,' 8vo, Breslau, 1837, another edition, 'Gedichte,' 16mo, Hanover, 1862, sixth edition, 1864; Leaves of Old German, 'Altdeutsche Blätter,' 2 vols. 8vo, Leipzig, 1835—40; Outlines of German Philology, 'Die deutsche Philologie im Grundriss. Ein Leitfadens zur Vorlesungen,' 8vo, Breslau, 1836; Popular Songs and Melodies of Silesia, 'Schlesischen Volkslieder. Mit Melodien,' 8vo, Leipzig, 1842; Songs of South Germany, 'Allemannische Lieder,' &c., 8vo, Mannheim, fifth edition, 1843; Ancient Political Poems, &c., 'Politische Gedichte aus der deutschen Vorzeit, herausgegeben,' &c., 8vo,

Leipzig, 1843; German Songs from Switzerland, 'Deutsche Lieder aus der Schweiz,' 8vo, Zurich, 1843; fourth edition, Altona, 1862; German Glees, &c., 'Die Deutschen Gesellschaftalieder des XVI. und XVII. Jahrhunderts. Aus gleichzeitigen Quellen gesammelt,' 12mo, Leipzig, 1844, second edition, 1860; Contributions to German Literary History, 'Spenden zur deutschen Literaturgeschichte,' 2 vols., 8vo, Leipzig, 1844—45; Home Tones, 'Heimathklänge. Lieder,' 8vo, Mayence, third edition, 1851; The Child-World in Song, 'Die Kinderwelt in Liedern,' 8vo, Mayence, 1853; Soldiers' Songs, 'Soldatenlieder,' 8vo, Mayence, 1851; and Soldiers' Life, 'Soldatenleben,' 8vo, Berlin, 1852; Songs from Weimar, 'Lieder aus Weimar,' third enlarged edition, 16mo, Hanover, 1856; Popular Songs of the Low Countries, 'Niederländische Volkslieder,' second edition, 8vo, Hanover, 1856; Our Popular Songs, 'Unsere Volksthümlichen Lieder,' second edition, 8vo, Leipzig, 1859; Small Contributions towards a History of the German Language and Poetry, 'Findlinge zur Geschichte deutscher Sprache und Dichtung,' 2 vols. 8vo, Leipzig, 1859—60; Little Frank's Songs, 'Franzchens Lieder,' 16mo, Lubeck and Leipzig, 1859; 'Schleswig-Holstein. Zehn Lieder,' 8vo, Cassel, 1864; Life on the Rhine, 'Rheinleben,' 8vo, Mayence, 1851, and Neuwed, 1865; Songs of the Free-Lances, &c., 'Lieder der Landsknechte unter G. & C. von Frundsberg,' 12mo, Hamburg, 1868; together with various editions of the older authors, and miscellaneous contributions to periodical literature.

HOGAN, JOHN [E. C. vol. iii. col. 452]. This excellent Irish sculptor died, in straitened circumstances, March 20, 1858.

HOGARTH, GEORGE [E. C. vol. iii. col. 452]. Mr. Hogarth died in London, on the 12th of February, 1870, aged 80. Several of the memoirs of musicians in the 'English Cyclopædia' were written by him.

HOLLAND, JAMES, landscape painter, was born at Burslem, Staffordshire, September 17, 1800. The son of a small potter, he served seven years with Mr. Devenport, of Longport, as a painter on porcelain. In 1819 he came to London and maintained himself by painting flowers and teaching drawing, but gave his spare hours to sketching the old buildings and scenery along the banks of the Thames. His water-colour drawings found purchasers and he was able to release himself from teaching. A large 'View of London from Blackheath' was exhibited at Somerset House in 1833. In 1835 he was elected an Associate of the Society of Painters in Water Colours. The following year he visited Italy, and his stay at Venice gave him new conceptions respecting colour, surface, and the general treatment of pictures. He now sought in oil the depth and force he was anxious to attain. Large views of the 'Interior of Milan Cathedral,' exhibited at the Society of British Artists, and 'The Rialto,' exhibited at the British Institution, and several smaller scenes in Venice showed his altered perception and enlarged artistic ambition. For a time, he pretty well abandoned water-colours, and in 1841 was elected a member of the Society of British Artists. Annual trips to Italy, Germany, France, Holland, Portugal, Normandy, Geneva, and Wales, varied his range of subjects, but produced no marked change of manner. His rank as a landscape painter was recognised, but landscape painting was persistently discouraged at the Royal Academy, and Holland became aware that he could not hope for admission among the forty. Somewhat tardily and reluctantly he returned to his original course; in 1856, was re-admitted associate, and in 1858, member of the Society of Painters in Water Colours, and continued to send to their exhibitions during the following years. But his later pictures evinced no increase of power and too frequent repetition of subject. In his own line he was an admirable painter, and, with due encouragement, might have become a great one. He died on the 12th of February, 1870. His large 'View of Greenwich Hospital' is in the Painted Hall of that institution. In the South Kensington Museum (Ellison Collection) is a series of 18 sketches made in Portugal.

HOLLES, DENZIL, LORD, Commonwealth statesman, was born in 1597, the second son of John, first Earl of Clare. He entered parliament as member for St. Michael's, Cornwall, and at once took his part with Sir John Eliot and the members opposed to the encroachments of the Court. In the parliament of 1628, Holles sat for Dorchester, was conspicuous in the impeachment of Buckingham, and when Eliot, March 2nd, 1629, brought forward the resolutions of the committee on religion, in the shape of protestations against "whoever should advise innovations in religion, the levying of tonnage or poundage not granted by parliament, and whoever should pay the same," on the Speaker refusing to read the paper and rising to quit the

chair, Holles was one of the two members who held him in it by force, and then himself read the paper and put it to the vote. Charles dissolved the parliament, and, on the 5th of March, Eliot, Holles, Selden and other members were arrested and sent to the Tower and their papers seized. A writ of habeas corpus failed to obtain their release, but the following Michaelmas, the attorney-general, dropping the charge against the rest, proceeded, by information, against Sir John Eliot for words uttered in the House of Commons, and against Mr. Denzil Holles and Mr. Valentine for a tumult on the last day of the session. Their plea against the jurisdiction of the court, on the ground that the offence was committed in parliament and consequently only to be examined into and punished there, was overruled and judgment was given against them that they should be imprisoned during the king's pleasure, and not released but upon payment of a fine and finding sureties for good behaviour. It was not the king's pleasure that Eliot should be released, and he died in prison in 1632; but Holles was discharged after a year's incarceration. The proceeding of the king, indefensible as it was, was ultimately productive of benefit. The legality of the proceeding was strongly condemned by votes in the Long Parliament, but as the parliament itself was hardly admitted to be legitimate, the subject was, as Hallam well puts it ('Const. Hist.' c. i.), "revived again in a more distant and more tranquil period. In the year 1667, the commons resolved that the Act of 4 H. VIII., concerning Strode, was a general law, 'extending to indemnify all and every the members of both houses of parliament, in all parliaments, for and touching any bills, speaking, reasoning, or declaring of any matter or matters in and concerning the parliament to be commended and treated of, and is a declaratory law of the ancient and necessary rights and privileges of parliament.' They resolved also that the judgment given, 5 Car. I., against Sir John Eliot, Denzil Holles, and Benjamin Valentine, is an illegal judgment, and against the freedom and privilege of parliament. To these resolutions the Lords gave their concurrence. And Holles, then become a peer, having brought the record of the king's bench by writ of error before them, they solemnly reversed the judgment. An important decision with respect to our constitutional law, which has established beyond controversy the great privilege of unlimited freedom of speech in parliament."

In the Long Parliament, 1640, Holles occupied a conspicuous place, being regarded as the leader of the Presbyterians. He was one of the five members, the others being Pym, Hampden, Haerlig and Strode, whom the king caused to be charged with high-treason at the bar of the House of Lords, January 3rd, 1642, and the next day made the ill-advised attempt in person to arrest in their places in the House of Commons. This foolish proceeding brought matters to a crisis, and was speedily followed by an appeal to arms. Denzil took the command of a regiment of horse, and fought at Edghill and Brentford. But he longed for peace and laboured to bring about a reconciliation, with which view he procured himself to be nominated one of the commissioners to treat with others, named by the king, at Uxbridge. The duplicity of the king caused the negotiations to fail. But Holles and the Presbyterians became more and more estranged from Cromwell. He moved the resolution in the house, March, 1647, for the disbanding of the army; but the army could not be spared, and Cromwell was too strong to be overturned by a side wind like that. Holles found it prudent to withdraw to Normandy. In his absence he was charged with treason, but he returned the following year and resumed his seat and his attempts to effect an accommodation. The commission to the king at the Isle of Wight, in which he took part, was fruitless, but he was one of the majority to vote in the Commons, December 5th, 1648, that the king's concessions are a ground of settlement. Cromwell and the army, however, thought otherwise, and the application of Pride's Purge a day or two after, effectually excluded Holles from Parliament, and from all further influence. The execution of Charles quickly followed. Holles escaped to Brittany, and returned no more to England whilst Cromwell was alive.

In 1660 he resumed his seat with the rest of the Long Parliament, and was one of the deputation sent by the House to Charles II. at the Hague, and delivered the address inviting him to return to England. He was one of the batch of new peers created by Charles II. on the eve of his coronation, April, 1661, when he assumed the title of Baron Holles, of Isfield. In 1661 he was sent to France to endeavour to secure Louis XIV. as an ally in the war with the Dutch; and he was one of the plenipotentiaries who concluded the treaty of peace between

England, France and Holland at Breda, July 29th, 1667. But the tyrannical measures of the king disgusted him, and he withdrew from the Court. He appears, however, to have been one of those who, through Barillon, carried on secret negotiations with Louis XIV., though he peremptorily refused to receive the French king's money. He died in 1680, at the age of 83. 'The Memoirs of Denzil Lord Holles, from 1641 to 1648,' 8vo, London, 1680, must not be overlooked by the student of that portion of English history.

HOLLOWAY, THOMAS, engraver, was born in 1748, and educated as a seal engraver, but on completing his apprenticeship turned to line engraving. He was chiefly employed on book plates, such as portraits for magazines, illustrations to the British Classics, the plates to the translation of 'Lavater's Physiognomy,' and on Boydell's publications. His claim to be remembered, however, rests on his series of large engravings of Raffaele's Cartoons, a work undertaken at his own risk, and prosecuted with great zeal and diligence. It is a neat and elegant, but feeble production. Mr. Holloway died in 1827, at Coltishall, near Norwich.

HOLMAN, JAMES BAPTISTE [E. C. vol. iii. col. 463], the "Blind Traveller," retained his passion for roaming long after his physical strength had so far declined as to render it advisable for him to take rest. His latest journeys were in Spain, Portugal, Wallachia, Moldavia, Montenegro, and Turkey. At the time of his death in London, July 28, 1857, he was preparing for publication his notes on these countries and places.

* HOLMES, OLIVER WENDELL, an American physician, poet, and man of letters, was born on the 29th of August, 1809, at Cambridge, Massachusetts, where his father, Dr. Abiel Holmes, known for his 'Annals of America,' was pastor of the first Congregational Church. He was educated at Harvard College, and, having graduated in 1829, devoted about a year to the study of law, which he abandoned for that of medicine. He visited the Old World in 1833, and occupied nearly three years in attending the hospitals of Paris and other large European capitals. He returned to America in 1835, and commenced practice at Boston; in the following year took the degree of M.D. at Cambridge; in 1838 was elected professor of anatomy and physiology in Dartmouth College; succeeded Dr. John C. Warren as professor of anatomy in the medical faculty of Harvard University, in 1847; and in 1849 retired from the general practice of his profession in order to command greater freedom for his literary activity. It is the habit of Dr. Holmes to make his winter residence chiefly at Boston, and to spend the rest of the year on an estate which was formerly in the possession of his great-grandfather, the Hon. Jacob Wendell, situated on the banks of the Housatonic, in Pittsfield, Berkshire County, Massachusetts.

To Dr. Holmes's professional and academical authorship we are indebted for his 'Boylston Prize Dissertations for the years 1836, 1837,' 8vo, Boston, 1838, which, three in number, were respectively on 'Indigenous Intermittent Fever in New England,' the 'Nature and Treatment of Neuralgia,' and the 'Utility and Importance of Direct Exploration in Medical Practice'; 'Lectures on Homœopathy and its Kindred Delusions,' 1842; a 'Report on Medical Literature,' which appeared in the 'Transactions of the National Medical Society,' for 1848; a pamphlet, entitled 'Puerperal Fever as a Private Pestilence'; a number of papers in the 'New England Quarterly Journal of Medicine and Surgery,' and in the 'Boston Medical and Surgical Journal,' an edition, in conjunction with Jacob Bigelow, M.D., of Dr. Marshall Hall's 'Principles of the Theory and Practice of Medicine,' 8vo, 1839; 'An Introductory Lecture delivered at the Massachusetts Medical College,' 8vo, Boston, 1847, and another, entitled 'The Benefactors of the Medical School of Harvard University,' &c., 8vo, Boston, 1850; and 'Currents and Counter-currents in Medical Science. With other Addresses and Essays,' 12mo, Boston, 1861.

Early in his college life, Dr. Holmes attracted attention as a poet. He contributed to the 'Collegian,' a periodical published in 1830 by the Harvard undergraduates; as well as to 'Illustrations of the Athenæum Gallery of Paintings,' in 1831, and to the 'Harbinger, a May Gift,' in 1833. In 1836 he read before the 'Phi Beta Kappa Society,' of Harvard, a metrical essay, entitled 'Poetry,' which established his fame as a writer of verse, and was published in the first collected edition of his 'Poems,' 12mo, Boston, 1836, 12mo, London, 1846, new and enlarged edition, 12mo, Boston, 1851, seventeenth edition, 8vo, Boston, 1859. In 1843, he published 'Terpsichore,' a poem read at the annual dinner of the Phi Beta Kappa Society in

that year; and followed this up by the issue of 'Urania. A Rhymed Lesson,' 8vo, Boston, 1846, which had been pronounced before the Mercantile Library Association, and of 'Astræa: the Balance of Illusions. A Poem delivered before the Phi Beta Kappa Society of Yale College, August 14th, 1850,' 12mo, Boston, 1850. The editions and the forms in which the collected, or separate, or selected poems of Dr. Holmes have appeared are very numerous; one which claimed to be the "first English edition" of his 'Poetical Works,' was issued in 12mo, London, 1852; and, a selected volume, with the title of 'Wit and Humour. Poems,' 8vo, London, 1867.

Dr. Holmes has been a contributor of miscellaneous articles to various periodicals, as the 'North American Review,' the 'New England Magazine,' the 'Knickerbocker,' &c.; but especially to the 'Atlantic Monthly: devoted to Literature, Art and Politics,' 8vo, Boston, 1857, &c., in the first twelve numbers of which appeared a series of papers, which were afterwards extremely popular in America and England, in the shape of an independent publication entitled, 'The Autocrat of the Breakfast Table: every Man his own Boswell,' 12mo, Boston, 1858, 8vo, Edinburgh, 1859, "with illustrations by J. G. Thomson," 8vo, London, 1865, &c.; followed by 'The Professor at the Breakfast Table: with the Story of Iris,' 8vo, London, 1860, &c. His other works comprise an 'Oration delivered before the City Authorities at Boston, on the Eighty-seventh Anniversary of the National Independence of America,' 8vo, Philadelphia, 1863; 'Elsie Venner: a Romance of Destiny,' 8vo, London, 1861, reprinted from the 'Atlantic Monthly,' where it appeared, in successive numbers, under the name of 'The Professor's Story'; a tale entitled, 'The Guardian Angel,' 8vo, Boston and Cambridge (U. S.), 1867, and several times reprinted in England; and 'Mechanism in Thought and Morals. An Address. With Notes and Afterthoughts,' 1870. In 1867, Dr. Holmes, in conjunction with Mr. D. G. Mitchell, instituted an annual, entitled the 'Atlantic Almanac,' 4to, Boston, which they still continue to conduct.

HOME, SIR EVERARD, BART., surgeon and anatomist, was born at Hull, May 6, 1756. He attended at Westminster School, and was about to proceed to Cambridge, when John Hunter (who had married his sister), undertook to give him a sound education in anatomy, an offer which he gladly accepted. From 1780 to 1784 he served on the medical staff in the West Indies, and then returned to assist Hunter both in completing his museum, and in his various official duties. In 1793 Hunter died. In 1808, Home was appointed sergeant-surgeon to the king, and in 1812 was created a baronet, an honour conferred for the first time on a practising surgeon. In 1821 he was appointed surgeon to Chelsea hospital, and in 1822 he was elected president of the College of Surgeons. He died at Chelsea, August 31, 1832. He was, to a certain extent, the successor of Hunter, and produced numerous papers detailing important researches in anatomy and physiology, some of which were continuations of lines of inquiry suggested by Hunter, and are believed to have been appropriated from Hunter's manuscripts, of which he held possession, and which, in order to escape detection, he eventually destroyed, although they were the property of the College of Surgeons. [HUNTER, JOHN, E. C. vol. iii. col. 524.] Many of his papers were published in the 'Philosophical Transactions,' but the more important results noticed in them were collected in his 'Lectures on Comparative Anatomy,' 6 vols. 4to, 1814—28.

HONDT, or HONDIUS, HENDRIK: there are two engravers of this name, both skilful artists, who flourished at the same time, and whom, especially as both practised for a while in London, it is desirable not to confound. Hendrik Hondt, known as the Elder, was born at Duffel, in Brabant, in 1573, and was a pupil of Jan Wierix. He visited and worked in both Paris and London, but settled at the Hague, where he engraved a great many portraits, including the leading reformers, from Wycliffe to Calvin, a series of 140 painters, some religious pieces, landscapes, &c. He was a good engraver, and the founder of a school which numbered some distinguished names. He was also a proficient in the art of perspective, which he learnt from De Vries, and on which he wrote a work 'Institutio artis Perspectivæ,' published after his death, Haag, 1622; Amsterdam, 1697; French translation, 1625. He died in 1610.

HONDT, or HONDIUS, HENDRIK, the Younger, was born about 1588 in London, where his father, Jost Hondt (b. 1563, d. 1611) was settled as an engraver and a maker of mathematical instruments: Speed's maps, and several of those of Mercator, as well as many portraits, were engraved by him. The younger Hondt,

besides finishing various plates begun by his father, engraved portraits of Elizabeth, James I., Charles I., Archbishop Cranmer, Sir Ralph Winwood, Sir Francis Drake, and other eminent Englishmen; some scripture subjects from Dutch and Flemish painters; and a few landscapes. He died at Amsterdam about 1648.

HONE, NATHANIEL, R.A., born at Dublin in 1730, was a portrait and miniature painter, drew in crayons and executed several works in enamel, and two or three mezzotints; but he acquired more notoriety by his quarrels and caricatures than admiration by his pictures. He was one of the original members of the Royal Academy, but soon got involved in disputes with his colleagues. Envyng the success of Reynolds he, in 1755, sent a large picture to the Academy for exhibition, which he called 'The Conjuror,' and in which a magician, painted from the model who sat for Reynolds's 'Count Ugolino,' was seen pointing with his wand to various engravings from the old masters, under which were sketches of pictures by Sir Joshua Reynolds, which it was suggested were derived from them. The council, of course, refused to admit the picture, and Hone made an independent exhibition of it, along with some others of his paintings. Sir Joshua took no notice of the attack, and public opinion went strongly against the satirist. A like attack on Angelica Kauffmann excited even stronger feeling. Hone died August 14th, 1784, and would have been long since forgotten but for having become thus unluckily associated with the name of Reynolds.

HOOGSTATEN, SAMUEL VAN, Dutch painter, was born at Dordrecht, in 1627, and learned painting in the first instance of his father, Dirk van Hoogstraten, an historical painter of some ability (b. 1596, d. 1640), and afterwards of Rembrandt, in whose manner he at first painted, but changed it for a lighter and brighter style. Besides portraits he painted, as his pupil Houbraken writes, "buildings, landscapes, stormy seas and still waters, animals, flowers, fruit, and still life," and all with a certain amount of success. He visited Vienna, where his works were greatly in vogue, and where the Emperor, Ferdinand III., tried hard to retain him; Rome, in order to study the works of the great masters; and, in 1633, England. Returning to Dordrecht, he obtained considerable popularity, and from his studio proceeded many of the best painters of the succeeding generation. Houbraken says he was careful to warn his scholars against the faults of his own style, especially a certain crudity of colouring of which he could not rid himself. Hoogstraten was an accomplished writer as well as painter. We have from him 'Den urlyken Jongeling of de edele Kunst van zich by groote en kleyne te doen eeren en beminnen,' 12mo, Dordrecht, 1657; 'De Gestrafte Ontschaking,' 12mo, Amsterdam, 1669; 'Inleyding tot de Hooge Schoole der Schilderkonst; anders de Zichtbaere Werelt,' 13 plates 4to, Rotterdam, 1678. This work (sometimes referred to by Houbraken as 'Zichtbare Waerelt,' and sometimes as 'Van de Schilderkonst,' and hence spoken of by some later writers as separate publications), is valuable as containing the statements of an accomplished painter, the pupil of Rembrandt, and one familiar with the traditions alike of the Dutch and Flemish schools. Hoogstraten died at Dordrecht, October 21st, 1678.

* HOOKER, JOSEPH, American general, was born at Hadley, Massachusetts, in 1819. Entering the Military Academy at West Point as a cadet in 1833, he became a second lieutenant of artillery in 1837; rose gradually in rank, and became adjutant of the same regiment. During the Mexican war he served in the same regiment with the officer who afterwards made himself famous as the Confederate General Stonewall Jackson; and was for a time aide-de-camp to Lieutenant-General Hawes. His services at Monterey brought him the rank of brevet-captain, then that of assistant-adjutant-general. He was made brevet-major in 1847; and after the battle of Chapultepec in the same year brevet lieutenant-colonel, and full colonel in 1848. He was employed in the Adjutant-General's department at Washington till 1850, when he retired from the army; went to California, established himself as a farmer, and became superintendent of the construction of the National road through that State. When the civil war broke out in 1861, he returned to the east, and was present at the battle of Bull's Run, but only as a spectator. He obtained the appointment of lieutenant-colonel of a newly raised regiment, which he exchanged for that of brigadier-general of volunteers. With these volunteers he entered on active service in Maryland and Eastern Virginia, assisting in clearing the Potomac of the Confederate blockading batteries. As commander of a division under General

McClellan, he distinguished himself at the battles of Williamsburg and Fair Oaks (May and June, 1862); also in a series of engagements known as the "Seven Days' Battles." His success at Malvern Hill, in the following August, led to his promotion to the rank of major-general of volunteers. He was wounded at the battle of Antietam, September 17th, 1862. He now became brigadier-general in the regular army, and on the 13th of December commanded the centre division of General Burnside's army, which was so thoroughly defeated by General Lee at the battle of Fredericksburg. In January, 1863, as major-general of the United States army, Hooker succeeded Burnside in command of the Army of the Potomac, which he reorganised, and then crossed the Rappahannock, some distance above Fredericksburg. He was attacked and totally defeated on the 30th of April at Chancellorsville by the Confederates under Stonewall Jackson, who here received his death wound. Lee attacked Hooker on the 3rd of May, and compelled him to retreat after great loss; but Hooker succeeded in recrossing the Rappahannock on the following day. A further defeat which he suffered in June led to his supersession by General Meade. Hooker was now transferred to the Army of the Tennessee, with which he was more successful—repulsing the Confederates severely at Chattanooga. In November he came to the relief of General Grant, who had been blockaded. During the sanguinary campaign of 1864 he was mostly with Grant, and acquired by his promptness and bravery the sobriquet of "Fighting Joe Hooker."

HOOKER, SIR WILLIAM JACKSON [E. C. vol. iii. col. 481]. In the above notice reference is made to the numerous works which Sir William wrote, and which fully indicate the great activity of his mind. His literary labours were continued to the last, and even when nearly 80 years of age he began publishing 'Synopsis Filicum,' for which he had been preparing some time. Hooker wrote upwards of fifty volumes of descriptive botany. His literary labours, however, were probably exceeded in importance by the encouragement which he otherwise gave to the pursuit of botany. His correspondence was so unusually extensive that he was fully informed of what was being done in his favourite science in all parts of the world; and he was generally resorted to by those who had any appointment suitable for botanists. In this way he lent a helping hand to many naturalists, and was instrumental in having larger regions explored by well-trained botanists, such as Gardner, Scouler, Douglas, Drummond, Thomson, and numerous others. He also organised a plan for a complete series of colonial floras, of which several are already published, such as those of Australia, Ceylon, and Cape of Good Hope. He died August 12, 1865, having completed his 80th year: he was born July 6, 1785.

HOOLE, JOHN, a dramatic poet and translator, especially from the Italian poets, was born in Moorfields, London, in December, 1727, and was educated successively by his uncle, a tailor in Grub-street, and at a private boarding-school in Hertfordshire. At the age of 17 he was appointed to a clerkship in the East India House, and devoted his leisure to the cultivation of Latin and Italian literature. He became in 1773 auditor of Indian accounts to the East India Company, an appointment which engrossed his time to such an extent as to delay by ten years the publication of his translation of Ariosto's 'Orlando Furioso,' the first volume of which appeared in 1773. About the end of 1783 he resigned his official appointment; and in 1786 retired with his wife and son to the rectory of Abinger, near Dorking, in Surrey, where he died on the 2nd of April, 1802. His son, the Rev. Samuel Hoole, published 'Anecdotes respecting the Life of the late Mr. John Hoole. To which are added some Pieces written by the Deceased, never before published,' 8vo, London, 1803.

Mr. Hoole early produced fugitive and anonymous specimens of his poetical talents, amongst which was a Monody on the Death of Mrs. Margaret ("Peg") Woffington; and his more important works comprise a Tragedy in five Acts and in Verse, entitled 'Cyrus,' 8vo, London, 1768, which, together with another, called 'Cleonice, Princess of Bithynia,' 8vo, London, 1775, was published in vol. xxiv. of Bell's 'British Theatre,' the 34th volume of which contained his 'Timanthes: A Tragedy,' 8vo, London, 1770, third edition, 1771. His principal translations are those of Tasso's 'Jerusalem Delivered,' 8vo, London, 1763, eighth edition with notes, 4to, London, 1803, 12mo, 1807, &c., the Dedication, which was to the Queen, being written by Dr. Johnson; Metastasio's 'Dramas and other Poems,' 2 vols. 12mo, London, 1767, of which he after-

wards published a more complete edition in 3 vols. 8vo; Tasso's 'Rinaldo,' 8vo, London, 1792; and Ariosto's 'Orlando Furioso,' with Notes, in 5 vols. 8vo, London, 1783, 8vo, London, 1785, &c., of which he produced a clever condensation, out of deference to the objections raised against the tediousness of Ariosto, with the title of 'Orlando, &c., reduced to Twenty-four Books,' 8vo, London, 1791, 12mo, 1816, &c.

HOPKINS, WILLIAM, mathematician and geologist, was born in 1793. His father had an objection to public schools, and the consequence was that what little education he got was of the most desultory nature. When about fourteen years old he obtained a copy of 'Euclid,' which, he afterwards stated, he read with intense interest. His inclination for mathematics was, however, repressed, for his father caused him to learn farming, and as a farmer he remained till his thirtieth year. Finding that this occupation only diminished the property which he inherited from his father, he gave it up, and entered himself as a Cambridge student. His college career was highly successful, and on taking his degree in 1827, he became a tutor, in which capacity he evinced unusual skill, especially as regards mathematics. About 1833 he became acquainted with Professor Sedgwick, by whom he was induced to take an interest in geological inquiries, to which he applied his talents as a physicist and mathematician. One of his earlier papers was 'Researches in Physical Geology,' which appeared in the 'Transactions of the Philosophical Society of Cambridge,' vi. pp. 1-84 (1838). In it he discussed the effects of a force acting from below and pushing the earth's crust outwards; and amongst the conclusions arrived at by him the most important was, that a system of parallel fissures must have been formed simultaneously, not consecutively. His inquiries as to the indications which the phenomena of precession and nutation afford as to the condition of the earth's interior led him to believe that the amount of precession requires that the earth's crust be at least 400 miles thick. He wrote several papers on the motion of glaciers in 'The London, Edinburgh, and Dublin Philosophical Magazine,' vol. xxvi. (1845), in which he maintained that the glaciers slid down the valleys as solid bodies, mainly by the force of gravitation, the process being materially assisted by the melting of the lower surface, acting like a lubricator in diminishing the friction against the rocky bottom of the valley. Another paper was 'On the cause which may have produced changes in the earth's superficial temperature,' in 'Quart. Jour. Geological Society,' vol. viii. pp. 56-92 (1852), in which he shows that the temperature of the earth's interior has scarcely any influence upon the temperature of the air, and that if the superficial temperature were raised 1° Fahr. higher, in consequence of the greater heat of the earth's interior, all springs rising from greater depths than 60 feet would be near or at the boiling point. This inquiry naturally led to others, which sought to ascertain the relative heat-conducting powers of rocks and other materials, and the influence which pressure has in raising the points at which they melt. For these researches he received the Wollaston medal in 1830. In 1831-32 he was the president of the Geological Society. In 1853 he was president of the British Association. He died on the 13th of October, 1866.

HORN, or HORNE, PHILIP DE MONTMORENCY-NIVELLE, GRAAF VAN, a Flemish general and statesman, son of Joseph de Montmorency, Lord of Nivelles, &c., and who succeeded to the title and estates of his mother's second husband, the Graaf van Horn, was born in 1522. From the outset of his career he was one of the richest and most influential of the nobility of the Netherlands; and he received from the Emperor Charles V. and from his son, Philip II. of Spain, many tokens of favour, and various places of confidence and distinction. He was made a knight of the Order of the Golden Fleece, chamberlain and captain of the guard to the King of Spain, finance minister to the Low Countries, and councillor of state, admiral of the Flemish fleet, and lieutenant-governor of Gelders and Zutphen. He materially contributed to the Spanish victories over the French at St. Quentin, 1557, and Gravelines, 1558; and in 1559 accompanied Philip II. to Spain, where he remained for two years, during which he is supposed to have communicated to the Prince of Orange, the measures which were meditated by the Spanish Government against the Netherlands. Upon his return to his own country, he joined the Prince of Orange and Count Egmont—the latter of whom was his maternal relative—in resisting the aggressive policy of Philip, and in urging upon him, March 11th, 1563, the recall of Cardinal Granvelle, Bishop of Arras, who had been left as Councillor to Margaret, Duchess-dowager of Parma, and natural

sister of Philip, upon whom he had, on his own departure for Spain, devolved the government of the Low Countries. Notwithstanding the heavy disbursements in the king's service, by which Horn had considerably reduced his fortunes, Philip conceived the idea of punishing him for the opposition, or at best, the tardy assent with which he had received the measures of the regent, Margaret of Parma. Unconscious, however, of any circumstances by which their safety could be seriously compromised, both Horn and Egmont awaited the arrival of the Duke of Alva, who had been appointed to succeed Margaret in the regency in 1567. Meanwhile, the Prince of Orange, who had more openly and fatally committed himself to the insurrection which Alva was commissioned to suppress, felt it expedient to leave the country, and was safe. But his escape told disastrously upon the fate of his two friends, who were arrested at Brussels on the 9th of September, 1567, on a charge of treason and other offences of magnitude. Egmont and Horn were conveyed, under a strong military escort, to Ghent, where for two months they were kept in rigorous confinement. In vain they claimed, as knights of the Golden Fleece, the privilege of being tried before a chapter of their own order; they were brought before a tribunal, known in Flemish history as the "Council of Blood," and, after a hollow trial, were convicted of treason and rebellion. The Duke of Alva determined to make the execution of the two counts an appalling and exemplary spectacle; and, in accordance with this design, he caused three thousand Spanish troops to be drawn up around the scaffold, in the great square of Brussels, where they were beheaded amongst the tears and the horror of the spectators on the 5th of June, 1568. Count Horn, who died last, met his fate with perfect composure, although, when his sentence was first made known to him, he indignantly protested against its injustice, exclaiming that it was a poor requital for twenty-eight years of faithful service. In the month of September following his execution, there were published a Dutch and a French apology for Count Horn, and a declaration of his innocence, entitled respectively, 'De Bewijssinghe vande onschult van Myn Herre Philips Baenreheere van Montmorency, Grave van Horne, Frijheere van Weert, &c., Admiraal ende Capiteaen Generael van der Zee vanden Nederlande, Ridders vander Oorden vander Gulden Vliese, &c.,' 8vo, Brussels, 1568, and 'La Deduction de l'Innocence de Messire Philippe Baron de Montmorency, Conte de Hornes, franc Seigneur de Weert, Admiral et Capitaine general de la Mer du Pais Bas, et Chevalier de l'ordre de la Toison d'Or. Contre la malicieuse Apprehension, indeue Detention, injuste Procedure, fausse Accusation, iniques Sentences, et Tyrannique Execution en sa Personne à grand tort, par voye de Fait perpétrée,' 8vo, Amsterdam (?) 1568.

HORNE, REV. THOMAS HARTWELL [E. C. vol. iii. col. 489]. In the above memoir Mr. Horne's labours as a theological writer are pretty fully noticed. Not so his services as a bibliographer, respecting which chiefly, we, therefore, supply a few supplementary particulars. He was born in London, October 20th, 1780; was educated at Christ's Hospital, and was afterwards a clerk to a barrister. It was whilst so employed that he found time not only to greatly extend his school studies, but to secure an unusual acquaintance with theology and especially with its literature. During these years he published 'A Brief View of the Necessity and Truth of the Christian Religion,' 8vo, 1800; prepared the materials for a really valuable 'Introduction to the Study of Bibliography,' 2 vols. 8vo, London, 1814; and began to collect the materials for the first edition of his chief work, the 'Introduction to the Study of the Scriptures,' 3 vols. 8vo, 1818, a work that at once met with a wide welcome, alike from clerical and lay students, and was adopted as a text book in the universities. The year after its publication, Mr. Horne was ordained by the Bishop of London and presented to the united City livings mentioned in the original memoir. The duties of these benefices allowed him ample time to pursue his literary and bibliographical studies. He accepted the appointment of librarian to the Surrey Institution, and made an excellent classified catalogue of the library. The institution was broken up in 1823; and it being about this time proposed to make a classified catalogue of the Library of the British Museum, Mr. Horne's Surrey Institution Catalogue, as well as one he had drawn up for the library of Queen's College, Cambridge, seemed to point him out as a suitable person to undertake it, especially as he was already favourably known to the trustees by a classed index to the Harleian MSS., which he had prepared in 1808. He was accordingly appointed in 1824, and in 1825 he printed 'Outlines for the Classification of a Library :

submitted to the Trustees of the British Museum,' 4to. In conjunction with Sir Frederic Madden and others, he was engaged for several years on this work, when the trustees decided to abandon their idea of a classified catalogue, and to prepare instead an alphabetical one. The system ultimately adopted was that proposed by Mr. (afterwards Sir A.) Panizzi, but Mr. Horne was retained to assist in carrying it out. Mr. Horne continued to be connected with the Museum, one of the most familiar and widely known of the library officials, till 1861, when, in his 81st year, he resigned the office he then held of supernumerary keeper of the printed books. He died on the 27th of January, 1862.

HORNECK, ANTHONY, a devotional writer and divine, was born, in 1641, at Bacharach, a small town between Mentz and Coblenz, of which his father was recorder. He studied divinity at the University of Heidelberg, under Dr. F. Spanheim, and made considerable progress in a knowledge of the oriental languages and the rabbinical writings; and after a time removed to Wittenberg, where he took his degree of M.A., in which, having come to England in 1661, he was incorporated at Queen's College, Oxford, on the 15th of March, 1664. After having resided for some time in the university, he was ordained; and through the influence of Dr. Barlow, then provost of Queen's, and afterwards Bishop of London, was appointed chaplain to his college. He was also instituted to the vicarage of All Saints, or All Hallows, in the city of Oxford; and having acted as tutor to Lord Torrington, eldest son of the Duke of Albemarle, received from the duke the rectory of Doulton, in Devonshire, and through his influence was collated by Bishop Sparrow to a stall in Exeter Cathedral on the 13th of June, 1670. He left England in 1669 for a two years' sojourn in Germany; and immediately upon his return in 1671 was appointed to the church of St. Mary-le-Savoy, commonly known as the Savoy Chapel, with which, having resigned the rectory of Doulton, it is probable that he conjoined the spiritual charge of the adjoining parish of St. Mary-le-Strand. He was admitted to the degree of D.D. at Cambridge in 1681, and subsequently became chaplain to William and Mary. On the recommendation of Archbishop Tillotson, he was promoted by the queen to the twelfth prebend in Westminster Abbey, in which he was installed on the 1st of July, 1693. In the following year he resigned his canonry at Exeter, in order to enter, on the 28th September, 1694, on the stall of Compton Bishop in the cathedral church of Wells, to which he was appointed by his friend and biographer, Bishop Kidder. He laboured for many years as incumbent of the Savoy, and when the measures of James II. seemed to threaten the restoration of popery, he opposed them by the promotion of those associations which were known as "Religious Societies" and "Societies for Reformation." He died of the stone, on the evening of Sunday, the 31st of January, 1696, and was buried on the 4th of February in Westminster Abbey.

Dr. Horneck's works, several of which have been extremely popular, comprise 'The great Law of Consideration: or, a Discourse concerning the Nature and Use of it in order to a serious Life,' 8vo, London, 1677, eleventh edition, 8vo, 1729, new edition, 8vo, 1840; 'A Letter to a Lady revolted to the Church of Rome,' 8vo, London, 1678, and 'Questions and Answers concerning the two Religions: viz., that of the Church of England and the order of the Church of Rome,' 4to, London, 1688, French and English version, 8vo, London, 1723, both of which works were issued anonymously; a translated work entitled 'An Account of some Persons that were accused for Witches and tried and executed in Sweden,' 8vo, London, 1682; 'The Fire of the Altar: or, certain Directions how to raise the Soul into holy Flames, before, at, and after receiving the Sacrament of the Lord's Supper, with Prayers and Devotions, and a Dialogue betwixt a Christian and his own Conscience concerning the true Nature of the Christian Religion,' 8vo, London, 1684; 'The Exercise of Prayer: or, a Help to Devotion,' 8vo, London, 1685, thirteenth edition, 12mo, 1718, new edition, 18mo, 1845; 'An Account of Edward Scater's Return to the Church of England, and his public Recantation,' 4to, London, 1689, which is a monument to the care with which Horneck sifted the motives of a "revolter," who, having once been vicar of Putney, might have owed his re-conversion to the motions of a self-interest quickened by the Revolution of 1683; the 'Preface' to a work by a "divine of the Church of England," entitled 'The true Interest of Families: or Directions how Parents may be happy with their Children, and Children with their Parents,' &c., 8vo, London, 1692; 'The Happy Ascetic: or, the best Exercise with Prayers. With a Letter to a Person of Quality,' 8vo, Lon-

don, 1693, &c., new edition, 8vo, 1724, a work dedicated to Bishop Barlow, the author's early patron at Oxford; and, amongst other translations, one entitled 'An Antidote against a careless Indifference in Matters of Religion, &c. Done out of French,' 8vo, London, 1694. Dr. Horneck published separately many of the sermons which he delivered on special occasions, particularly a 'Sermon [on 2 Timothy, i. 6] at the Consecration of Gilbert Burnet, Bishop of Sarum,' 4to, London, 1688; and a collection of 'Sermons,' 2 vols. 8vo, 1706, third edition, 1717, was posthumously issued under the care of Bishop Kidder, who supplied an interesting memoir of the author's life.

HORNER, LEONARD [E. C. vol. iii. col. 491]. He was born Jan. 17, 1785. To the general outline of his life already given we may add that he was president of the Geological Society of London in 1856, 1857, 1860, and 1861, and that he died March 5, 1864.

HORSFIELD, THOMAS [E. C. vol. ii. col. 1006]. He was born at Bethlehem, in Pennsylvania, May 12, 1773, and was educated for the medical profession in the University of Pennsylvania. Soon after taking his degree of M.D. in 1798 he started for Java, where he spent so many years of his life. The 'Catalogue of the Lepidopterous Insects contained in the Museum of the Hon. East India Company,' of which only two parts were published in 1828—29, was never completed; it, however, deserves notice on account of the introduction and of the classification of those insects, which is largely based upon their metamorphoses. At the time of his death Dr. Horsfield was busy on a similar catalogue, but only one volume was published, entitled 'Catalogue of the Lepidoptera in the East India Museum,' in the production of which he was assisted by Mr. F. Moore. Dr. Horsfield spent three years in Java in making observations on the development of butterflies. He died July 24, 1859.

HOSKING, WILLIAM [E. C. vol. iii. col. 395]. This able architect and writer died on the 2nd of August, 1861.

***HOSMER, HARRIET**, one of the few ladies who have succeeded in the difficult art of sculpture, was born in 1831 at Watertown, in Massachusetts, U.S. Her passion for art was shown at an early age, and as it developed into a decided preference for modelling the human form, her father resolved to teach her anatomy; she continued the study at the St. Louis Medical College, and the advantage of the course is shown in every one of her works. The success of her first statue, 'Hesper,' 1851, led to her proceeding to Rome to procure the best European teaching. Mr. Gibson, to whom she was introduced, was so much struck with her talent, that in her favour he broke through his resolution not to take a regular pupil. Gibson was so proud of her progress and so warm an admirer of her talent that in arranging the little temple in which his Venus and other tinted statues were displayed at the International Exhibition of 1862 he appropriated one of the four divisions to Miss Hosmer's 'Zenobia Captive.' With the exception of occasional visits to America and England, Miss Hosmer has continued to reside at Rome. Her works include classic statues and busts, as Medusa, Daphne, Ceneone, and the like; others of a romantic and historical class, as 'Puck' (repeated for the Prince of Wales), 'Will o' the Wisp,' 'Beatrice Cenci'; some portrait busts and monumental works. Her latest and most important effort in this class is the monument to President Lincoln, which, if carried out as designed, will be a magnificent and impressive work. Miss Hosmer designs and models with much grace, vigour, and originality, and has achieved an admirable mastery over the chisel.

HOUDON, JEAN-ANTOINE, a distinguished French sculptor, was born at Versailles in 1740. He was a pupil of Michel-Angelo Stolze and of Pigalle, and won the grand prize for sculpture at the École des Beaux-Arts, which entitled him to complete his studies in the French Academy at Rome. He stayed at Rome for ten years, and whilst there executed some of his most admired works; among others, a colossal statue of S. Bruno for the porch of Sta. Maria in the Certosa, Rome, and Morpheus for the Salon at Paris. Returning to France, he soon secured a high place in public favour. His classic statues—Minervas, Venuses, Vestals, and so forth, including a Diana executed for the Empress of Russia, which was refused a place in the Salon, as being too scantily draped and too free in action—strangely affected and unclassic as they seem to us, were regarded as in the purest style of art, and his portrait statues were universally popular. These last include one of Washington for the senate-house of Virginia, which he went to Philadelphia to model, and which has served as the type of most of the portraits of the great liberator; busts and statues of Louis XVI., Napoleon I. and Josephine, Catherine of Russia, Voltaire, Rousseau, Diderot,

Franklin, Gluck, Sophie Arnault, D'Alembert, Mirabeau, and many other of the remarkable personages of that memorable period. Houdon was elected associate member of the Academy in 1774, full member and professor in 1778. He was denounced in the Convention on account of a statue of Theology on which he was engaged, but was rescued by the promptitude of a friend in the tribune, who declared it to be a figure of Philosophy. The empire brought safety and imperial favour; and under the Restoration Houdon's good fortune was continued. He was nominated member of the Institute, and Chevalier of the Legion of Honour, and died at a ripe old age, July 16th, 1828.

***HOUGHTON, RICHARD MONCKTON MILNES, BARON** [MILNES, RICHARD MONCKTON, E. C. vol. iv. col. 253]. Mr. Monckton Milnes remained M.P. for Pontefract till he was raised to the peerage, August 20, 1860, with the title of Baron Houghton. He has made no substantial addition to literature since the above memoir was written.

***HOUSSAYE, ARSÈNE**, a versatile French writer, was born at Bruyères, near Laon, March 28, 1815. He went to Paris in 1836, and commenced a literary career, which he has continued to the present time. His first productions were two novels, 'La Couronne de Bluets' and 'La Pécheresse.' With the friendly aid of Jules Janin, Théophile Gautier, and Jules Sandeau, he was introduced into literary and theatrical circles, which brought much employment for his pen. He published the 'Revue de Salon, 1844,' the 'Galerie de Portraits du XVIII^e Siècle,' 1844; and 'L'Histoire de la Peinture Flamande et Hollandaise,' folio, with 100 copperplate engravings, 1846. This last-named work brought upon him a charge of plagiarism by Alfred Michiels, against which he defended himself in a pamphlet. Through the influence of Mlle. Rachel he obtained, in 1849, the directorship of the Théâtre Français, which for some years he conducted with much success. On the proclamation of the Napoleonic Empire in 1851 he wrote a cantata for Rachel, 'L'Empire c'est la Paix.' In 1856 he resigned the directorship, wearied with the difficulty of satisfying the demands of jealous actors and authors; and accepted a place created for him—that of "Inspector-General of Provincial Museums." Houssaye's pen has seldom been inactive. His publications take a wide range, including novels, poems, dramas, criticisms, and miscellaneous contributions to various journals. His novels and romances are upwards of thirty in number. One of the latest of these is a series of four romances, under the general title 'Nos Grandes Dames,' 4 vols. 8vo., 1868. His 'Mademoiselle de la Vallière and Madame de Montespan,' 1860, is an historical study of Court life in the time of Louis XIV.; it has gone through many editions. His 'Notre Dame de Thermidor,' 1865, is a history of Madame Tallien. In poetry his chief works are 'Les Sentiers Perdus,' 1841; 'La Poésie dans les bois,' 1845; 'Poèmes Antiques,' 1855, &c. They have appeared in several editions, and in a collective form under the title of 'Poésies Complètes,' 1851, and again in 1858 as 'Œuvres Poétiques.' Houssaye's dramas, 'Les Caprices de la Marquise,' 1844, and 'La Comédie à la Fenêtre,' 1852, were not so successful as his other writings. In criticism and miscellaneous literature his productions are very numerous. One of the most remarkable among them is 'L'Histoire de la Quarante et unième fauteuil de l'Académie Française,' 1855. The idea is an ingenious one. The Académie being limited to forty members, Houssaye has invited the reader to be present at the imaginary reception (as the forty-first) of various great men in France, whom the Academy has refused or neglected to admit, from Descartes to Béranger. Another remarkable work by him is 'Le Roi Voltaire; sa généalogie, sa jeunesse, sa cour, ses ministres, son peuple, sa dynastie, &c.,' 1858. Several editions of his 'Œuvres' have appeared. He has written largely in 'Le Constitutionnel,' 'La Revue de Paris,' the 'Revue des Deux Mondes,' and especially 'L'Artiste,' the last of which periodicals was for some years managed by him. In 1861 he became chief proprietor and editor of 'La Presse.'

HOUSTON, SAMUEL, American general, remarkable for his extraordinary career, was born at Lexington, Virginia, March 2, 1793. When his father died, in 1807, his mother and her nine children retired to the backwoods of Tennessee, near the land of the Cherokees. Young Houston, after a little schooling, entered a store as a clerk; but soon absconding, he went to live with the Indians, who cherished him, and whose chief adopted him. In 1811 he returned to his relatives, and opened a school; in the following year he enlisted as a soldier; in 1814 became an ensign under General Jackson, and in the course of the campaign was severely wounded. In 1818 he began to study the law, in which he practised with success at Knoxville. In

1823, and again in 1825, he was elected to Congress, and also assumed the peaceful duties of major-general of militia. In 1827 he was made governor of Tennessee. His restlessness of character, however, did not allow him to remain long in any one place or any one employment. In April, 1829, after being three months married to the daughter of an ex-governor, he quitted his wife and the several duties of civilised life, went to his old acquaintances the Cherokees, in a new settlement beyond the Mississippi, and stayed with them as a chief for four or five years. During this period, in 1832, he went to Washington to protest against the misconduct of some of the Government agents in the breach of their engagements with the Indians; but although he succeeded in substantiating many of his charges, he made a host of enemies, who harassed him with prosecutions in various ways. A new field of enterprise opened to him soon afterwards, by the revolt of Texas from the Mexican Government; he joined the revolutionists, and became commander-in-chief of the small army of the Texans in 1835. Santa Anna opposed him with superior forces, and compelled him to retreat 300 miles; rallying his troops, however, Houston gained a signal victory at San Jacinto, April 21, 1836. This achieved the independence of Texas, which became a distinct republic; and in October he was elected the first president. After a term of two years he retired from office; but, matters becoming disorganised, he was re-elected in 1841. He then began to negotiate the union of Texas with the United States, which was effected in 1845; and he sat in the Senate of the United States at Washington from that year till 1859, as one of the two representatives for the State of Texas. Throughout this period he was the zealous friend of the Indians, in all matters of legislation and treaty. In 1854 he opposed the Kansas and Nebraska measure, and joined the party of the "Know-Nothings." When the Civil War broke out in 1861, he was governor of the State of Texas; he opposed the secession of the State, but finding his opposition unavailing, retired into private life. He died on the 23rd of July, 1863.

HOWARD, LUKE, was born in London in 1772, of Quaker parents. He was sent to a school in the north of Oxfordshire, where, as he was afterwards accustomed to say, he learned too much Latin grammar and too little of anything else. But he was fond of observation, especially of watching the appearances of the sky and the forms of clouds. On leaving school Howard was apprenticed to a chemist at Stockport. Here he devoted his spare time to the study of French, botany, and chemistry, on which last science the labours of Lavoisier and Priestley were then exerting a quickening influence. In 1798 he entered into partnership with William Allen, a celebrated manufacturing chemist; but after a few years the connection was amicably dissolved, Howard retaining the laboratory at Plaistow, and working it for profit.

Howard's first paper on the Modifications of Clouds was read before the Askesian Society. He also contributed some papers on Atmospheric Electricity, and one which was considered as an anticipation of the "cell" theory as regards the structure and functions of plants. But as the Askesian was not a publishing society, Howard lost the benefit of discoveries which he more or less originated. His paper on Clouds was published in 1803, and was, as he tells us, "the result of his early boyish musings, enriched by the observations of many a walk and ride morning and evening, to or from his day's work at the laboratory." He contributed many, if not all, the articles on Meteorology to Rees's Cyclopædia; also a series of papers to a journal, embodying the results of his observations from 1806. These were afterwards collected into 2 volumes, 1818—20, under the title 'Climate of London, deduced from Meteorological Observations made in the neighbourhood.' This was republished in 1833.

Howard became a fellow of the Royal Society in 1821. His reputation as a meteorologist was now established. His classification of the clouds is still retained in all observatories; and although the increasing perfection of instruments of observation has superseded some of his methods, his labours imparted more of a scientific character to meteorology than it had before received. Those who knew him well speak of his intense interest in the appearance of the sky. "Whether at morning, noon, or night, he would go out to look around on the heavens, and notice the changes going on. His intelligent remarks and pictorial descriptions gave a character to the scene never before realised by some. A beautiful sunset was a real and intense delight to him; he would stand at the window, change his position, go out of doors, and watch it to the last lingering ray;

BIOG. DIV.—SUP.

and long after he ceased, from failing memory, to name the 'cirrus' or 'cumulus,' he would derive a mental feast from the gaze, and seem to recognise old friends in their outlines."

Howard participated in the active beneficence of the Society of Friends. He exerted himself greatly to mitigate the sufferings of the Germans, during the campaigns that preceded the first abdication of Napoleon I. He took a great interest in Ackworth school, and in order the better to watch over its welfare, as well as to be able to offer hospitality to the visitors, he bought the Ackworth Villa Estate in 1823, and made it his summer residence, his winter residence being at Tottenham.

In 1796 Howard married Mariabella Eliot, also a member of the Society of Friends. They had seven children, but only two sons survived their parents. At about the age of eighty Howard was much enfeebled by illness, and he was greatly afflicted by the death of his wife, after a union of fifty-six years. He died at Tottenham on the 21st of March, 1864. His portrait, bequeathed to one of his friends, is eventually to be added to the Royal Society's collection.

In 1832 Howard published an essay on the 'Modification of Clouds.' In 1837, 'Seven Lectures on Meteorology'; in 1842, 'A Cycle of Eighteen Years in the Seasons of Britain,' &c.; in 1847, 'Barometrographia; twenty years' variation of the barometer in the Climate of Britain'; in 1850, 'Fifty-four Papers on Meteorology.' He was also writer or editor of a religious and literary periodical, entitled 'The Yorkshireman,' in 5 vols., 1833—37.

HOWARD, SIR ROBERT, politician and play writer, a younger son of Thomas Howard, first Earl of Berkshire, was born in January, 1626, and educated at Magdalen College, Oxford. He was an eager Royalist, and distinguished himself in more than one encounter with the Parliamentarians. At the Restoration he was knighted, made auditor of the Exchequer, elected M.P. for Stockbridge in 1661, and in 1679 for Castle Rising. He was employed by Charles II. in procuring the assent of the House to his many applications for money. Evelyn speaks disparagingly of his morals, and styles him "that universal pretender," a term that explains the appropriation to him of the character of Sir Positive At-All in Shadwell's play of the 'Sullen Lovers.' He first appeared as a poet in a volume of 'Poems, viz., a Panegyrick to the King, Songs and Sonnets, the Blind Lady a Comedy, the Fourth Book of Virgil, Statius his Achilleis, with Annotations, and a Panegyrick to General Monk,' small 8vo, London, 1696; to which Dryden prefixed a very laudatory copy of verses. Howard afterwards wrote the 'Indian Queen' in conjunction with Dryden, whom he patronised and introduced to his family, and who afterwards married his sister. But later, Dryden, resenting some slights, handled his brother-in-law rather roughly in his 'Defence of the Essay of Dramatic Poesy.' The Duke of Buckingham made Sir Robert the original Bilboa of his 'Rehearsal,' though he afterwards transferred the satire to Dryden as Bayes. Howard published 'Four New Playes,' folio, 1665, and others subsequently; his 'Dramatic Works' were collected in 1722. Pepys mentions being present at the performance of his 'Committee,' which he thought "a merry but indifferent play." Others were the 'Surprisa!,' 'The Duke of Lerma,' &c., dreary rubbish, now utterly forgotten. The reign of James II. cured him of his absolutist notions. He was a warm partisan of the Revolution; was made a privy councillor; in the first Parliament of William III. carried the Act annulling the sentence on Titus Oates, and continued thenceforward to take a prominent part as a steady Whig. In his last years, abandoning plays and poetry, he wrote on history, politics, and religion: 'Historical Observations upon the Reigns of Edward I., II., III., and Richard II., with Remarks upon their faithful Counsellors and false Favourites,' 12mo, London, 1689; 'The History of Religion,' 8vo, 1694; and one or two pamphlets. He died September 3, 1698.

HOWE, ELIAS, the inventor, or chief inventor of the sewing machine, was born at Spencer, Massachusetts, in 1819. He was the son of a farmer and miller; the family was large, and all had to labour. After working, as a boy, at sticking wire teeth into strips of leather, to make the hand apparatus for carding cotton, he went to Lowell in 1835, where he entered a manufactory of cotton machinery. In 1837 he worked in a machine shop at Cambridge (Mass.), and then at a nautical instrument maker's at Boston. In 1839 a conversation in his master's shop suggested to him the possibility of constructing a sewing machine; but it was not until 1843, when he was supporting a young family on the wages of a journeyman mechanic, that he bent his attention steadily to the matter. He experimented for twelve months on

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some contrivance that might imitate his wife's sewing; employing a needle pointed at both ends, with an eye in the middle, that should work up and down through the cloth, and carry the thread with it. But all his attempts failed. He then tried another kind of stitch: he conceived the idea of using two threads, one to be carried by a curved needle with the eye near the point, the other by a shuttle, the two threads locking together into a tight stitch. This was the turning point in his career. In 1844 he was convinced that he had hit upon the right principle, and what remained was to work it out practically. He entered into partnership with one George Fisher, who had a little capital to spare; and, after working sedulously during the winter, produced his first sewing machine in 1845: (it was at the Paris Exhibition in 1867). He himself sewed two suits of clothes with it, one for himself, and one for Fisher. But difficulties beset him: some tailors refused to believe in the possibility of a sewing machine; others feared that it would injure their trade; and he met with no encouragement. After employment for a time as engine-driver on one of the railways, he made a model of a somewhat improved sewing machine, deposited it in the patent office at Washington, and obtained a patent for it in 1846. Fisher had by this time spent all his money; Howe was as poor as ever; and he and his brother Amasa made a voyage to England in 1847. Howe made a bargain with a manufacturing staymaker in London, whereby the latter, for a sum of 250*l.*, was to become the purchaser of the machine which Howe brought with him, and was to have the right of making and using as many similar to it as he chose, Howe being employed by him for a time at weekly wages. The staymaker made an ample fortune, while the inventor returned to America nearly penniless in 1849. He found that during his obscurity in London his invention had attracted notice in America, and numbers were beginning to construct sewing machines. Obtaining a little money on loan, he bought up Fisher's share in the patent, and defended his patent rights in a court of law. In 1850 he superintended the construction of fourteen sewing machines at a machine-shop in New York, for a manufacturer who consented to pay him a licence fee. After a lengthened lawsuit against the infringers of his patent, decided in his favour in 1854, Howe repaid the money advanced to him, became unshackled owner of his patent, and began rapidly to accumulate a fortune. In 1860 his patent was renewed, and the Howe Machine Company, of which he was the chief partner, carried on the manufacture on a vast scale. Early in the Civil War the War Department sent an order for 50,000 sand-bags, such as are used in siege works; they were finished and shipped off by the company within 24 hours. Mr. Howe raised and equipped a regiment of volunteers at his own expense, presented every officer in it with a horse, and himself served for a time as a private. He died September 3rd, 1867. It is now generally admitted on both sides of the Atlantic that Elias Howe was, more than any other person, the real inventor of the sewing machine.

HOZIER, PIERRE D', Sieur de la Garde, in Provence, a celebrated genealogist and family historian, was born on the 12th of July, 1592, at Marseille, where his father, Etienne d'Hozier, was an advocate. After receiving his early education under the careful superintendence of his father, he was sent, in 1612, to prosecute his studies at Paris, from which, however, after about a year's stay, the weakness of his sight compelled him to return. He revisited Paris after the death of his father, in 1615, with an inclination to a military career, and entering the army, served under the Count de Crequi Bernieules, whom he assisted in the prosecution of his genealogical investigations. The success which attended his devotion to the elucidation of the antiquities of the illustrious family of which M. de Crequi was at that time the head, was conclusive in determining the after career of d'Hozier, who in 1620 obtained a place among the hundred gentlemen of the household of Louis XIII. in order that he might with greater ease and facility occupy himself with illustrating the archives of other principal families of France. Gaston de France, Duc d'Orleans, struck with admiration at the unexampled power of memory exhibited by d'Hozier in the recapitulation of the names, surnames, arms, exploits, and contracts of illustrious individuals, appointed him, January 12th, 1627, one of the gentlemen of his train; and in the following year, 1628, he received from the king the distinction of the Order of St. Michael, to which was added, in 1629, a pension of 1200 livres. In 1641 d'Hozier was appointed juge d'armes de France, in succession to St. Mauris, the first holder of the office; on the 31st of December, 1642, was made maître d'hôtel to the king; and after the death of Louis XIII., on the 14th of May, 1643, was

confirmed in his offices and honours by Louis XIV., by whom he was raised to his final dignity of conseiller d'état in 1654. After having acquired, by his ability, earnestness, and honesty, the reputation of being the founder of the science of genealogy, d'Hozier died at Paris, on the 1st of December, 1660.

His works include, 'Généalogie des Seigneurs de la Dufferie, sortis de la Maison de Baglioni, Seigneurs Souverains de Perouse en Italie,' folio, Paris, 1622; 'Généalogies et Alliances de la Maison des Sieurs de Larbour, dits depuis de Combault, sortie autrefois puinée de la première Race de Bourbon non Royale, dès avant l'An 1200, &c. Justifiée par Titres,' 4to, Paris, 1629; 'Table Généalogique pour faire voir que la Maison de S. Simon descend par les Femmes de la Royale Maison de France. Justifiée par Preuves,' folio, Paris, 1631; 'Généalogie de la Maison des Gilliers,' folio, Paris, 1631; 'Les Noms, Surnoms, Armes, et Blasons des Chevaliers et Officiers de l'Ordre du S. Esprit, créés par Louis XIII. le 24 May, 1633,' folio, Paris, 1634; 'Généalogie de la Maison de Rouvroy,' folio, Paris; 'Histoire de Bretagne jusqu'en 1458: avec les Chroniques des Maisons de Vitré et de Laval, par Pierre le Baud, Aumônier de la Reine Anne, Doyen de Saint Tugal de Laval. Les Breviaire des Bretons, ou leur Histoire abrégée en vers. Ensemble quelques autres Traités servant à la même Histoire, et l'Armorial des Maisons de Bretagne. Le tout tiré de la Bibliothèque du Marquis de Molac, et mis en Lumière par Pierre d'Hozier,' folio, Paris, 1638; 'La Généalogie de la Maison de Rosmadec,' folio, Paris, 1644; 'Remarques sommaires sur la Généalogie de la Maison de Gondy,' folio, Paris, 1652; 'Généalogie de la Maison Bournonville,' folio, Paris, 1657; 'La Généalogie et les Alliances de la Maison d'Amahé au Comté de Maconnais, par Pierre d'Hozier: avec les Preuves et Additions, par Pierre Palliot,' folio, Dijon, 1659; 'Généalogies des principales Familles de France: avec beaucoup de Titres servant de Preuves, rangées par Ordre alphabétique: recueillies par Pierre d'Hozier, et par Charles d'Hozier son Fils,' a work in 150 folio volumes, preserved in the national library of France, upon which each of the d'Hoziers is said to have spent 50 years, so that the whole may be regarded as the result of a century of labour.

CHARLES RENÉ D'HOZIER, whose name occurs jointly with his father's in the title of the last-named work, was born at Paris on the 24th of February, 1640, and succeeded his father in his office of juge d'armes de France. He enjoyed a pension of 4000 livres, and received from the Duke of Savoy the Croix de la Religion, and the knighthood of the military orders of St. Maurice and St. Lazare. He signalled his proficiency in heraldic knowledge by the composition of various works; and especially produced, under the direction of M. de Caumartin, 'Recherches sur la Noblesse de Champagne,' 2 vols. folio, Chalons, 1673; and 'Généalogies des Maisons de Conflans et de Lafare,' &c. He died in 1732; and was succeeded in his office by his nephew, LOUIS PIERRE D'HOZIER, who was born on the 20th of November, 1685, and died on the 26th of September, 1767, and who, jointly with his son, Antoine Marie d'Hozier de Sévigny, edited the 'Armorial Général de la France; ou, Registre de la Noblesse de France,' 10 vols. folio, Paris, 1738—68. The last-mentioned is also the author of 'Histoire Généalogique de la Maison de Chastellard,' folio, Paris, 1756.

HROSWITHA, whose name is more correctly written Hrôth-suth, corresponding with the old High German Hruodsuind, and varies as Hrosvita, Hrosvitha, Roswida, &c., a canoness of the Benedictine abbey of Gandersheim, in the duchy of Brunswick, was celebrated, towards the close of the 10th century, for her poetical talents, and especially for her dramatic compositions. She was born about the year 935, and died later than 968: possibly in one of the earliest years of the 11th century. Her life is little known, except as it has found expression in her works; and these have given rise to considerable discussion amongst bibliographers. The following list of them is given on the authority of M. Charles Magnin, the author of a French translation, with the Latin text, introduction, and notes of the 'Théâtre de Hrosvitha,' 8vo, Paris, 1845:—'Panegyria, sive Historia Oddonum,' of which she appears to have completed only the first part, 'Carmen de Gestis Oddonis I. Imperatoris,' a poem of about 900 hexameters, which has often been reprinted, as, for instance, in Justus Reuber's 'Veterum Scriptorum qui Cæsarem et Imperatorem Germanicorum Res per aliquot Secula gestas, Literis mandarunt, Tomus unus,' Frankfurt, 1784; a poem, also in hexameter verse, very valuable for the light which it throws on the literary and monastic history of the 9th and 10th centuries, entitled 'Carmen de Constructione Cœnobii Gandershemensis,' which was first published by J. G. Leuckfeld, in his

'Antiquitates Gandershemenses,' 4to, Wolfenbüttel, 1709, afterwards by Leibnitz, in his 'Scriptores Rerum Brunsvicensium Illustrationi inservientes,' 3 vols, folio, Hanover, 1707—10, and by J. Chr. Harenberg, in his 'Historia Ecclesiæ Gandershemensis cathedralis ac collegiæ diplomatica,' folio, Hanover, 1734, and by various editors of the works, or selections from the works of Hroswitha, German translation, by Fr. Horn, in the first volume of 'Nordalbingische Blätter,' 8vo, Hamburg, 1820, &c.; 'Maria. Historia Nativitatis laudabilisque Conversationis intactæ Dei Genitricis, quam scriptam reperi sub nomine Sancti Jacobi, Fratris Domini;' 'De Ascensione Domini;' 'Passio Sancti Gongolfi, Martyris;' 'Passio Sancti Pelagii, pretiosissimi Martyris, qui nostris Temporibus in Corduba Martyrio est coronatus;' 'Theophilus. Lapsus et Conversio Theophili Vice-domini;' 'Historia de Conversione cujusdam Juvenis desperati per Sanctum Basilium Episcopum;' 'Passio Sancti Dionysii, egregii Martyris;' 'Historia Passionis Sanctæ Agnetis, Virginis et Martyris;' and six comedies, composed avowedly on the model of Terence, which are exemplary for their pure morality, and very valuable as forming one of the links of the chain which connects, through works of a religious interest, the old pagan theatre with the later stage, and are entitled respectively, 'Gallicanus,' 'Dulcitius,' 'Callimachus,' 'Abraham,' 'Paphnucius,' and 'Sapientia,' in the last of which the interlocutors are "Antiochus, Adrianus, Sapientia, Fides, Spes, Charitas, Matronæ."

Amongst the partial or complete editions of the works of Hroswitha, may be mentioned, as the first in the order of time, that of Conrad Celtis, 'Opera, &c., nuper a Cr. Celte inventa,' folio, Nürnberg, 1501; 'Opera, &c., partim soluto partim vincto Sermonis Genere conscripta, recognita et repurgata Cura et Studio H. Lh. Schurzleischii,' 4to, Wittenberg, 1717; 'Poésies Latines de Roswithe, Religieuse saxonne de X^e Siecle, avec une Traduction libre en Vers français, &c., par Vignon Rétif de la Bretonne,' 8vc, Paris, 1854; 'Hroswithæ Gandershemensis Comœdiæ sex ad Fidem Codicis Emmeranensis Typis expressas, edidit J. Bendixen,' 16mo, Lubeck, 1857; 'Die Werke der Hrotswitha, herausgegeben von Dr. K. A. Barack,' 8vo, Nürnberg, 1858. The principal of the biographical and critical essays which have been produced in relation to Hroswitha, Canoness of Gandersheim, are 'Geschichte der Roswitha eines Stiftsfräuleins von Gandersheim,' 8vo, Leipzig, 1758; 'Roswitha die Nonne aus Gandersheim, von Edmund Dorer,' 8vo, Aarau, 1857; and an essay by Franz Löher, on Hroswitha and her Time, 'Hrotswitha und ihrer Zeit,' which appeared in a volume of scientific discourses delivered at Munich in the winter of 1858, 'Wissenschaftliche Vorträge gehalten zu München im Winter, 1858,' 8vo, Brunswick, 1858.

HUBER, FRANÇOIS, naturalist, was born at Geneva, July 2, 1750. When about seventeen years of age he lost his sight. Notwithstanding this defect, he occupied himself with making a series of observations and experiments on bees, which resulted in his drawing up one of the most accurate and fullest accounts in existence of the habits of bees. His inquiries were materially aided by his assistant Burnens, his son, and especially by his wife, who devoted herself to him, and endeavoured in every way to alleviate his misfortune. Her endeavours were so successful that he asserted that he should be miserable were his blindness to cease. His 'Nouvelles observations sur les Abeilles,' 8vo, Paris, 2nd ed., 1796, contains many important additions to our knowledge of those insects. He also helped to determine the fact that the bees secrete their wax, in a 'Mémoire sur l'origine de la Cire,' in 'Bibliothèque Britannique,' vol. xxv., pp. 58—79 (1804). He also wrote some observations on the germination of plants. He died October 22, 1830. His son, PIERRE HUBER (died 1841) was also an entomologist. He wrote several articles for the Mémoires of the Physical Society of Geneva, but is best known for his remarkable work on the manners of ants.

* HÜBNER, RUDOLF JULIUS BENO, German historical painter, was born in 1806, at Oels, in Silesia, and studied at Berlin, under Schadow, whom he accompanied to Düsseldorf, and whose manner he adopted. He was associated in various works with Hildebrandt and Lessing, and he enlarged his views of art by Italian travel. In 1839 he settled in Dresden, where, in 1841, he was appointed professor in the Royal Academy. His works consist of religious subjects, as 'Ruth and Boaz,' his earliest picture; 'Job and his friends,' 'Samson breaking the pillars of the Temple,' 'Christ Teaching,' 'Christ Scourged,' 'Samuel brought to Eli,' 'Guardian Angels,' of allegories, as the 'Germania,' known by Stahl's engraving; of historical subjects, like his great work, 'Luther's Disputation with Eck;' and of historical portraits, as the 'Emperor Frederick III.' for the city of Frankfurt. Hübner is

admired for the purity of his forms, for his skilful composition and for a certain mystic depth of feeling; but his works seem to an English eye cold, elaborate, and conventional.

HÜBSCH, HEINRICH, celebrated German architect, was born at Weinheim, February 9th, 1795. On quitting Heidelberg University, he entered the Bauschule, Karlsruhe, and there studied architecture under Weinbrenner. During 1817—20 he travelled in Greece, Turkey, and Italy, making a careful study of the architectural remains of Athens and Rome. Having settled in Karlsruhe he was appointed in 1827 court architect and member of the state architectural commission; in 1829 a commissioner of buildings, and subsequently chief director of buildings in the grand duchy. As architect he found ample employment, and he is regarded as the founder of a new epoch of architecture in Baden. He held decided opinions on architectural style, which he set forth in his essay 'In what Style shall we build?'—'In welchem Stile sollen wir bauen?' 8vo, Karlsruhe, 1828, and exemplified in the numerous buildings he erected. Among these were the Hotel of the Finance Minister, the Kunsthalle, the Polytechnic Institute, the Botanical Museum, the Court Theatre, &c., in Karlsruhe; the theatre and salons at Baden-Baden, &c. These and other civil buildings are mostly a modification of, or based on, the Lombardic style, but exhibit a considerable amount of difference and some originality in the ornamentation. In his later years he gave increasing attention to ecclesiastical architecture, and built a large number of both Lutheran and Catholic churches at Freiburg, Mühlhausen, Mannheim, Bülach, Stahringen, and elsewhere. His latest, and perhaps most important work in this line was the magnificent restoration of Spiers cathedral, carried out chiefly at the expense of King Ludwig of Bavaria. Besides the essay already cited, Hübsch published an essay on Greek Architecture, 'Ueber griechische Architektur,' Heidelberg, 1822; on Architecture and its connection with Painting and Sculpture, 'Die Architektur und ihr Verhältniss zur heutigen Malerei und Sculptur,' 8vo, Stuttgart and Tübingen, 1847; a series of views in Athens, a treatise on architectural ornament, and a learned and elaborate work on early ecclesiastical architecture, 'Die altchristliche Kirchen nach den Baudenkmalen und ältern Beschreibungen,' 8vo, with an atlas of 63 plates, Karlsruhe, 1859—62. Hübsch died at Karlsruhe on the 3rd of April, 1863.

HUC, EVARISTE RÉGIS, a French missionary, was born at Toulouse, August 1, 1813. In 1839 he went to China as a missionary. In 1844 he was instructed, in conjunction with M. Gabet, to penetrate into the central deserts of Asia, for the purpose of propagating their religion. They stopped at the celebrated Buddhist convent at Kounboun for some months, studying the Thibetan language; and then joined a caravan on its way from China to Lhasa, the capital of Thibet. They resided at Lhasa for a time, but towards the end of 1846 the Chinese ambassador insisted on their being compelled to quit the country. In the course of his wanderings, the Abbé Huc obtained much interesting information about people and places which had hitherto been almost unknown to Europe. The books which he wrote acquired considerable popularity; and, although from a scientific point of view they are not of much importance, still they contain accounts of places which no other Europeans had visited and reported on. Recently, however, much more accurate geographical information about Lhasa and its environs has been obtained. The works written by Huc are entitled 'Souvenirs d'un Voyage dans la Tartarie, Thibet et la Chine, pendant les années 1844, 1845, et 1846,' 2 vols, 8vo, Paris, 1850; 'L'Empire Chinois,' 2 vols, 8vo, Paris, 1854; and 'Le Christianisme en Chine, en Tartarie, et au Thibet,' 3 vols, 8vo, 1857. Huc died in March, 1860.

* HUGHES, THOMAS, M.P., the second son of Mr. John Hughes, of Donnington Priory, near Newbury, in Berkshire, was born at Uffington, Berks, on the 20th of October, 1823. He was educated at Rugby, under Dr. Arnold; removed to Oriel College, Oxford, in 1841, and took his B. A. degree in 1845. He entered as a student at Lincoln's-inn, was called to the bar in 1848, and became a Chancery barrister. In 1856 he published 'Tom Brown's Schooldays'—a book which has since become closely associated with his name, and which is a vigorous reminiscence of the author's experiences as a Rugby boy. In 1858 appeared his 'Scouring of the White Horse,' a lively account of an annual festival, held avowedly for the purpose of cleansing the vast effigy, known as the White Horse of Berkshire, on the side of a down near his native village of Uffington. In 1861 he published 'Tom Brown at Oxford,' treating college life in the same spirit as he had treated public-school life. Mr.

Hughes has not practised much at the bar. He has rather turned his attention to politics, and especially to the well-being of the working-classes, and the maintenance of amicable relations between them and their employers. Mr. Hughes has been applied to by men and masters to act as arbitrator in trade disputes, and with the happiest results. "As an instance of what may be accomplished in this way," said Mr. Mundella, in the House of Commons, February 14, 1871, "he might mention that the hon. member for Frome, by his labours in a court of arbitration, within the last few days, had settled the question of wages in a town formerly torn by strikes, to the entire satisfaction of both master and workmen, until March, 1872." At the general election of 1865 he was chosen one of the members for Lambeth, and for three years took an active part in the furtherance of liberal measures. When the Reform Act of 1867 led to a general election in 1868, Mr. Hughes withdrew his candidature, in order that a working-man might have a chance of election for Lambeth: but that object was not attained. He became member for Frome, which borough he still represents (1871). Mr. Hughes has shown a warm interest in the intellectual as well as the social advancement of the industrial classes. He was one of the founders of the Working Men's College, Great Ormond-street, London, and during its early years an active member of the council, and lecturer; he has continued to afford it his zealous support and counsel, and has given willing aid to all similar institutions. After writing prefaces to new editions of the works of Lowell, Whitmore, and other American authors, he visited the United States in 1870, and was received with marked cordiality. He took advantage of the opportunity to deliver a lecture at Boston, on the best means of maintaining friendly relations between the two countries. The lecture was afterwards published in England, under the title 'John to Jonathan.' Mr. Hughes is colonel of the Working Men's Volunteer Rifle Corps, which he assisted in establishing and organising.

* HUGO, VICTOR MARIE, VICOMTE. [E. C. vol. iii. col. 507.] First at Jersey, and then for a longer period at Guernsey, M. Hugo spent the years during which the Emperor of the French remained in power. From first to last he refused to acknowledge the rule of Napoleon III. In 1856 he published his 'Contemplations,' 2 vols. 8vo: a work in which the souvenirs of a poet are treated under the heading 'Autrefois,' and the inspiration of a prophet under that of 'Aujourd'hui.' This work has gone through many editions. 'Les Enfants, Livre des Mères,' 12mo, 1858, is a smaller and less pretentious work. 'La Légende des Siècles,' 2 vols. 8vo, 1859, is a collection of poems, announced as being the first part of a trilogy, of which the second and third parts were to bear the titles 'La Fin de Satan,' and 'Dieu.' The same year witnessed a decree of the Emperor, on August 15th, which permitted the re-entrance of political exiles into France. Victor Hugo, with Louis Blanc, Edgar Quinet, Charras, and some others, refused to avail themselves of the concession, and published a protest against the terms in which it had been made. 'Les Misérables,' a romance of a singular kind, was published with more than usual trade boldness. Besides the French edition, (10 vols. 8vo, 1862,) the work was translated into English, German, Italian, Spanish, and Russian, and published on the same day at Paris, Brussels, London, New York, Berlin, Turin, and St. Petersburg. An illustrated French edition, in small 18mo vols., 1863-5, had an enormous sale. Hugo's son, Charles Victor, dramatised the work, and had it brought out at Brussels; but it did not meet with much success. 'Victor Hugo raconté par un témoin de sa vie,' 2 vols. 8vo, 1863, is understood to have been written by his wife, with his concurrence. 'Littérature et Philosophie Mélangées,' and 'William Shakespeare,' both published in 1864, passed without special attention; but 'Chansons des Rues et des Bois,' 1865, earned for the author the sobriquet of the 'Paganini of poetry': so bizarre in form, idea, and imagery are the caprices, and yet so picturesquely truthful the details. 'Les Travailleurs de la Mer,' 3 vols. 8vo, 1866, has been characterised as a sort of idyllic épopée, simple recitals presented in a picturesque form. In 1867 his drama of 'Hernani' was acted with great success at Paris for many weeks, when the city was crowded with visitors to the International Exhibition. 'L'Homme qui rit,' 4 vols., 8vo, 1869, is intended to develop a sort of metaphysical and social programme; but it has met with only a limited amount of favour. An English version of the work appeared in the 'Gentleman's Magazine,' in 1870. When the Revolution took place at Paris, September 4th, 1870, by which the imperial power was deposed, France was re-opened to such of the exiles as had continued to reside abroad. M. Victor Hugo was among

those who returned to Paris, where he was received with great enthusiasm. He did not, however, join the Committee of National Defence; nor did he render much practical service in the ensuing troubled period of five months. In February, 1871, he was elected to the new National Assembly.

* HULL, EDWARD, geologist, was born in Antrim, in 1829. He has been long employed on the geological survey of Great Britain, in connection with which he has contributed several memoirs, descriptive of the geology of parts of Wiltshire, Gloucestershire, Leicestershire, Berkshire, Oxfordshire, Lancashire, Cheshire, Cumberland, and Westmorland. He has written several papers on the Permian rocks near Heidelberg, on isodiametric lines in sedimentary deposits, and on the old palæozoic ridge of land across what is now the central portion of England. He has also written a book, entitled 'The Coal Fields of Great Britain, their History, Structure, and Duration; with notices of the Coalfields of other parts of the World,' 8vo, London, 1861, which is an excellent popular digest of what is known on the subject. On the death of Professor Jukes, 1869, Mr. Hull succeeded to the directorship of the Geological Survey of Ireland. He is also professor of geology in the Royal College of Science for Ireland, and a fellow of the Royal and other societies.

HULLS, JONATHAN, the inventor, or one of the inventors of steam navigation, was a native of Kingston-upon-Hull, and is known to have exercised his ingenuity during the reign of George the Second; but personal details relating to him are wanting. He took out a patent, December 21st, 1736, for a mode of applying steam power to the propulsion of vessels; and in the following year he published a pamphlet containing a description of the boat and its mechanism, an illustrative plate, and a refutation of certain objections which had been urged against his plan. The pamphlet had for title—'A Description and Draught of a new Invented Machine for carrying Vessels out of or into any Harbour, against Wind and Tide, or in a Calm,' 12mo, 1736. The description related to a tug-boat, to draw sailing vessels under circumstances when the sails would be useless. So little was this pamphlet known at the time when steam navigation became really established, that the name of Jonathan Hulls was scarcely mentioned by any the claimants to the honour of the invention; but since the publication of an edition comprising a small number of copies, edited by J. Sheepshanks, in 1855, it has been found that Hulls must no longer be excluded from the list. "In some convenient part of the tow-boat," he says, "there is placed a vessel about two-thirds full of water, with the top close shut. This vessel being kept boiling, rarifies the steam, which being conveyed through a large pipe to a cylindrical vessel, and there condensed, makes a vacuum, which causes the weight of the atmosphere to press on the vessel, and so presses down a piston fitted into the cylindrical vessel, in the same manner as Mr. Newcomen's engine, with which he raises water by fire." He calculates the power of the steam generated in a cylinder of certain size, and from thence deduces the tractive force of the tug-boat. The propelling machinery adopted by him was very curious. Two paddle-wheels were suspended in a frame projecting from the stern; two ropes, from two pistons (which worked alternately in two cylinders), extended to the two paddle-wheels, one to each; the ropes passed over pulleys, and the free ends were kept hanging down by weights. The ropes conveyed the motion from the pistons to the paddles, and each gave a pull in turn. However clumsy the arrangements may have been, as described and depicted, it is certain that a boat *could* have been propelled by such means. The late Professor Barlow, after noticing the complexity of the apparatus, said, "Yet as the first idea of such an application of the power of steam, it is as an historical fact extremely interesting. It appears to have altogether failed at that time, either from want of encouragement, or from the inefficiency of the apparatus."

* HULLAH, JOHN. [E. C. vol. vi. col. 1096.]

HUMBOLDT, FRIEDRICH HEINRICH ALEXANDER, BARON VON [E. C. vol. iii. col. 509]. Almost to the end, Humboldt retained his usual good health, and clearness of intellect; although for the last few years of his life he was feeble in body. He took an active interest in science, and kept up an enormous correspondence, so that in one of his letters written a few weeks before his death, he states that the answering letters at the rate of 2000 a year is becoming rather a burthen to him. His time was mostly occupied with his 'Cosmos,' of which the first part of the 4th volume appeared in 1858; the remainder, which was in a forward state at the time of his death, was published in 1862. Humboldt died on the 6th of May, 1859. In 1869 the first centenary of his birth was celebrated at Berlin,

when a long account of his life and labours was delivered by Ehrenberg, which has since been published under the title of 'Gedachtnisrede auf Alex. von Humboldt,' 1870. A notice of him has been given in almost every important scientific journal. Memoirs of him have also been published by F. A. Schwarzburg, and Bayard Taylor.

HUNT, JAMES, anthropologist, was born at Swanage in 1833, and was educated for the medical profession. His father had established a successful practice in the cure of stammering, and he himself adopted the same specialty, in which he acquired considerable skill and reputation. He made numerous observations on stammering, and published the results in two works, one entitled 'On Stammering and Stuttering, their nature and treatment,' which has attained its seventh edition, and the other 'A Manual of the Philosophy of Voice and Speech.' He was an active member of the Royal Society of Literature, and of the Ethnological Society. In 1863 he founded the Anthropological Society, of which he was for several years president. His scientific papers include his presidential addresses, treatises on the negro, acclimatisation of man, prehistoric monuments of various parts of Europe, and a translation of Karl Vogt's 'Lectures on Man.' He was a member of a large number of foreign scientific societies. He died at Ore House, near Hastings, August 26, 1869.

HUNT, JAMES HENRY LEIGH [E. C., vol iii. col. 518]. Mr. Hunt died on the 28th of August, 1859. A new edition of 'The Autobiography of Leigh Hunt, with a further Revision and Introduction by his eldest son,' appeared in 1860; 'The Correspondence of Leigh Hunt: Edited by his eldest son,' in 2 vols, 8vo, 1862; and 'A Day by the Fire; and other Papers, hitherto uncollected,' in 1870.

* HUNT, THOMAS STERRY, chemist and geologist, was born at Norwich, Connecticut, September 5, 1826. After attending the educational establishments of his native city (where he acquired sufficient chemical knowledge to make out the complicated composition of monazite), he went to Yale College, New-haven, first as a private student with Professor B. Silliman, jun., and afterwards as chemical assistant to the elder Silliman. On leaving Yale he became chemist and mineralogist to the Geological Survey of Canada, of which Mr. (now Sir) W. E. Logan, was director, a post which he still occupies. He has given most of his attention to the chemistry of organic and inorganic compounds. He has been the leading disciple and expounder in America of the doctrines and theories of Dumas, Laurent, Wurtz and Gerhardt. His work in connection with the Canadian geological survey has led him to numerous important conclusions relating to the composition, alteration, and mode of formation of minerals and rocks, such as serpentines, limestones, dolomites, euphotide, and numerous others; to the composition of spring-waters, and the reactions which take place in them under various conditions; to the reaction of the salts of lime and magnesia, and the light which these give as to the mode of formation of gypsum and the magnesian rocks; and to the explanation of volcanic phenomena. His researches are published in the reports of the geological surveyors of Canada, in 'Comptes Rendus,' in 'The American Journal of Science and Art,' in the 'Canadian Naturalist,' and in a few other scientific journals.

HUNT, WILLIAM [E. C. vol. iii. col. 520]. This admirable water-colour painter, unrivalled in his way, died February 10, 1864, aged 74. Six or eight of his pictures are in the National Collection at South Kensington, and several small studies of shells, &c.—marvellous as minutely accurate, yet broad, imitations of simple natural objects—have been distributed among the art schools of the country, they having been commissioned by Mr. Ruskin for that purpose.

HUNTER, REV. JOSEPH, Sub-commissioner of the Public Records [E. C. vol. iii. col. 525]. After a painful illness of two years' continuance, Mr. Hunter died in London on the 9th of May, 1861. He was born at Sheffield, February 6, 1783.

HUNTINGTON, WILLIAM, S.S., a Calvinistic preacher, the reputed son of a day-labourer named Hunt, but really the son of a farmer named Russel, was born in 1744, at Cranbrook, in the Weald of Kent. The circumstances of his family were so straitened that his earlier years were passed in "hunger, cold and almost nakedness;" and to supply his wants he was occasionally driven into petty acts of childish dishonesty, as he himself narrates in his autobiography. His means of education were restricted to the desultory advantages of a free school; and he was early taken from this in order to help his father in farm labour. After a time he became an errand-boy; was a servant in the employ of various persons, and varied his occupations by acting as day-

labourer, gardener, coalheaver, and shoemaker. He married early in life, and lived successively at Mortlake, Sunbury, Ewell Marsh, and Thames Ditton. When he made his début as a preacher, he was known as the Coalheaver, a name by which, with other curious epithets, he frequently designated himself in after-life. After preaching at Woking, Thames Ditton, Farnham, Petworth, and other places, he was called upon to take his turn in officiating at Margaret Street Chapel; but when he found that this was "open to every erroneous preacher, the hearts of his hearers were stirred up to look out for another place for him, and very soon, 1788, a larger chapel was built, in Gray's Inn Lane, which he called by the name of Providence Chapel." At this time he resided in Church Street, Paddington, often leaving town for the purpose of itinerating in the country, throughout which he preached in most of the counties of England between Devonshire and the North Riding of York. About the year 1800 he migrated to Cricklewood House, near the Edgware Road, where he combined with his spiritual avocations, the business of a farmer and grazier. As after fixing upon the site of his chapel, "God had drawn the pattern of the chapel to be erected, on the imagination of a wise man while hearing him preach a sermon," and had put it into the hearts of friends to supply the fittings and all requisites for worship, so now Huntington found the same providential impulses at work for his secular interests. Every necessity for stocking his farm and carrying it on, together with every convenience—including a coach and pair of horses—for an increasing family, followed in the order of his prayers, his wants, his wishes, and his opportune imparting of them to persons able and willing to entertain them favourably. In the "Bank of Faith" it was scarcely possible for him to overdraw his account. In the days of his poverty, prayer had brought him annual suits of professional clothes, riding breeches, and horseman's coats, all of which fitted him—in many cases without his measure having been taken—as if the tailors had laboured under a divine inspiration; and in the days of his prosperity, this last was increased by his marriage—his first wife having died not long before—with Lady Sanderson, the daughter of Alderman Skinner, who was Lord Mayor in 1795, and widow of Sir James Sanderson, Bart., M.P., who had served the same office with great distinction in 1792. In 1810 Huntington's chapel was burned down, and when his wife and daughter stood weeping over the calamity, he asked them, "Why do you weep? Is God Almighty bankrupt?" Another chapel speedily arose, the freehold of which he demanded and received for himself before he would officiate in it, in order that he might with the more independence and fearlessness give utterance to his opinions. As he was not blessed with academical distinctions, as M.A., or D.D., he adopted the style of S.S., by which he meant Sinner Saved, after his name, and had these letters, as well as his initials, W. H., blazoned on the panels of his coach. In his latter years he resided at Pentonville, and having been taken violently ill there on the 11th of June, 1813, determined to go down to Tunbridge Wells, where he died on the 1st of July following. On the 29th of June, when his friend, Mr. Bensley, expressed his gladness at "seeing him look so comfortable," he replied, "Why should I look otherwise? Death with me has lost its sting these forty years; I am no more afraid of death than I am of my nightcap." A monument was erected to his memory in Providence Chapel, which, *inter alia*, states that "he was interred in the burying ground belonging to Jireh Chapel, at Lewes, in Sussex; where the following Epitaph, dictated by himself a few days before his death, is inscribed on his tomb: 'Here lies the Coalheaver; beloved of his God, but abhorred of men. The Omniscient Judge, at the Grand Assize, shall ratify and confirm this, to the confusion of many thousands; for England and its Metropolis shall know 'that there hath been a prophet among them.' It is, at least, certain that he fixed upon the year 1870 as the extreme limit of the temporal power of the Pope. So great was the affection of his adherents to his person, and their devotion to his memory, that at the sale of his effects at Pentonville, an old arm-chair sold for sixty guineas, and many other articles fetched proportionally high prices."

His preaching partook of the peculiarities of his ordinary life; full of independence and individuality, novel in his expositions, dogmatic in his assertions, confident in his ability as an interpreter of the Bible, which he seemed to know by heart, to recapitulate at will, and to use as suited him in argument. His sermons were desultory and frequently protracted through a delivery of a couple of hours. Chapels still exist in Sussex and other

counties where his peculiar tenets are taught, and they are periodically advocated by the 'Gospel Magazine,' the conductor of which, the Rev. Dr. D. A. Doudney, vicar of St. Luke's, Westminster, Bristol, edited his 'Select Works,' in 1856.

The personal and professional career of a man like Huntington, as is to be expected, was a pretty nearly constant succession of controversies. "God enabled him," he says, "to put out several little books, which were almost universally exclaimed against both by preachers and professors, and by these means God sent them into all winds. They are calculated to suit the earnest enquirer, the soul in bondage, in the furnace, in the path of tribulation, or in the stronghold of Satan. I have heard of them from Wales, from Scotland, from Ireland, from various parts of America, from Cadiz in Spain, from Alexandria in Egypt, and, I believe from both the East and West Indies." These "little books" include, "A Divine Poem upon a Spiritual Birth," 8vo, London, 1784, second edition, with additions, 1789, fifth edition, 1815, other editions, 1830, 1836, and 12mo, 1852; "A Divine Poem on the Shunamite," 8vo, London, 1787, new edition, revised and corrected, 8vo, London, 1808; "Epistles of Faith," two parts, 8vo, London, 1785, 1789, 1792, &c., 8vo, London and Brighton, 1851, 16mo, London and Guildford, 1858; "Justification of a Sinner and Satan's Law Suit with him," 8vo, London, 1787, &c.; "The Arminian Skeleton: or, the Arminian dissected and anatomized," 8vo, London, 1788, sixth edition, 8vo, London, 1814, new edition, 8vo, London, 1835, 16mo, London and Guildford, 1855, &c.; "Cry of Little Faith," 8vo, London, 1768, fifth edition, 1814, new edition, 1823, &c.; "The Naked Bow of God," a record of Divine judgments on the author's adversaries and antagonists; "God the Guardian of the Poor, and the Bank of Faith: or, a Display of the Providences of God which have at Sundry Times attended the Author," and the "Kingdom of Heaven taken by Prayer," all of which have gone through numerous editions; "The Bank of Charity at Providence Chapel," 8vo, London, 1790, &c.; "The Bond Child brought to the Test, and his Use of the Letter considered," 8vo, London, 1789, fourth edition, 8vo, London, 1814; "The Broken Cistern," &c., 8vo, London, 1791, second edition, 1800, and "Forty Stripes save none for Satan: or, The Devil beaten with Rods," 8vo, London, 1792, 1809, &c., jointly published in 16mo, London and Woking, 1855; "The Barber: or, Timothy Priestley shaved, as reflected from his own Looking-glass," two parts, 8vo, London, 1791-92, second edition, 1798, &c., being a reply to Dr. Priestley's "Christian's Looking-glass"; "Advocates for Devils Refuted, and their Hope of the Damned Demolished: or, an Everlasting Task for Winchester and all his Confederates," 8vo, London, 1794, new edition, 1815; "An Answer to Fools and a Word to the Wise. Addressed to the Reverend Maria de Fleury," &c., 8vo, London, 1792, being a reply to the work entitled, "A Farewell to Mr. Huntington"; "The Lying Prophet Examined and his False Predictions Discovered: being a Dissection of the Prophecies of Richard Brothers," 8vo, London, 1795, &c.; "Correspondence between Noctua Aurita and Philomela," 8vo, London, 1799, new edition, 1809; "Contemplations on the God of Israel, in a Series of Letters to a Friend," 8vo, London, 1802, 1810, and 16mo, 1838, 16mo, London and Woking, 1840 and 1855; "Destruction of Death by the Fountain of Life," 8vo, London, 1804, second edition, 1805, 16mo, London and Woking, 1840; "The Coalheaver's Scraps; a Present to his Venerable and Reverend Brother Jenkins," 8vo, London, 1809; "The Doctrine of Garrett Refuted," 8vo, London, 1808, 1830, 1836, &c.; and a sermon, on Psalm civ. 3, entitled "The Apartments, Equipage and Parade of Emmanuel," 8vo, London, 1811, 1835, &c. The "Works of William Huntington, completed to the close of the year 1806," 20 vols., 8vo, London, 1811, &c., were published by Mr. T. Bensley; and the Rev. Dr. Doudney edited, with an introductory preface, "The Select Works of the late Rev. William Huntington, S.S.," six vols., 8vo, London, 1856. Huntington's "Posthumous Letters," were published in four vols., 8vo, London, 1815-22, of which the first three volumes were edited by his widow, Lady Sanderson, and the fourth by Mr. Bensley; a *verbatim* reprint of which was published in two vols., 8vo, Brighton, 1850. The writer of these "Letters" speaks of himself in all kinds of allegorical and other quaintness; subscribing himself now as the "Coalheaver," and again as "S. S.," "The Doctor," "Parson Sack," and "Jonah under the Booth near Nineveh." A few years ago appeared a volume of "Recollections of the late William Huntington; together with Selections from his Writings, Anecdotes, remarkable Incidents, &c. By William Stevens, one of his Hearers," 8vo, London, 1868.

HUPFELD, HERMANN, a German orientalist and divine, was born in 1796, at Marburg, in the University of which he was first a student and afterwards a tutor. After acting for a few years as extraordinary professor at Halle, where he diligently prosecuted his researches in eastern learning, he returned, in 1825, to Marburg, and became professor of the oriental languages in that university in 1827, adding to his duties, in 1830, those of the chair of theology. In 1843 he was called upon to succeed Gesenius, by whose instructions he had formerly profited, as professor of theology at Halle; and held that position until his death on the 24th of April, 1866.

The results of his labours, which were mainly occupied with the Semitic languages, and especially with Hebrew, in the composition of which he claimed to have discovered the débris of a primitive Semitic language, and to have ascertained its ancient laws and transformations, are to be found in the following works:—"Exercitationes Æthiopice, sive Observationum criticarum ad emendandam Rationem Grammaticæ Semiticæ," 4to, Leipzig, 1826; Letters on North America, and especially on a Settlement in Alabama, 'Briefe eines deutschen Ausgewanderten aus Nordamerika, besonders eine Ansiedelung in Alabama betreffend,' 12mo, Marburg, 1834; On the Idea and Method of the Introduction to the Bible, together with a Review of its History and Literature, 'Ueber den Begriff und Methode der sogenannten biblischen Einleitung, nebst ein Uebersicht ihrer Geschichte und Literatur,' 8vo, Marburg, 1844; 'De Rei Grammaticæ apud Judæos Initii antiquissimisque Scriptoribus, Commentatio,' 4to, Halle, 1847; 'Commentatio de antiquioribus apud Judæos Accentuum Scriptoribus,' 2 vols. 4to, Halle, 1846-47; 'Commentatio de primitiva et vera Festorum apud Hebræos, ex Legum Mosaicarum Varietate eruenda,' 2 parts, 4to, Halle, 1851-52; 'Quæstionum in lobeoides Locos vexatos Specimen. Commentatio,' &c., 4to, Halle, 1853; Sources and Composition of the Book of Genesis, 'Die Quellen der Genesis und die Art ihrer Zusammensetzung,' &c., 8vo, Berlin, 1853; Translation and Commentaries on the Psalms, 'Die Psalmen. Uebersetzt und ausgelegt,' 4 vols. 8vo, Gotha, 1855-62; and a Critique on the theosophic or mythological Theology of the Day, 'Die heutige theosophische oder mythologische Theologie und Schrifterklärung. Ein Beitrag zur Kritik derselben,' 8vo, Berlin, 1861.

HURLSTONE, FREDERICK YEATES [E. C. vol. iii. col. 528]. Mr. Hurlstone died at his residence, Charles-street, Belgrave-square, on the 10th of June, 1869, in his 59th year.

HUTTEN, ULRICH VON, who, on account of his philippics against the Papacy, has been called the Demosthenes of Germany, and who, as a member of one of the noblest families of Franconia, exhibited in his own person the characteristics of the knightly and the theological adherents of the Reformation, was born at the Castle of Steckelberg, on the 20th of April, 1488. In 1499 he was sent to the Convent of Fulda, with a view to the life of the cloister; but not feeling a vocation for this career, he escaped from it at 16 years of age, and repaired to the University of Cologne, where he devoted himself to the study of languages. In 1506 he migrated to the University of Frankfurt-on-the-Oder, where he took his M.A. degree. In 1508 he went to Italy, and served for a short time as a soldier of fortune; and returned to lead an unsettled life in various parts of Northern Germany, during which he temporarily acted as a teacher in the University of Rostock. In 1510 he produced a Latin poem, entitled 'De Arte Versificandi: Liber unus in heroico Carmine,' 4to, Wittenberg, 1511, which has been many times published, edited, and annotated; and addressed in the following year, 'Ad Divum Maximilianum Cæsarem, Exhortatio,' by which he gained considerable applause. Out of deference to the wishes of his father, he revisited Italy in 1512, for the purpose of studying jurisprudence at the University of Padua; and, after having suffered spoliation at the taking of this city in 1513, repaired to Bologna in a state of destitution, and once more took temporary military service. After a visit to Rome, during which he prepared the weapons with which he subsequently attacked the Papal system, he returned in 1514 to Germany, and repaired to the Court of Archbishop Albert of Mayence, in whose praise he wrote 'In Laudem Reverendissimi Alberthi Archiepiscopi Maguntini Panegyricus.' In 1515 he paid a visit to Frankfurt to see Erasmus; and in the following year, after another sojourn in Italy, had a principal hand in producing the famous satirical defence of Reuchlin against the Dominican theologians of Cologne, entitled 'Epistolæ obscurorum Virorum ad Venerabilem Virum Magistrum Ortuinum Gratium Davenportensem Coloniam Agrippinensem bonas Litteras docentem: variis

et Locis et Temporibus missæ ac demum in Volumen coactæ, 4to, 1516, of which editions have been constantly issuing from various English and continental presses up to the present time, amongst the latest being one by "Rocchus Bocchus, LL., A.A.M., Muselmannus," 8vo, Leipzig, 1858, and a very complete one in 16mo, Leipzig, 1864. In this celebrated satire, monks, who are adversaries of Reuchlin, and the supposed authors of the letters, discourse on the affairs of the time, and on theological subjects, after their own manner and in their own barbarous Latin. They address to their correspondent, Ortuinus Gratius, professor at Cologne, and friend of Pfefferkorn, the silliest and most useless questions, exhibiting their ignorance, incredulity, superstition, vulgarity, gluttony, pride, fanaticism, and persecuting zeal. They inform Gratius of several of their droll adventures, their escapes, their dissoluteness, and a variety of scandals in the lives of Hochstraten, Pfefferkorn, and other leaders of their party. The satire is highly coloured, and yet the style of the letters is so natural that they were accepted as genuine by a large proportion of the Dominicans and Franciscans, who regarded them as offering a valuable apology for the monastic life. But the rage of the monks was at length fiercely stirred against the reputed authors of the letters; and Erasmus, Reuchlin, and Hutten, were the especial objects of their denunciations. It was to Pirckheimer, of Nürnberg, one of the Army of Reuchlinists, "*Exercitus Reuchlinistarum*," that Hutten addressed his '*Epistola Vitæ suæ Rationem exponens*,' 4to, Augsburg, 1518. Whilst in Italy, Hutten had produced, in Latin verse, his '*Epistola ad Maximilianum Cæsarem Italiæ fictitia*,' 4to, Bologna, 1516; and on his return to Germany, dedicated to the same Emperor a book of epigrams, '*Epigrammatum, ad Maximilianum Imperatorem, Libellus*,' 1517, after which he was admitted by the Emperor to the dignity of knighthood, and of the poetical crown, at Augsburg. In 1518 he again went to reside at Mayence, under the patronage of Archbishop Albert, to whom he dedicated an edition of two Books of Livy, which he discovered in 1519, as well as the works, or portions of the works, of other classical authors. In the last-named year, he varied those scholarly pursuits which won for him from Erasmus the epithet of "*Linguae Latine Delicium*," by fighting under Franz von Sickingen, against Ulrich, Duke of Würtemberg, who had put to death his cousin, Johann von Hutten, and against whom he directed his complaints to the Emperor and the States of the Empire, in a style of vehement eloquence which reminded his contemporaries of the invectives of Cicero against Catiline. He produced, in this connection, his '*Super Interfectione Propinqui sui Johannis Hutteni, Equitis, Deploratio*,' which was published, with other treatises, in 4to, 1519, and '*In Ulricum Wirtembergensem Orationes quinque*.' He next edited, with a preface, a MS. which he had discovered, On the Preservation of the Unity of the Church, '*De Unitate Ecclesiæ conservanda, et Schismate quod fuit inter Henricum IV., Imp. et Gregorium VII., Pont. Max. cujusdam ejus Temporis Theologi Liber, ab Hutteno inventus nuper*,' 4to, Mayence, 1520; and produced his Roman Trinity, '*Trias Romana*,' a pamphlet, in which he unveiled the disorders of the Court of Rome, and showed the necessity of pulling down its tyranny by main force, and an English version of which appeared with the title of '*The Triades, or Trinities of Rome, wherein you shall see what Things be either set by, used, or hated at Rome*,' 8vo, London. The publication of these works obliged Hutten to quit the court of the Archbishop of Mayence; and he applied for the protection of Charles V., who had at this time quarrelled with the Pope, repairing for that purpose to Brussels, where Charles was holding his court. But learning that the Pope had required the Emperor to send him to Rome bound hand and foot, he quitted Brabant and took refuge in the castle of Ebernburg, where Franz von Sickingen offered an asylum to all who were persecuted by the Ultramontanists. It was at this "hotel of the just," as Hutten called it, that he produced the remarkable letters which he addressed to Charles V.; Frederick, Elector of Saxony; Albert, Archbishop of Mayence, and the princes and nobles, and which entitle him to a place amongst the most distinguished authors. His appeal to the Emperor was entitled '*Ad Carolum Imperatorem, adversus intentatam sibi a Romanistis vim et injuriam, Conquestio*,' &c., 4to, Ebernburg, 1520, 8vo, Basel, 1538, &c. It was at Ebernburg, also, that he composed several works which, being read and comprehended by the people, inspired Germany with a hatred of Rome and a love of freedom. He addressed Luther on the occasion of his excommunication in an '*Epistola ad Martinum Lutherum*,' 4to, Wittenberg, 1520, and edited, with notes, the '*Bulla Leonis Decimi, contra Errores Martini*

Lutheri et Sequacium,' 4to, 1520. But Hutten was unwilling to confine himself to a war of words; and taking up arms, he served in the campaign of 1522, under Franz von Sickingen, after whose death, amid the ruins of his Castle of Landstein, he repaired to Basel, where Erasmus, upon whose friendship and hospitality he had reckoned, refused to see him. In a short time the magistrates also, who had at first received Hutten with distinction, requested him to leave the town; and he accordingly retired, first to an Augustine Convent at Mulhausen, whence he attacked the inconstancy and timidity of Erasmus in a remonstrance, entitled '*Ulrichi ab Hutteno cum Erasmo Roterodamo, Presbytero, Theologo, Expostulatio*,' 4to, Strasburg, 1523, 8vo, 1530, &c., German translation, 4to, Strasburg, 1523. From Mulhausen Hutten repaired to Zurich, where he was generously received by Zwingle; but which he was obliged to quit, first for the baths of Pfeffers, and finally for the little island of Uffnau, in the Lake of Zurich, to the pastor of which Zwingle had recommended him. In this retreat he died on the 31st of August, 1523, leaving "neither money, nor furniture, nor books—nothing in the world except a pen."

To the productions of Ulrich von Hutten, which have already been mentioned, only two need be added—'*Julius Secundus. Dialogus*,' &c., which has gone through many editions in Latin, German, English, and French, and which exhibits his Holiness after death knocking vainly for admittance into heaven, and holding a bootless controversy with St. Peter at the gate; and a Dialogue of posthumous publication, entitled '*Arminius, Dialogus Huttenicus, quo Homo Patriæ amantissimus Germanorum Laudem celebravit*,' 8vo, Hagenau, 1529. His works, whether selected or complete, have been constantly undergoing reproduction, and amongst the editions may be mentioned his '*Opera poetica, ex diversis illius Monumentis in unum collecta*,' 8vo, Frankfurt-am-Main, 1538; Poems by Hutten and his Contemporaries, '*Gedichte von Ulrich von Hutten, und einigen seiner Zeitgenossen. Herausgegeben von A. Schreiber. Mit Hutten's Portrait*,' 8vo, Heidelberg, 1810; his Select Works, &c., '*Des teutschen Ritters Ulrich von Hutten auserlesene Werke. Uebersetzt und herausgegeben von Ernst Münch*,' 3 vols. 8vo, Leipzig, 1822—23; his Complete Works, &c., '*Des teutschen Ritters Ulrich von Hutten Sammtliche Werke. Gesammelt und, mit den erforderlichen Einleitungen, Anmerkungen und Zusätzen, herausgegeben von E. J. H. Münch. Ulrichi ab Hutteno, Equitis Germani, Opera quæ extant omnia*,' &c., 5 vols. 8vo, 1821—25, of which the first 3 volumes were published at Berlin, and the remainder at Leipzig; his early Poems, &c., '*Ulrich von Huttens Jugend-Dichtungen, didaktisch-biographischen und satyrisch-epigrammatischen, Inhalts, &c. Uebersetzt und erläutert. Herausgegeben von E. Münch*,' 8vo, Stuttgart, 1838; '*U. Hutteni Equitis Germani Opera quæ reperiri potuerunt omnia. U. von H. Schriften. Herausgegeben von E. Böcking*,' 8vo, Leipzig, 1859, an edition in Latin and German; to which may be added, also by Professor Edward Böcking, the '*Index Bibliographicus Huttenianus. Verzeichniss der Schriften Ulrich von Hutten*,' 8vo, Leipzig, 1858.

The principal biographical or critical works relating to Hutten are—'*A Tribute to the Memory, &c.: Translated from the German of Goethe, the celebrated Author of the Sorrows of Werther. By Anthony Aufrey, Esq.*,' &c., 8vo, London, 1789; Life and Character, '*Ulrich von Hutten. Leben und Charakter*,' 8vo, Leipzig, 1791, by Ludwig Schubart; a Life which appeared in the '*Pantheon der Deutschen*,' &c., 3 vols. 8vo, Chemnitz, 1794—1800; a Biography by G. W. Panzer, entitled '*Ulrich von Hutten in litterarischer Einsicht*,' 8vo, Nürnberg, 1798; the Quarrel between Hutten, &c., '*Der Streit zwischen Ulrich von Hutten und Erasmus von Rotterdam: ein Beitrag zur Charakteristik Ulrich von Huttens und seiner literarischen Zeitgenossen. Herausgegeben von Carl Kieser*,' 8vo, Mayence, 1823; Life, Character, and Writings, '*Ulrich von Hutten nach seinem Leben, seinem Charakter, und seinem Schriften, geschildert von C. J. Wagenseil*,' 8vo, Nürnberg, 1823; a poetical Biography, by A. E. Frölich, entitled '*Ulrich von Hutten. Siebenzehn Gesänge*,' 8vo, Zurich, 1845; a Thesis by Jules Zeller, entitled '*Ulrich von Hutten. Sa Vie, ses Œuvres, son Temps*,' 8vo, Rennes, 1849; a Portraiture, by August Bürck, of '*Ulrich von Hutten, der Ritter, der Gelehrte, der Dichter, der Kämpfer für die deutsche Freiheit*,' 8vo, Leipzig, second edition 1850; a Life in M. Chauffour-Kestner's '*Études sur les Réformateurs du XVI. Siècle*,' 2 vols. 12mo, Paris, 1853, of which an English translation of as much as referred to Hutten, was published by Mr. A. Young, with the title of '*Ulrich von Hutten, the Great Knightly Reformer of the Sixteenth Century*,' 8vo, Edinburgh,

1863; a Biography, by Dr. D. F. Strauss, entitled 'Ulrich von Hutten,' 2 vols. 8vo, Leipzig, 1858; a Study of the Life and Works of Ulrich von Hutten, the Champion of German Liberty, 'Ulrich von Hutten, der Streiter für deutsche Freiheit, in seinem Leben und Werken. Mit 7 Stahlstichen,' 16mo, Leipzig, 1862; and a 'Thèse présentée à la Faculté de Théologie protestante de Strasbourg,' &c., by M. Georges Macier, entitled 'Études sur Ulrich de Hutten dans ses Rapports avec la Réforme,' 8vo, Strasbourg, 1867.

HUTTON, JAMES, geologist, was born at Edinburgh, June 3, 1726. In 1740 he entered the University of Edinburgh, and commenced studying for the law. He was articled to a writer to the signet, but as he neglected his duties for the purpose of making experiments in chemistry he was discharged. He then abandoned the law, and adopted the study of medicine, attending courses at Edinburgh, Paris, and Leyden, at which last place he took his degree of M.D. in September, 1749. For some years after this his occupations were very unsettled. He set up as a manufacturer of sal-ammoniac; then resided with a Norfolk farmer for the purpose of learning agriculture; and on his father's death he settled down as a farmer on an estate in Berwickshire, which he inherited. Prior to his settling in Berwickshire, in 1754, agriculture, as an art, was in a very low state, but he soon brought it up to a higher standard by introducing improved methods of culture. During all this time he was constantly occupied with the study of mineralogical and geological subjects; and in 1768 he relinquished his farm and went to Edinburgh, in order to devote himself entirely to geology. He wrote little for several years, and almost his first publication was a pamphlet on coal and culm in 1777. His next contribution to literature was 'The Theory of Rain,' read in 1784, and published in the 'Transactions of the Royal Society of Edinburgh,' i., pp. 41—86 (1788). This is one of the earliest hypotheses proposed to explain the mode of occurrence of aqueous vapour in the air, and the causes which lead to its condensation as rain. In the main, it is the theory which is now generally adopted. [RAIN, E. C., ARTS AND SCIENCES DIV. vol. vi., col. 925.] In the same volume first appeared his 'Theory of the Earth,' pp. 204—304, which was subsequently expanded into a two-volume work, bearing the same title, and published in 1795—96. This work marks an era in geological science. In it he was the first to declare that geology did not concern itself about questions as to the origin of things, and that, so far as material phenomena guided us, there was nothing indicative of a period when the present physical forces and laws of nature were not in operation. The present continents are being ground down and distributed over the sea bottom, and they themselves were formed from the degradation of still older continents. "In the economy of the world," he says, "I can find no trace of a beginning, no prospect of an end"—a statement which has been the foundation of a charge against him of denying the action of God as creator, but which is quite consistent with the belief that the creation took place prior to the existence of anything discovered by Hutton. His statement implies that the laws which come under the cognizance of the geologists are those by which the world is sustained, not those by which it was created, nor those by which it will be destroyed. The amount of excitement which existed on this subject in Hutton's time was extraordinary, and party feeling ran strongly in opposition to his doctrines. Hutton was in many points the opponent of Werner, whose general theory was that the ocean once reached to the mountain tops, that the land remaining perfectly stationary the waters gradually subsided, and that during this subsidence the various rocks, both sedimentary and igneous, were formed by precipitation from the water. As regards the igneous rocks, such as basalt and granite, Hutton's view was that they were once in a state of fusion; that they penetrated the sedimentary rocks in their fused state; and that their compactness and crystalline condition is owing to their having solidified under immense pressure. The alteration which the basaltic rocks have produced in the strata through which they have burst he held to be indicative of their former heated or molten condition; and a similar proof was looked for in the case of granite. In order to put his idea to the test he explored the line of junction of granite with the stratified beds above it, and in 1785 discovered the facts he sought for in Glen Tilt, where red granite traverses schist and limestone. This discovery so delighted him that the guides who accompanied him thought he had found a vein of silver or gold. Hutton's views as to the igneous origin of granite are still held to a certain extent, viz., that some granites have been introduced through strata in a fused condition; but it is unquestionable that some granitic rocks are

simply metamorphosed sedimentary beds, while others seem to be veins formed from aqueous solutions. He recognised more fully than any previous, and more than most subsequent, geologists, the importance of freshwater currents in moulding the minor inequalities of the surface of the land. According to him, valleys have been formed almost exclusively by rivers, while the sea has had little to do with their formation. It has generally been considered that he did not give sufficient prominence to marine denudation; but the state of science at the present time seems to show that Hutton saw more clearly than his successors the true importance and action of the denudation which takes place above the level of the sea, so far as regards the formation of orographic details. In some respects, however, he over-estimated the work performed by it, at the expense of other phenomena. Thus he considered that continents were submerged wholly by means of degradation; that new continents were formed by the upheaval of the sea bottom; and that these actions took place alternately, not simultaneously. He denied that the land was ever submerged by subsidence. In holding this idea he was less advanced than many geologists who flourished centuries before him. His disciple and biographer, Dr. John Playfair, greatly aided in disseminating and supporting his doctrines. Hutton wrote a few other papers and books, but of minor importance to those already mentioned; one of these is, 'An Investigation of the Principles of Knowledge, and of the Progress of Reason from Sense to Science and Philosophy,' 3 vols. 4to, 1795. He died March 26, 1797.

* HUXLEY, THOMAS HENRY [E. C. vol. iii. col. 1007].

* HYACINTHE, PÈRE, a French preacher and Reformer, whose secular name is Charles Loyson, was born in the year 1827, at Orleans, whence in his infancy he removed to Pau, on the appointment of his father to the rectorship of the academy in the latter place. Here he prosecuted his earlier studies, and attained some reputation for his poetical talent, which, it has been said, displayed a marked inclination to the dramatic form. At the age of eighteen he was sent to Saint-Sulpice, and after four years of theological study, was ordained to the priesthood. After teaching philosophy at the seminary of Avignon, and theology at that of Nantes, he became one of the parochial clergy of Saint-Sulpice. Some years later he yielded to a vocation for the monastic life, and, repairing to Lyons, passed a two years' novitiate in the Carmelite Convent there, after which he took the vows of the order. He now became celebrated as a preacher successively at Lyons, Bordeaux, and Périgueux; repairing in the summer of 1864 to Paris, where, first at the Madeleine, and afterwards, in Advent, 1865, at Notre Dame, he achieved a success which increased with each succeeding year, and with every exhibition of his zealous and fearless oratory. The liberality of the opinions expressed in his *Conferences*, caused his orthodoxy to be suspected by the Ultramontanes; and he was denounced to the Court of Rome by the editor of the 'Univers' in the commencement of 1869, but found means to exonerate himself from the charges brought against him. In June of the same year he again gave offence to the Catholic press by an address which he delivered at a meeting of the International Peace Association, in which he spoke of Judaism, Catholicism, and Protestantism, as "les trois grandes religions des peuples civilisés." The audience received the sentiment with applause, but it brought upon him the censure of his canonical superiors, who peremptorily placed before him the alternatives of silence and of modifying the expression of such opinions. Against this censure he rebelled, and in a letter addressed, on the 20th of September, to the General of the Carmelites at Rome, he broke with his order, protesting against "the sacrilegious perversion of the Gospel," and adding that "if France and the Latin races are delivered over to social anarchy, the principal cause of it is, not doubtless in Catholicism itself, but in the manner in which Catholicism has for so long a time been understood and interpreted." Such an animadversion brought upon him the vituperations and remonstrances of all the Ultramontanes in France; and he was called upon to suffer the indignity of the greater excommunication, as a monk who had deserted his order. In 1870 he paid a visit of some months' duration to the United States of America, where he was received with much sympathy and demonstrative respect by the various Protestant communities, to whom, however, he professed his unshaken determination to continue in the Catholic faith. Since the disasters which have fallen upon France he has addressed audiences at St. George's Hall, London, on the question of the war, appearing in a layman's garb, and exhibiting little passion and gesture in his delivery, which was rather of a graceful and

subdued order. He has lately addressed an appeal, dated Christmas-day, 1870, to the Bishops of Catholic Christendom, in which he protests against the recent promulgation of the "impious dogma" of Papal infallibility, and against the two enemies of France, Ultramontanism and Infidelity, against which "she ought to combat with an energy equal at least to that with which she combats those who have invaded her soil alone." He enjoins the bishops to declare whether the decrees of the recent Council are or are not binding on the faithful; and argues from the unfairness of the proceedings that Catholics "remain free, after as before the Council, to reject the infallibility of the Pope as a doctrine unknown to ecclesiastical antiquity, and resting only on apocryphal writings, concerning which criticism has pronounced its final judgment."

The contributions of Père Hyacinthe to literature are few and slight. He has a part in the authorship of a volume, entitled 'Distribution des Prix de l'Ecole Albert-le-Grand, présidée par le R. P. Hyacinthe, de l'Ordre des Carmes, à Arcueil, le 6 Août, 1867. Matérialisme et Spiritualisme; Discours prononcés par le R. P. Captier, Prieur de l'Ecole, et par le R. P. Hyacinthe,' 8vo, Paris, 1867; and he wrote a letter for an edition of the 'Œuvres Choiesies de Charles Loyson,' 8vo, Paris

and Nantes, 1869, to which MM. Patin, Sainte-Beuve, and others, contributed biographical and literary notices.

* HYRTL, JOSEPH, anatomist, was born at Eisenstadt, in Hungary, December 7, 1811. In 1837 he was appointed professor of anatomy at the University of Prague, and in 1845 he removed to the University of Vienna, to occupy a similar post, which he still holds. His reputation mainly rests upon the excellence of his anatomical preparations, some of which are amongst the finest pieces of work of their kind; but he is also eminent for several literary works, and for numerous anatomical researches which he has conducted. His papers are upwards of 70 in number, the more important of them include monographs on *Lepidosiren paradoxa*, *Manis*, *Myrmecophaga*, *Chlamyphorus truncatus*, and *Cryptobranchus japonicus*. His more important books are 'Lehrbuch der Anatomie des Menschen,' 2 vols, 8vo, Vienna, 1847, of which the 9th edition was published in 1865, and the latest in 1870, and which is in general use as a textbook in all the German Universities; 'Handbuch der topographischen Anatomie,' 8vo, 1847, which has passed through five or six editions; 'Vergleichende Anatomische Untersuchungen über das Gehörorgan des Menschen und der Säugethiere,' 8vo. Prague, 1845.

I

ICTINUS (*Ἰκτινός*), a famous Greek architect, was contemporary with Pericles at Athens. Nothing is known of his personal history. He erected several of the temples which are the accepted standards of Greek architecture. The Parthenon, in which he was assisted by Callicrates, was completed by him B.C. 438, when Phidias's colossal chryselephantine statue of Athena was uncovered and the temple consecrated. The Temple of Apollo Epicurius, at Bassæ, near Phigalia, was another of his famous works. Both of these were of the Doric order, constructed of Pentelic marble, heightened with colour and gold, and adorned with sculpture by Phidias. The temples remain magnificent in their ruin; what is left of the sculpture is in the British Museum, and is best known as the Elgin and Phigalian marbles. The temple of Ceres, at Eleusis, was another of the great works of Ictinus, his assistants being Metagenes and Corœbus. Like the other temples, it was of the Doric order. In conjunction with Carpius, Ictinus wrote a description of the Parthenon, of which, however, nothing is left.

IDELER, CHRISTIAN LUDWIG, a Prussian chronologist and astronomer, was born September 21st, 1766, at Gross-Brese, near Perleberg. After being employed as an astronomical assistant to calculate the Prussian kalendar, he became, in 1816, preceptor to the Princes Wilhelm Friedrich and Karl. In 1821 he was appointed professor at the University of Berlin; and in later years director of studies to the Cadet Corps, instructor to the School of Forestry, and also to the military schools. He became member of the Academy of Sciences at Berlin, and in 1839 honorary member of the French Institute. Ideler is favourably known for his excellent works on chronology, astronomy, and the kalendar, of which the following are the principal:—'*Historische Untersuchungen über die Astronomische Beobachtungen der Alten*,' 1806; '*Untersuchung über den Ursprung und die Bedeutung der Sternnamen*,' 1809; '*Handbuch der mathematischen und technischen Chronologie*,' 1825-6: re-edited and published in 1831, under the title '*Lehrbuch der Chronologie*,' it has become a standard work in Germany; '*Die Zeitrechnung der Chinesen*,' 1839. In conjunction with Nolte, he wrote '*Handbuch der französischen Sprache und Literatur*,' and '*Handbuch der englischen Sprache und Literatur*,' of both of which there have been numerous editions. Ideler died August 10th, 1846.

INGEMANN, BERNHARD SEVERIN. [E. C. vol. iii. col. 551.] Ingemann retained the directorship of the Academy of Sörø till the dissolution of the institution in 1849. He died February 24th, 1862. During a period of nearly half a century Ingemann published a vast number of works, which he himself considered to represent three phases in his mental character—romantic and sentimental poems from 1811 to 1814; dramas

and dramatic poems from 1814 to 1821; historical romances, somewhat in the style of Sir Walter Scott, and novels, in later years. His works are much read in Denmark, especially those relating to old national legends, such as '*Waldemar*,' '*Holger Danske*,' and '*Landsbybørnene*'; several have been translated into German, and a few into French and English. A collected edition of his works, '*Samlede Skrifter*,' was published in 39 vols, 1847-56, in four series, viz., dramatic works, 6 vols; historical poems and romances, 12 vols.; stories and tales, 12 vols.; songs, romances, and tales in verse, 9 vols. Ingemann wrote an autobiography, '*Levnetsbøg*,' which was published by Galskjøt, in 1862.

INGRAM, JAMES, D.D., was born December, 1774, at East Codford, Wiltshire; educated at Westminster and Oxford; elected fellow and tutor of Trinity College, and was for awhile a master in Winchester school. In 1803 he was elected professor of Anglo-Saxon at Oxford University, and published his '*Inaugural Lecture on the Utility of Anglo-Saxon Literature*' in 1807. In 1815 he was appointed keeper of the university archives. In 1823 appeared the work on which he had been engaged from the time he held the Anglo-Saxon professorship, '*The Saxon Chronicle*,' with an English translation and notes, 4to, London. The investigations of later scholars have carried our knowledge far beyond the condition in which Ingram left it, but his book was for the time a very valuable one, and the result of an immense amount of labour. Dr. Ingram collated all the known and accessible texts, made a careful translation, and added a great body of notes in elucidation of the text, indexes of persons and places, and a short Anglo-Saxon grammar. The year following the publication of the '*Chronicle*' he was elected president of Trinity College, an office he held with great acceptance till his death, on the 4th of September, 1850. He left his fine library to the college with which he had been connected for over half a century, and for a moiety of the time as president. Besides his Anglo-Saxon publications, Dr. Ingram wrote the '*Memorials of Oxford*,' 3 vols. (100 plates) 8vo, and 4to, 1827; '*The Church in the Middle Centuries*,' 8vo, Oxford, 1842; '*Memorials of the Parish of Codford St. Mary, in the County of Wiltshire*,' 8vo, Oxford, 1844.

INGRES, JEAN DOMINIQUE AUGUSTE [E. C. vol. iii. col. 553]. In the memoir just cited it was stated that at the International Exposition of 1855 an entire gallery was devoted to the works of M. Ingres. It was recognised as the apotheosis of the greatest living painter of France. But though he might well have been content to rest on his laurels, Ingres was too true an artist to abandon his art whilst he could hold a pencil. To the International Exhibition of 1862 he sent his latest and one of his noblest classic pictures, '*The Source*,' seemingly little more than the life-size study of a nude female, or a statue trans-

formed into flesh and blood, but full of poetry and beauty, chaste as the marble from which it might have been hewn, a masterpiece of drawing and execution, and, as the work of a man of eighty, little less than wonderful. It was his last great work, the chef d'œuvre of his old age, though he did not yet cease to labour. His last years were passed amidst the general homage of his countrymen. He had been nominated grand officer of the Legion of Honour in 1855; in 1862 he was raised to the dignity of senator, and made a member of the Imperial Council of Public Instruction. He died at his residence on the Quai Voltaire, Paris, January 14, 1867, after a short illness, the consequence of a severe cold, in his 86th year, and was interred with great solemnity in the cemetery of Père La Chaise.

IRVING, WASHINGTON [E. C. vol. iii. col. 563]. Mr. Irving lived to complete the biography of Washington, the fifth and concluding volume of which appeared in 1859, but the task, though courageously prosecuted and successfully accomplished, was too much for his strength and years. His health gave way, and after protracted suffering from extreme nervousness, mental depression, and physical exhaustion, he died at his pleasant residence, Sunnyside, Irvington, about 25 miles from New York, on the 28th of November, 1859, aged 76. Irving had outlived his three score years and ten, but his death was felt in both hemispheres as the loss not merely of one of the best and pleasantest writers of his age, but almost as that of a warm-hearted and cherished friend.

* ISABEL II. (MARIA ISABEL LUISA), ex-Queen of Spain [E. C. vol. iii. col. 566]. On the 12th of October, 1856, upon the downfall of the O'Donnell administration, the direction of affairs was assumed by Narvaez, by whom the most reactionary measures were instituted or promoted. The new President of the Council and his colleagues laboured resolutely to recover the absolute integrity of the royal prerogative, to introduce various severities in the administration of justice, and to efface from the laws the last traces of the revolution of July, 1854. These measures met with no considerable opposition throughout the country; and it was chiefly by means of intrigues about the court and the person of the Queen that the Narvaez cabinet was superseded in October, 1857, by one of a more liberal character, which prepared the way for the return of O'Donnell to the presidency of the Council on the 1st of July, 1858. On the 28th of November, 1857, the Queen was safely delivered of a son, the Prince of Asturias. The Cortes were opened on Sunday, January 10th, 1858, by the Queen in person; who, in her speech from the throne, announced a settlement of the questions relating to the clergy, and a balance between income and expenditure, and spoke of an augmentation of the navy, of reform in the electoral laws and of those relating to the press, and of the redemption of State lands. In the course of the year 1858 the Queen paid visits to various places in her dominions, and everywhere was well and loyally received. On the 11th of September, having signed a decree for the dissolution of the Cortes, she ordained their convocation to take place on the 1st of December, when she again opened them in person. On the 25th of August, 1859, a convention was concluded between Spain and the Papal See respecting the property of the Church. War was declared against Morocco on the 22nd of October following; and on the 4th of November the command of the African expedition of 50,000 men was confided to O'Donnell, who, after a campaign of almost unvaried success, finally forced the Moorish government to a satisfactory treaty by the decisive defeat of its army on the 23rd of March, 1860. Early in the following month a futile attempt at insurrection was made by General Ortega, commander of the Balearic Isles, in the interest of the Comte de Montemolin, son of Don Carlos de Bourbon, and nephew of Ferdinand VII. Ortega ordered his troops, 3000 in number, to embark without informing them of their destination, which they only discovered on their landing at Tortosa, where he proclaimed the Comte de Montemolin as King of Spain, under the title of Carlos VI. His men, however, refused to follow him, and he was constrained to flee, but being overtaken, was arrested, and shot at Tortosa, on the 19th; whilst the Comte de Montemolin, who, with his brother Ferdinand, was arrested on the 21st, was allowed to quit the kingdom after having executed at Tortosa, on the 23rd, a 'solemn act' of renunciation of all pretensions to the throne of Spain, in favour of Isabella and her descendants. In a letter addressed from Cologne to the Queen, on the 15th of June, the Comte de Montemolin retracted his renunciation; but his pretensions came to a conclusion by his sudden death on the 13th or 14th of January, 1861. The Queen of Spain gave her ready adhesion to the French Emperor's scheme of a congress for a

revision of the treaties of 1815, which had been submitted, by a circular dated November 4th, 1863, to the leading powers of Europe. In February, 1865, in consequence of the embarrassment of the Spanish treasury, Isabella signalled her sympathy with the remedial measures proposed, by surrendering three-fourths of the crown domains for sale on behalf of the nation. But no act of self-sacrifice could now avail to restore the Queen in the respect of her subjects, who, with slight intervals of tranquillity and apparent content, had for many years been in the habit of giving utterance, in insurrections and *pronunciamientos* of more or less magnitude, to the impatience they felt at the meanness of her superstition, the intensity of her bigotry, and the notorious laxity of her morals. Pity, chivalry, and loyalty did their utmost in the way of excusing the last as being probably owing to the unfortunate marriage of which, so early in life, she had been made the victim; but at length it was found to be intolerable. In August, 1867, another insurrection broke out, which raged in the provinces of Arragon, Catalonia, and Valencia, and on the borders of Murcia and Castille, where bands of armed men made their appearance, whilst in some places the mayors of towns and other functionaries joined in the movement. The leaders of the movement had reckoned on the sympathy and co-operation of at least a part of the army; but the soldiers, for once, were true to their colours, and inflicted several defeats upon the insurgents, many of whom were taken and executed. Afterwards an amnesty was granted by the Queen, whose ministers, in a circular to the Spanish representatives abroad, described the revolt as being aimed "at the destruction of social order and existing policy, including, as social consequences, the constitutional principle, the monarchical principle, the Catholic principle, and the dynasty as symbol and practical application of the whole." It failed owing to "the indifference and good sense of the population, the noble determination of our worthy and valiant army, the zeal and co-operation of the authorities, and the confidence her Majesty's government had never ceased for an instant to feel and to inspire." This confidence was rudely assailed, however, and finally broken in the following year, when a decisive revolution, in the carrying out of which both the army and the navy were of accord, roused all the provinces, and after having triumphed at Cadiz, gained the capital just after the Queen had quitted it to find a refuge across the French frontier. The 29th of September, 1868, had seen her accession, and the 29th of September, 1868, witnessed her downfall. She found shelter for about a month, with her husband, children, and her favourite, Marfori, a principal cause of her misfortunes, at the château of Pau, whence she issued an unavailing proclamation to the Spanish people, and whence she repaired to Paris, in the gaieties of which she seemed to find abundant distraction and compensation. Soon after the outbreak of the war which originated in an effort made to find an occupant for the throne of which she had been declared unworthy, she left Paris for Geneva, where, it is perhaps scarcely surprising, she does not give signs of long remaining. It may be mentioned that in February, 1868, Queen Isabella was selected by the pope as the recipient of the sacred rose which he occasionally confers on the crowned faithful who are nearest to his heart; and that the opening of the present year, 1871, found Prince Amadeus, second son of the King of Italy, installed at Madrid as her successor.

* ISMAIL PASHA, Khedive or Viceroy of Egypt, was born in 1830 at Cairo. He was the nephew of Said Pasha, whose rule over that country commenced in 1854; and was related by collateral descent to Mehemet Ali and Ibrahim Pasha. Ismail and his eldest brother Ahmed received the principal part of their education in France, where they acquired European ideas and habits, then very unusual among orientals. Returning to Egypt in 1849, Ismail placed himself in opposition to the court party: Abbas Pasha having become viceroy instead of a more direct descendant of Mehemet Ali and Ibrahim Pasha; but when Said became viceroy, Ismail acted in full loyalty to him. He visited the Sultan at Constantinople, and in 1855 went on confidential missions to France and Rome. He afterwards filled many important posts in Egypt, and acted as regent during a visit of Said Pasha to Europe in 1861. At the end of that year, and during a portion of 1862, he commanded an army of 14,000 men engaged in the subjugation of rebellious tribes on the Soudan frontier. On the death of Said Pasha, in January, 1863, Ismail succeeded him as viceroy of Egypt. By obtaining and conducting vast areas of cotton cultivation, and by the establishment of sugar factories, on his own private account, he gradually accumulated enormous wealth; while his intelligence, shrewdness,

and European experience, enabled him to consolidate his viceregal power. He pursued the same policy as his uncle Said in regard to the Suez canal, investing in it largely both as a viceroy and as an individual. He made it a steady rule of policy to cultivate as friendly relations as possible both with France and with England; facilitating the plans of the one with regard to the Suez canal, and the requirements of the other in reference to the overland route to India. In 1867 he visited France and England, at the same time as his suzerain, the Sultan. He again visited the European courts in 1869 to invite the sovereigns and princes to the opening of the Suez canal. The Sultan took umbrage at this and other of his proceedings, and sent him a letter of reproof. Ismail had been greatly favoured. On his entreaty, the line of succession was changed. The rule had been, for some years, to regard the eldest living male descendant of Mehemet Ali as the heir; but it was transferred to the eldest son of the existing pasha, in other words, was made directly hereditary. He had also been created *Khidiv* or *Khedive* of Egypt, a title midway between king and pasha, and implying something like "Lord of Egypt." The ceremony of opening the Suez canal in November, 1869, was witnessed by the Empress of the French, the Emperor of Austria, the Crown Prince of Prussia, the Prince of Orange, &c., and was conducted at lavish cost by the Khedive. The Sultan complained that his proceedings in this instance, his maintenance of a large army and the formation of an iron-clad fleet, the imposition of taxes in Egypt without the Sultan's consent, and the negotiation of European loans in the Khedive's own name, would only have been justifiable had he been an independent sovereign. After some correspondence, and the friendly intervention of other powers, mutual concessions were made, the Khedive gave a formal submission, and amity was restored. In 1870 Ismail, with the aid of all the powers who had consuls in Egypt, made a great reform in the constitution of the consular tribunals, courts which tried all cases in which natives and foreigners were jointly concerned. There is now a mixed tribunal, on a better basis. It was stated in 1870 that during his seven years of viceroyalty Ismail had brought 1,000,000 acres of land into cultivation, constructed 40 canals, and built 200 bridges and 25 aqueducts. European customs are being gradually introduced into the Egyptian palaces and government offices.

* ISTURIZ, FRANCISCO XAVIER DE, a Spanish statesman, and the son of a Basque merchant established at Cadiz, was born in that city in the year 1790. He served as a deputy to the national Cortes from 1812 to 1814, the year of the restoration of Ferdinand VII., who signalled his return to his capital by repudiating the Constitution of 1812, by restoring the Inquisition, and generally proceeding in the most absolute and reactionary manner. Isturiz now became an influential member of the malcontent party, of which his house, known as the Casa Otomana, became the head-quarters. He took a prominent part in the insurrection of Riego and Quiroga, which broke out at Cadiz on the 1st of January, 1820, and which, it was said, introduced a three years' anarchy in succession to a six years' despotism. It had, at least, the effect of forcing from the unwilling King, March 10th, 1820, an oath to observe the Constitution; and on the 9th of July following the Cortes assembled for the consolidation of the kingdom on liberal principles, General Quiroga being the vice-president. Isturiz now repaired to Madrid, where, with Alcala and Galiano, he founded various clubs in opposition to the moderate constitutional party, at that time represented by Arguelles and Martinez de la Rosa. In 1822 he gave more direct effect to his opposition on his election to the Cortes, of which, in the following year, he was named president. He now agitated in the Cortes, which met successively at Seville and Cadiz, the suspension of the royal government, and when Ferdinand was re-established, November, 1823, on a despotic throne by the assistance of a French army, Isturiz fled to London where he became interested in the commercial house of Zulueta and Co. Riego was executed at Madrid on the 7th of November, 1823; and Isturiz, condemned to death in his absence, was able to return to Spain only after the death of Ferdinand, September 29th, 1833, by favour of an amnesty granted by Maria Christina, the Queen Regent, in the following year. Being named by the city of Cadiz procurador to the Cortes, he identified himself with the democratic party, and took part in exciting those insurrectionary and other movements, which after the fall successively of the ministries of Martinez de la Rosa, on the 7th of June, 1835, and of Toreno on the 4th of July following, raised Mendizabal to power as chief of the cabinet, September 14. Of this minister, Isturiz was the trusted friend and counsellor, and took

office under him as president of the Chamber of Procuradores, a kind of state council, in November; but when this Chamber, having shown itself too extreme in its liberality, was dissolved by Mendizabal, in January, 1836, a quarrel and a duel ensued between the latter and Isturiz, who succeeded in effecting the downfall of his former friend, and in raising himself, May 15th, 1836, to the ministry of foreign affairs and the presidency of the Council. But his want of tact and conciliation prevented his enjoying a long tenure of office; and his unpopularity was so great that, after the commotions of August, 1836, which resulted in the proclamation of the Constitution of 1812, he fled in disguise to Lisbon, and afterwards sought refuge a second time in England. After some time he repaired to Paris, where he attached himself to Toreno, Miraflores, and other aristocratic emigrants; and having been again annested by the Queen Regent, in 1837, returned to Spain, and took his seat in the Cortes, in the following year, as deputy for the city of Cadiz. In 1839 he became president of the Congress. The regency of the Queen-mother determined in October, 1840; but during the occupancy of this office by Espartero, Isturiz was constantly at work for the restoration to it of Christina, whose thorough confidence he succeeded in attracting. On the resignation of the Narvaez administration in February, 1846, Isturiz held for a few weeks the office of prime minister, of which, after having been temporarily supplanted by his predecessor, he took a more definitive possession in April. It is to his ministry that the sinister distinction belongs of having negotiated, on the part of Spain, the marriages of the young Queen Isabella II. and her sister, October, 1846. In December following he resigned in the face of a vote of want of confidence, and retired to Cadiz, with the design of giving up public or political life. Circumstances, however, occurred which completely frustrated such an intention. He was appointed ambassador to England in 1848, and returned to the same post in June, 1850, after the resumption of the negotiations which had been interrupted by the difficulties which forced Sir Henry Bulwer Lytton, the English minister at the Court of Spain, to leave Madrid. In 1856 Isturiz was appointed ambassador to St. Petersburg, after which, in October, 1858, he was once more accredited to London, which he left in 1862, in order to undertake the presidency of the administration at Madrid. In March of the following year he was accredited as Spanish ambassador to France, fulfilling the duties of this office until October, 1864, when he resigned.

ITURBIDE, or YTURBIDE, AUGUSTIN DE, a Mexican general and sometime emperor, was born at Valladolid de Michoacan, in Mexico, most probably on the 27th of September, 1784, although some authorities make the year of his birth to have been 1790. His father, who was a member of an ancient Basque family, was a native of Pampeluna, in Spain, and emigrated about the year 1770 to Mexico, where he married a wealthy Creole lady. Augustin was bred to agricultural pursuits, and from early youth was addicted to hardy and athletic exercises. After serving as a subaltern in the militia of his province, he obtained in 1810 a lieutenant's commission in the regular army, and assisted in combating the insurgents who at this time wished to throw off the yoke of Spain. The success which attended his activity and courage in the suppression of Morelos and others secured his rapid promotion in the army, and his advancement to the command of the provinces of Guajuato and Valladolid, as well as of the Army of the North, in 1816. Men of inferior qualities became jealous of his advancement; and, disgusted with the intrigues that were set in motion against him—although acquitted by the viceroy of the disaffection with which he was charged—he resigned his command, and retired to his plantation. Being invited, however, to take the command of an army destined to the south, he marched to Acapulco in the latter end of 1819, and soon afterwards matured a plan for the emancipation and independence of Mexico. According to this plan, which was called the plan of Iguala from the fact of its having been first promulgated to the army under his command at that place, February 24th, 1821, all interests were studied and reconciled. Protection was promised to all—promotion to the soldiery; authority over souls to the priests; to the nobles their titles; to the merchants, privileges; to the planters, commerce; and to the various classes of labourers, liberty. The plan proposed was successful, and Mexico was at once transformed from a colony into "a great and independent empire;" so that when the viceroy-general, Don Juan O'Donoju, arrived from Spain, he found the whole country virtually on the side of Iturbide, with whom he concluded a treaty at Cordova, on the 24th of August, 1821. On the 27th of September,

Iturbide, who had accepted the title of generalissimo of the empire, entered the city of Mexico, where he at once proceeded to establish a provisional government, composed of five members, and a junta, or assembly of notables. In February, 1822, the Cortes of Mexico proclaimed the independence of the nation; but the dissensions and mutual jealousy of parties having brought about a state of things fast verging on anarchy, the people and the army simultaneously proclaimed Iturbide emperor on the evening of the 18th of May. In the words of the emperor himself, as they occur in an apologetic autobiography, "Long live Augustin I.!" was the universal cry that astonished and appalled me." This spontaneous appointment was ratified by a majority of 74 to 20 in an extraordinary meeting of the Congress, who soon after declared the crown hereditary in the family of Iturbide, gave to his sons and his father the title of princes, and established an order of knighthood, called the Order of Guadalupe. The prospects of peace and confidence which at first smiled upon the empire were soon overclouded by jealousy, mistrust, partial insurrection, and general dissatisfaction; so that Augustin I., on the 20th of March, 1823, resigned his power into the hands of a Congress, the president of which, Victoria, proceeded to organise the Mexican States on the model of the United States of the North. Up to this time the conduct and manner of Iturbide are described as being rather persuasive than imperative. Neither presuming nor assuming too much, he insensibly brought those up to his level with whom he conversed, and never failed to excite great attachment. His military operations were distinguished for their vigilance, patience, and perseverance; and "when he struck, it was with the decision of thunder." In the most critical and hazardous situations he was composed, collected, and smilingly indifferent to danger. The fear and jealousies natural to a people emerging from despotism to independence ascribed to him a sinister ambition incompatible with free government; yet he publicly repeated his resolve to terminate his political career by following the example of Washington. After his abdication he repaired to Italy, and having resided for some months at Leghorn, quitted that city in November, 1823, for England, where he arrived on the 31st of December, and organised a weak and inefficient expedition for the recovery of the empire he had surrendered, with the declaration that if he obtained any influence upon his return to Mexico he would use it, so far as the genius of that country would permit, in introducing the political institutions of England, which during his stay here he had studied with admiration. He embarked on the 11th of May, 1824, and landed in disguise near the port—"que es un puerto, que no es puerto"—of Soto-la-Marina, on the 14th of July, accompanied by his wife and his two youngest sons, having left his other six children to be educated at different institutions in England. On the 17th he was arrested by General Felipe de la Garza, commander of the province of Tamaulipas, who conducted his prisoner to Padilla, and sent to the provincial Legislature for instructions. These were to the effect that the decree of Congress, which was passed on the 28th of the previous April, and proscribed him as a traitor, declaring that the mere fact of his landing in Mexico should constitute him a public enemy, should be forthwith put into execution. Iturbide in vain solicited a reprieve until the general government should be informed of his situation, and have an opportunity to decide upon his case. To all his representations and protests against death, the immovable and often-repeated answer was, "La ley lo manda" ("The law commands it"). At six o'clock in the evening of the 19th of July, 1824, after having confessed himself, he was led to the place of execution, where he made a short address to the assembled people, in which he protested his innocence of any treasonable purpose, exhorted them to observe the duties of patriotism, religion, and civil subordination, and declared that he pardoned all his enemies. The unfortunate Iturbide fell dead at the first fire. The conduct of the Government towards his family was just and liberal; and the pension promised to him at the time of his abdication was continued to his widow, on condition that she

should reside in Colombia or the United States. She chose the latter, and repairing to Philadelphia, devoted herself to the education of her children, two of whom afterwards returned to Mexico, and were appointed to places of trust by the Government.

Whilst resident at Leghorn, Iturbide produced a 'Statement' of the events and motives of his career, which was framed especially as a manifesto addressed to the people of Mexico. This 'Statement' was translated by Mr. Michael Joseph Quin, a personal friend of the writer, and published as 'A Statement of some of the Principal Events in the Public Life of Augustin de Iturbide, written by himself. With a Preface by the Translator, and an Appendix of Documents,' 8vo, London, 1824; of which a French version, by M. J. T. Parisot, was published with the title of 'Mémoires Autographes de Don Augustin Iturbide, Ex-Empereur du Mexique,' &c., 8vo, Paris, 1824. The original 'Statement,' or 'Memoria,' was not allowed to be printed in Tuscany at the time of its completion, but it formed the substance of a volume, published three years after, under the editorship of Pablo Villavicencio, with the title of 'Carrera militar y política de Don Augustin de Iturbide, o sea Memoria que escribió en Liorna,' &c., 4to, Mexico, 1827. A "literal translation" of the 'Memoria,' from a Spanish manuscript, "received from Mexico, through a channel of the highest respectability," was given in the 28th volume of the 'Pamphleteer,' 8vo, London, 1827, as the 'Political Life of the Ex-Emperor of Mexico,' &c. Other works conversant about the career of Iturbide are—'Catastrofe de Don Augustin de Iturbide, aclamado Emperador de Méjico, el 18 de Mayo del Año, 1822,' &c., 8vo, Paris, 1825; a Biographical Sketch, &c., 'Bosquejo biografico de los Generales Iturbide y Teran, escrito por Don Manuel Payno,' &c., 4to, Mexico, 1843; a 'Biography,' included in Albert M. Gilliam's 'Travels over the Table-Lands and Corderillas of Mexico,' &c., 8vo, Philadelphia, 1846; and a work written by Carlos Maria de Bustamente, in continuation of his voluminous 'Cuadro historico de la Revolucion Mexicana,' with the sub-title of 'Historia del Emperador Don Augustin de Iturbide, hasta su Muerte y sus Consecuencias,' &c. 8vo, Mexico, 1846.

IVARA or JUVARRA, FILIPPO, a celebrated Italian architect, was born at Messina, about 1685, of an ancient but poor family; learned the rudiments of design under a brother; took ecclesiastical orders, and then proceeded to Rome, where he studied architecture under Fontana. His first employment was to decorate the Villa Ottoboni. When Victor Amadeus became king of Sardinia, he commissioned Ivra to build a palace at Messina; afterwards took him to Turin, appointed him his architect, and gave him the abbey of Salve. Ivra's principal buildings are at Turin. They include the royal hunting-palace of Stopinigi; the Birago di Borgaro palace; the royal basilica of La Superga, a circular edifice, the cupola of which is a conspicuous object in the general view of the city; the churches of the Carmelites, del Carmine, and of the fathers of the oratory. At Milan he erected the façade of the church of St. Ambrogio; at Mantua he finished the cupola of St. Andrea; and at Como he made various additions to the Cathedral. He went to Lisbon at the special request of the king, in order to superintend the erection of the royal palace. On the destruction of the royal palace at Madrid by fire in 1734, Ivra was invited to erect a new one. He prepared a design of extraordinary magnificence, but the national dilatoriness interposed obstacles, and Ivra died in 1736, of a violent fever, brought on, it is believed, from vexation, before any steps had been taken for carrying his design into execution. The present building, a modification of his design, was erected by G. Sacchetti, a countryman of Ivra's, and on a scale of much less magnitude, yet it is pronounced by Ford to be "certainly one of the most magnificent palaces in the world." Ivra was a facile and skilful designer, but his buildings are deficient in dignity, and overlaid with the florid exuberances of the period. Ivra published 'Raccolta di Targhe fatte da' Professori primari in Roma, disegnatte ed intagliate dal Cav. D. F. J.,' 4to, Rome, 1715, another edition 1722.

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* **JACKSON, CHARLES THOMAS**, geologist and mineralogist, was born at Plymouth, Massachusetts, June 21, 1805. His first education was received at a private school at Duxbury. He then served for a short time in a mercantile house in Boston, during which period he manifested his bent for scientific pursuits by devoting his leisure hours to making electrical and chemical experiments. He then went through a course of study preparatory to entering Harvard College, but his health breaking down, he joined Baron Lederer, together with Messrs. Maclure, Say, Lesueur, and Troost in a scientific pedestrian tour through the states of New York and New Jersey. On returning to Boston he received instructions from Drs. J. Jackson and W. Channing, which enabled him to take his degree of M. D. at the Harvard University, in January, 1829. From 1827 to 1829 he associated himself with F. Alger in making a mineralogical and geographical survey of Nova Scotia, during which a good collection of the minerals and fossils was brought together. The results of the survey were given in papers which appeared in 1828 and 1833. In 1829 he embarked for Europe, where he stayed till October, 1832. During his stay he was occupied partly as a student at Paris and partly as a scientific tourist through most parts of the continent. While at Vienna the cholera was prevalent in that city, and he was engaged in dissecting the bodies of a large number of persons who had died from that disease. The results of his research were given in the Boston 'Medical Magazine,' for 1832. He also made a careful examination of the volcanic areas of Etna, Vesuvius, the Lipari Islands, and Auvergne. While returning to New York he was engaged in a conversation with Professor Morse and others on the applicability of electro-magnetism for telegraphic purposes, and, as he states, he suggested a plan which was essentially the same as that subsequently patented by Professor Morse. In 1834 he made a working model. A controversy arose between him and Professor Morse as to their respective claims, which led to the issue of several pamphlets. Admitting the originality of his idea (which, however, had occurred to various persons before him), and that he imparted it to Professor Morse, still it seems unquestionable that the establishment of electric telegraphy was little, if at all, dependent on his influence. The merits of the rival claims of the various persons said to have originated the electric telegraph will be found under TELEGRAPH, ELECTRIC, E. C. ARTS & SCI. Div. vol. viii. cols. 70, *et seq.* On reaching Boston he settled down for a short while as a medical practitioner, but he abandoned the profession in consequence of the great request for his services as a geological surveyor and analyst. In 1836 he was appointed state geologist for Maine; in that year also he drew up a plan for surveying the state of New York, which was adopted by the authorities, and he himself was appointed one of the geological surveyors; but he resigned this post in consequence of its interfering with his duties in Maine. The survey of Maine being finished, he was in 1840 charged with a similar survey of Rhode Island. In 1840 he had to undertake a similar task for New Hampshire. While engaged in New Hampshire he made a cursory survey of the district on the south shore of Lake Superior, which resulted in his revealing the great mineral riches of that area. In a subsequent visit in 1845 he reopened the copper mines which had been worked in some former time beyond the reach of tradition, and discovered the great masses of magnetic iron ore, which have since been extensively worked. From 1847 to 1849 he was occupied in surveying Michigan. Since the last mentioned year he has surveyed portions of New Brunswick. From 1834 to 1842 he also interested himself in experiments on anæsthetics. In 1834 he discovered that when lint saturated with chloroform was applied locally there was a local insensibility to pain. In 1837 he made experiments on nitrous oxide. In 1841 and 1842 he experimented on the effects of pure sulphuric ether, and he strongly recommended its use as an anæsthetic. During the same period Dr. Morton also had been giving his attention to the same subject, and seems to have the strongest claim as the introducer of practical anæsthetics. Dr. Jackson has published numerous geological reports in connection with his surveys, and a large number of papers, chiefly consisting of analyses of minerals.

JACKSON, THOMAS JEFFERSON, better known as STONE-

WALL JACKSON, an American general, was born January 21st, 1824, at Clarksburg, State of Virginia. In 1842 he entered as cadet in the Military Academy at West Point. Receiving a commission in 1846 as second lieutenant in the first corps of artillery, he took part in the Mexican war. For his gallant conduct at Contreras and Cherususco he was made captain, and before the end of the war he rose to the rank of major. Resigning his commission in 1852, he became professor of mathematics and artillery tactics in the Military Institute at Lexington, Virginia. In 1856 he made the tour of Europe. When the Civil War broke out in 1861, he, like most Virginians, took part with the South. His grave, reserved, and religious character caused him to be much respected; and his adhesion was valued by the Confederates. He at once raised a regiment and headed it; and in May was placed in command of a Confederate corps of observation near Harper's Ferry. On the 3rd of July, 1861, he was created brigadier-general; and on the 21st of that month the incident took place by which he earned his singular cognomen. The battle of Bull's Run, the first important action between the belligerents, was fought near a small stream about twenty miles from Washington. M'Dowell commanded the Federals, Beauregard the Confederates, with Jackson at the head of the reserve. At one time fortune was going against Beauregard; some of his forces retreated so hastily as to break into a flight; they came to the position where Jackson was posted with his reserves, and an officer said to him "They (the enemy) are beating us back!" Jackson replied calmly, "Well, sir, we will give them the bayonet." The officer was encouraged; he rallied his men, saying, "Form, form! There stands Jackson like a stone wall!" The day ended victoriously for the Confederates; Beauregard himself, in his despatch relating to the battle, used the "stone wall" simile; and the name Stonewall Jackson was at once adopted. During the remainder of the year he was engaged in various operations, which won for him the rank of major-general. In May, 1862, he frustrated the plans of the Federal general, Banks, by taking up a strong position on the Potomac, between Williamsport and Harper's Ferry. He was, however, defeated by Fremont at Cross Keys on June 8th; but won the admiration of his opponent by the energy, rapidity, and sagacity of his retreat. In July he was concerned in the defensive operations near Richmond; commanded General Lee's advanced corps on the Rapidan and Rappahannock in August; won the second battle of Bull's Run; and captured Harper's Ferry on the 15th of September. On the 17th he was with Lee at the sanguinary battle of Antietam. On December 13th he aided Lee in resisting a formidable attack by the Federals at Fredericksburg. During these varied services he was raised to the rank of lieutenant-general. After various engagements in the early part of 1863, Jackson aided Lee in winning the battle of Chancellorsville on the 2nd of May; but, unhappily, whilst Jackson and his staff were returning to head-quarters in the evening, the party were mistaken by one of his own South Carolina regiments for a body of the enemy, and fired upon. The general was wounded; amputation of the arm failed to save him, and he died in a few days, May 9th, 1863. Memoirs of him have been written, generally under his popular name of Stonewall Jackson, by Addey, Cooke, Dabney, Daniells, Hotchkiss, Allen, and other American authors; and his memory is held in respect by all parties as one of the bravest and best of American soldiers, and one of her worthiest men.

JAMES, GEORGE PAYNE RAINSFORD [E. C. vol. iii. col. 596]. In 1858 Mr. James was appointed consul-general for the Austrian ports in the Adriatic. His official residence was at Venice, and in that city he died on the 9th of May, 1860.

JAMES, SIR HENRY, geodetist, was born in Cornwall in 1803, and educated first at Exeter, afterwards at the Royal Military Academy, Woolwich. In 1825 he entered the army, and became colonel in the Royal Engineers in 1857. Although a military man, his life has been almost entirely spent in engineering and surveying works. Originally Director of the Geological Survey of Ireland, he became, in 1857, the Superintendent of the Ordnance Survey of the United Kingdom, and of the Topographical and Statistical Depôt of the War Office, which two departments had, previous to his appointment, been

conducted by officers quite independent of each other. In connection with this office he has written several papers and contributed to, as well as superintended, several reports. His principal paper is 'On the Figure, Dimensions and Mean Specific Gravity of the Earth, as derived from the Ordnance Trigonometrical Survey of Great Britain and Ireland' in 'Philosophical Transactions' for 1856, pp. 607—626. His application of the invention of photolithography arose from an attempt to solve some difficulties in the working of the Ordnance Survey. The authorities decided that the mapping should be executed on several scales from 126 inches to 1 inch to a mile. The country generally was to be planned on the scale of 25 inches to a mile, and then reduced to the smaller scales, an operation generally performed by a pentagraph. After a time it was decided to discontinue the larger scale as being too expensive, and the grant for the survey was reduced by 30,000*l*. In 1855 he made some experiments on the applicability of photography for the purpose of reducing the ordnance maps, and satisfied himself that the process could be usefully adopted. It was put into practice and effected a saving of 2,000*l*. a year. Photolithography was invented by M. Poitevin, who patented his process in 1856, but failed in its practical application. It was first rendered practically available by Mr. J. W. Osborne, an officer of the Department of Lands and Surveys at Melbourne, Victoria, who, in November, 1859, communicated to the Melbourne Institute a paper on a 'Photolithographic Process,' in which he had overcome the difficulties in Poitevin's process. After being fully tested, the Melbourne Government purchased the right of using Mr. Osborne's process, including his methods of enlarging and reducing, for the sum of 1,000*l*., and various maps and plans were produced by it. The process and its results were, however, unknown to the authorities in England till the autumn of 1860, when the earliest specimens were received. Meantime, Mr. Asser, of Amsterdam, had, in 1860, introduced a process resembling Mr. Osborne's to the Ordnance authorities at Southampton; and Captain Scott, under Col. James's instructions, applied it to the reproduction and reduction of the Ordnance Maps. Subsequently, Mr. Osborne himself visited England, and in 1862 described his process before the British Association. [PHOTOLITHOGRAPHY, E. C. S., Arts and Sciences Div.] The process was afterwards rendered cheaper and simpler, partly by substituting zinc for stone, and partly by taking the negative photograph by the carbon process on waxed paper instead of by the collodion process on glass. Col. James's photographs were so successful that he was requested to copy the 'Domesday Book,' a fac-simile of which he has photolithographed in 32 volumes. The art has since been much employed in multiplying accurate copies of rare and costly documents at a cost far below that of the methods previously employed. In 1860 Col. James received the honour of knighthood for his public services.

JAMESON, ANNA [E. C. vol. iii. col. 598]. Mrs. Jameson died on the 17th of March, 1860, in her 63rd year. A second edition of her 'Legends of the Madonna, as represented in the Fine Arts,' corrected and enlarged, with additional etchings and woodcuts, appeared in 1858. The last of the series 'The History of Our Lord as exemplified in Works of Art; with that of His Types: St. John the Baptist, and other persons of the Old and New Testament. Commenced by the late Mrs. Jameson, continued and completed by Lady Eastlake,' was published in 2 vols., 4to, 1864.

JAMESON, ROBERT, mineralogist, was born at Leith, July 11, 1774. Although educated for the medical profession he never practised, but devoted his attention entirely to natural history. His first original work was 'An Outline of the Mineralogy of the Shetland Islands and of the Island of Arran,' 8vo, Edinburgh, 1798, which was soon followed by a more extensive work on the 'Mineralogy of the Scottish Isles,' 8vo, 2 vols., 1800. The reputation which they brought him induced him to obtain a deeper insight into geological knowledge by spending two years as a student in Werner's class at Freyburg. On returning to Scotland in 1804, he was elected to the chair of natural history in the University of Edinburgh. Soon after this he projected a large work on the geology of Scotland, each county of which was to be treated in succession, but the work did not advance beyond an account of the mineralogy of Dumfriesshire in consequence of his undertaking other engagements, more especially the preparation of class books for students. Amongst these the more important are a 'System of Mineralogy,' 3 vols., 8vo, 1804-1808, which has passed through several editions; and a 'Manual of Mineralogy,' 8vo, 1821. He wrote numerous papers relating to a great range of subjects in natural history, such as

minerals, rocks, stratigraphy, physical geography, plants and birds. He contributed various articles to the 'Encyclopædia Britannica,' founded the Wernerian Society of Edinburgh, started and conducted, from 1819 to 1854, the 'Edinburgh New Philosophical Journal,' in conjunction with Sir D. Brewster, and assisted Hugh Murray and others in drawing up a series of geographical works of a popular character. His knowledge of the physical characters of minerals and rocks was extensive, but he paid little attention to their chemical properties and composition. He was for long an ardent supporter of the Wernerian doctrines, but he ultimately abandoned them as insufficient. As a teacher he achieved much success, not by any oratorical powers but by earnestness of manner, clearness of language, and by frequently having recourse to the means of instruction afforded by field excursions. He belonged to many scientific societies. He died on April the 19th, 1854.

JAMITZER, WENZEL, one of the most famous of the German goldsmiths and engravers of the sixteenth century—a time when the goldsmith's art attained its highest excellence in Germany—was born at Vienna about 1508, and settled in Nürnberg, where he died in 1585. He worked both in gold and silver, fashioning the metals into the quaintest and most fanciful forms, and modelling and chasing on the surface plants, flowers, and animals with rare truth and delicacy. He also excelled in a sort of niello work and enamel. Jamitzer was employed by Charles V., Ferdinand I., Maximilian II., and Rudolf II. By his fellow-citizens, who held him in great esteem, he was elected a member of the city council. He published a treatise on perspective, 'Perspectiva corporum regularium,' folio, Nürnberg, 1568, the plates to which were drawn and engraved by himself. Nagler gives a list of several other plates by him. In his metal work he was assisted by his brother, ALBRECHT JAMITZER, who died about 1590. He had a son, CHRISTOPH JAMITZER—born at Nürnberg about 1560; died in 1619—who also worked as a goldsmith, and executed some good engravings, especially several prints of children at play, and a 'Neuw Grotteszen Buch. Inventirt, gradirt und verlegt, durch C. J.,' with 42 etchings, oblong 4to, Nürnberg, 1610.

JANSEN, JANSSEN, or JANSENIUS, CORNELIUS, a Dutch theologian, famous as being eponymous of the sect called Jansenists [JANSENISTS, E. C., Arts and Sciences Div., vol. iv. col. 1010], was born on the 28th of October, 1585, at the village of Acquoy, near Leerdam, in Holland; and was educated successively at the Universities of Utrecht and Louvain. In 1604 or 1605 he repaired to Paris, where he contracted a lasting friendship with Jean du Verger de Hauranne, afterwards Abbot of St. Cyran, and a native of Bayonne, whom, about the year 1611, he accompanied to that city, the bishop of which placed Jansen at the head of a college he had recently founded. After a stay of five or six years, during which he applied himself to the study of the Fathers, and especially of St. Augustine, Jansen returned to Louvain, where he was chosen principal of the College of St. Pulcheria. Here also he took the degree of D.D. in 1619; in 1624 was sent on a special mission to the King of Spain; and in 1630 was appointed professor of the Holy Scriptures. In 1635 he attracted the special favour of the Spanish King, then on the eve of a war with France, which sought to detach the Low Countries from the rule of Spain, by a work which he produced as an apology for the war, and in which he attacked the prerogatives of the Kings of France, the political system of Richelieu, and the alliances contracted between France and the Protestant States. This work, which appeared with a pseudonym, was entitled 'Mars Gallicus; seu de Justitia Armorum et Foderum Regis Gallie Libri duo. Per Alex. Patricium,' folio, 1635, enlarged edition, 8vo, 1637, and elicited, amongst other attacks, a reply from Daniel Priezacus, with the title of 'Vindiciæ Gallicæ adversus Alex. Patricium Armacanum,' 8vo, Paris, 1638. The 'Mars Gallicus,' of which a French translation, by Charles Hersant, D.D., was published with the title of 'Le Mars françois ou la Guerre de France,' &c., 8vo, 1637, procured for its author the appointment of Bishop of Ypres; where, in the midst of reforms which he had projected but did not live to complete, he died of the plague, on the 6th of May, 1638.

Jansen's principal work is one upon the doctrines of St. Augustine, upon which he was employed for upwards of twenty years, and which, leaving it finished at the time of his death, he submitted, by his last will, to the judgment of the Holy See. This work, which treated of divine grace, free-will, and predestination, and which was conceived against the doctrines of the Jesuits and gave rise to much controversy, was entitled

'Augustinus : seu Doctrina S. Augustini de humanæ Naturæ Sanitate, Ægritudine, et Medicina, adversus Pelagianos et Masilienses,' 3 vols., folio, Louvain, 1640; Paris, 1641; Rouen, 1642, &c. The other productions of Bishop Jansen comprise 'Letters,' and 'Commentaries' on various parts of the Bible, as, for instance, on the Pentateuch, the Books of Proverbs and Ecclesiastes, and the Gospels.

JAQUOTOT, MARIE-VICTOIRE, a celebrated French painter on porcelain, was born at Paris, in 1778. At the exposition of 1808, Mme. Jaquotot received a gold medal, being the first awarded for painting on porcelain, and she was engaged soon after as a principal painter at the manufactory of Sèvres, in which capacity she painted the magnificent dessert service presented by Napoleon I. to Alexander of Russia after the peace of Tilsit. From 1808 to 1827, the paintings of Mme. Jaquotot were always among the attractions of the annual expositions. A large proportion of them were reduced copies from celebrated pictures of the great masters; but many were from original designs, others from state portraits of royal personages, and some from the life, among which were several distinguished members of the English aristocracy. Mme. Jaquotot was appointed, in 1817, cabinet painter to the king (Louis XVIII.), and in 1828, principal painter on porcelain to Charles X.; under Louis Philippe she retained the title, but was not employed by the court. She died at Florence in 1855.

* JARDINE, SIR WILLIAM, BART., zoologist, was born on the family estate of Jardine Hall, in the parish of Applegarth, Dumfriesshire, February 23, 1800. On the death of his father in 1821, he succeeded to the baronetcy and estate. His attention has been given chiefly to birds, but he has written more or less on all the other vertebrate classes. His writings consist of editions of well-known works, books, articles in the scientific journals and notes contributed to various sources. He edited the editions of White's 'Natural History of Selborne,' in Bohn's Library, Constable's Miscellany, and The National Illustrated Library; Strickland's 'Ornithological Synonyms,' 8vo, 1855; and the 'Magazine of Zoology and Botany,' which, however, only lasted for about a couple of years, when it was changed into the 'Annals of Natural History,' of which he has been one of the editors since its commencement in 1838. He is also one of the editors of the 'Edinburgh New Philosophical Journal.' He was the conductor of the 'Naturalist's Library,' 40 vols., 16mo, to which he contributed the volumes relating to monkeys (vol. 2), the *Felineæ* (vol. 3), the pachyderms (vol. 9), the ruminating animals (vols. 10, 11), the humming birds (vols. 14, 15), the *Nectarinidæ* or Sun birds (vol. 16), the gallinaceous birds (vols. 20, 21), the birds of Great Britain and Ireland (vols. 24 to 27), and the perches (vol. 29). He has also written a 'Calendar of Ornithology,' 8vo, 1849; 'The Ichthyology of Annandale,' folio, Edinburgh, 1853; 'Memoir of H. E. Strickland,' 8vo, London, 1858; 'British Salmonidæ,' folio, Edinburgh, 1861. He has contributed to 'Illustrations of Ornithology,' 4 vols., fol., by himself, Selby, Raffles, and Horsfield; to Wilson's 'American Ornithology,' 12mo, 1840, and to 'The New Statistical Account of Scotland,' in which the natural history of Applegarth, in vol. 4, is by him. His scientific articles relate to the same subjects as his other works; the most important are those on salmon, in the 'Edinburgh New Philosophical Journal,' for 1835 and 1862, and the report on the experiments at Stormontfield for the artificial propagation of salmon, in the 'British Association Report' for 1856, pp. 451-458. He is a magistrate and vice-lieutenant of Dumfriesshire, and belongs to many scientific societies. He married in 1820, and one of his daughters married H. E. Strickland.

JASMIN, JACQUES, or JAQUOU JANSMIN [E. C. vol. iii. col. 603], died at Agen, on the 4th of October, 1864. The death of the hairdresser of Agen, who had lived on in his own simple way to the last, produced a lively sensation throughout the south of France. He received a pompous funeral, services were performed in his honour, and the outward marks of esteem for the man, and admiration of the poet, were universal. Longfellow has translated Jasmin's exquisite 'Blind Girl of Castel Cuillé,' (*L'Abuglo de Castel-Cuillé*), and in a note has given an interesting account of the author from Miss Costello's 'Béarn and the Pyrenees,' i. 369, &c. Jasmin's own autobiographical sketches, 'Las Papillotos de Jasmin,' have been several times reprinted since the author's death.

JAY, JOHN, American statesman, was descended from a Huguenot family which emigrated to America after the revocation of the Edict of Nantes, and was born at New York, December 12th, 1745. At the age of 14 he entered King's (now Columbia)

College, and, after a brilliant course, graduated with the highest honours in 1764. He studied law under B. Kissam, was called to the bar in 1768, and soon obtained a large share of business. Like most men of his standing, he engaged passionately in the disputes with the home government, became a leading member of the New York Committee of Correspondence, and was elected a member of the first Congress, September, 1774. The 'Address to the People of Great Britain,' put forth by the congress, and which produced a profound impression in both countries, was written by Jay. He was one of the leaders in the proceedings for separating New York from the mother country, was appointed to write the draft of the declaration of independence, and was nominated first chief justice of the State, 1777. Jay was one of the Council of Safety chosen to act during the recess of the legislature; and in 1778 was elected president of the Congress. In 1779 he went as minister to Spain. In 1782 he was sent to England as commissioner with Franklin, Adams and Laurens to negotiate peace; on November 30th, signed the preliminary treaty, and in September, 1783, the definite treaty of pacification, by the first article of which England acknowledged the Independence of the United States. On his return to America, in 1784, Jay was appointed secretary for foreign affairs, and he continued to fill this important post till the new Federal Constitution came into operation, when he became first Chief Justice of the United States. Jay had a large share in the preparation of this constitution, and was active in promoting its adoption both in the debates in the Convention and by writing, in conjunction with Hamilton and Madison, the very remarkable series of papers which were afterwards published in a collected form under the title of 'The Federalist.' In 1794 he was appointed by Hamilton, then at the head of the foreign office, envoy-extraordinary, to settle the differences between the governments of England and the States, and to negotiate a commercial treaty between the two countries. He succeeded in both, but there was a strong party in America desirous to draw closer to France and violently opposed to England, and Jay and his treaty were made the objects of bitter and persistent attacks. But though unpopular with the country at large, he was esteemed at home, and in 1795 was elected governor of New York, an office he retained till 1801, when he formally withdrew from public and political life. He continued, however, to take an active part in the promotion of the American Bible Society, of which he was president, and of other religious and philanthropic institutions, till his death, which occurred at his seat Bedford, Westchester county, New York, on the 17th of May, 1829, in his 84th year. Jay was one of the purest, the ablest, and the most unselfish statesmen the war of American Independence called forth, and in private life one of the most estimable of men.

(William Jay, *Life and Correspondence of John Jay*.)

JELLACHICH DE BUZIN, JOSEPH, GRAF VON [E. C. vol. iii. col. 613]. Jellachich received the title of Graf in 1855. He died on the 20th May, 1859, at Agram.

JERDAN, WILLIAM [E. C. vol. iii. col. 615]. In 1866 Mr. Jerdan published a work supplementary to his 'Autobiography,' under the title 'Men I Have Known.' He died at his residence, Bushey Heath, near Watford, Herts, on the 11th of July, 1869, aged 87.

* JERICHAU, ADOLPH, Danish sculptor, was born at Assens in the island of Fühnen, April 17th 1816. On completing his course of study at the Copenhagen Academy he went to Rome, where he derived great assistance from the encouragement and advice of Thorwaldsen. His first important work, executed at Rome, was a frieze of the 'Marriage of Alexander and Roxana' for the royal castle of Christiansburg. This was followed by a colossal group of 'Hercules and Hebe,' 'Penelope,' and other classical subjects. He was also called to execute some religious pieces; and after his return to Copenhagen, about 1849, his chisel found most employment in this line. Among the works executed for churches and private persons were colossal statues of the Saviour, Moses, King David, the Ascension, the Angel of Death, Adam and Eve, &c. Many of his works are in the royal and other collections in England. Jerichau is professor of sculpture and director of the Academy, Copenhagen. His style as a sculptor is grave, learned, and somewhat academical, but with much vigour and breadth of thought and handling. His wife,

* ELIZABETH JERICHAU, born at Warsaw, November 21st, 1819, has achieved a European reputation as a painter. Her artistic training was completed at Düsseldorf, and she still retains much of the manner of the school. But she studied the great Italian masters and Italian life at Rome, and thus super-

added to the German precision something of Italian warmth and feeling. Many of her pictures are of Italian peasants and scenes of homely Italian life; others exhibit the wrongs and sufferings of the poorer Poles; others again, and those which have been most popular in England, represent, without special reference to nationality, sick children, hospital patients nursed by sisters of mercy, 'Reading the Bible,' and other circumstances and incidents which appeal to the feelings and illustrate female compassion, sympathy, and devotion. Such scenes she paints with much power and pathos; her style is simple and unaffected, and her pictures display considerable technical knowledge and skill. She generally contributes to the exhibition of the Royal Academy, and some of her best pictures are in English collections.

JERROLD, DOUGLAS [E. C. vol. iii. col. 620]. The brilliant wit, dramatist, journalist, the earnest politician, the warm-hearted friend, lived but a few short months after the above notice of him was printed. He died at his residence, Kilburn Priory, on Monday, the 8th of June, 1857, and was interred on that day week in the Cemetery, Norwood, in the presence of one of the most remarkable assemblages of representatives of nearly every class of mental culture which had been brought together in England on any similar occasion. To the memoir referred to it is unnecessary to add anything here. A fuller biography of him was published in 1858, 'The Life and Remains of Douglas Jerrold.' By his son, Blanchard Jerrold. This son,

* **WILLIAM BLANCHARD JERROLD**, born 1826, succeeded his father as editor of 'Lloyd's Weekly Newspaper,' and has secured an independent reputation by several dramatic pieces, tales, sketches of London and Parisian life and manners, notes of continental journeys, and numerous contributions to periodicals.

JERVIS, THOMAS BEST, lieutenant-colonel, engineer, and geographical surveyor, was born at Jaffnapatam, Ceylon, August 2, 1796. On the completion of his school education he went to the East India Company's College at Addiscombe, where he distinguished himself for proficiency in mathematics, French and Hindustani. On leaving the college he entered the corps of Royal Engineers, and was employed on the ordnance survey to plan and map Bromsgrove and its neighbourhood. In 1814 he reached Bombay, and was engaged in erecting civil and military buildings. In 1820 he was appointed to survey South Cancon, and the result of his labours was a series of valuable reports on and maps of that part of India, chiefly embodied in 'Geographical and Statistical Memoir of the Konkun,' 8vo, Calcutta, 1840. After serving in various engineering posts in different parts of India, he was in 1835 made superintending engineer of the Bombay Presidency. From 1836 to 1839 he returned to England on furlough, and on going back to India he was appointed superintending engineer of the Northern Provinces. While in London he had been nominated to succeed Colonel Everest as surveyor-general, but finding that that officer had no intention of retiring, he himself retired from the East India Company's service in January, 1842. After his return to England he continued to employ himself actively in assisting the government authorities both at home and in India. He established a private lithographic press, and succeeded in printing forms and maps with remarkable excellence and rapidity.

When the Russian war broke out he urged the importance of supplying the army with accurate maps of Russia. The best map of the Crimea, that prepared by General Muhkin, was not to be obtained in England, and only one or two copies existed on the continent. He obtained a tracing, translated the Russian names into English, and in ten days produced 200 copies, each copy consisting of 21 sheets. This map proved to be of great service to the army. He then impressed upon the government the necessity of having a collection of maps for the use of the army. Accordingly, the Topographical and Statistical Depot of the War Office was established, and himself appointed director. He also recommended that a topographical corps should be sent out with the army during every campaign. He conducted the first corps, and surveyed portions of the Euphrates valley, the Caucasus, the Caspian Sea, and other districts. He died April 3, 1857. He was greatly assisted by his son,

* **WILLIAM PAGET JERVIS**, who has obtained a reputation in connection with the Italian department in the International Exhibition of 1862, and with the Royal Italian Industrial Museum at Turin, of which he is the director. He is the author of 'Mineral Resources of Tuscany,' 8vo, London, 1860; 'The History, Geological and Geographical Distribution and Commercial Bearings of the Marbles of Tuscany and Modena, and the Boracic Acid Lagoons of the Maremma,' 8vo, London, 1860;

'Guida alle Acque Minerali d'Italia,' 8vo, Turin, 1868; and of a few papers on mineralogical subjects.

JESSE, EDWARD, naturalist, son of the Rev. William Jesse, was born at the vicarage, Hutton Cranswick, in the East Riding of Yorkshire, on the 14th of January, 1780, and received a good private education. By the influence of Wilberforce, he obtained a clerkship in a government office in 1798, and was appointed secretary to Lord Dartmouth when that nobleman became president of the Board of Control. He served for a time as lieutenant-colonel of the Birmingham volunteers, and captain in the Leicestershire Militia, when he was appointed deputy-surveyor of the royal parks and palaces and gentleman of the Ewery at Windsor Castle, and, upon the abolition of the latter office, commissioner of hackney coaches. Mr. Jesse's connection with the parks and palaces, Windsor, Richmond, and Hampton Court being specially within his jurisdiction, and his habits of observation and fondness for out-door exercises and animal life, led him to cultivate natural history, and to publish the results of his observation and experience in a number of light, gossiping books, which were very popular, and, though of no scientific value, contain much interesting information, and are pleasant reading. These include 'Gleanings in Natural History,' three series, 3 vols. 8vo, 1832-35, eighth edition, 1858; 'An Angler's Rambles,' 8vo, 1836; 'Anecdotes of Dogs,' 4to, 1846, enlarged edition, 1858; 'Lectures on Natural History,' 1863. Another class of books of perhaps equal popularity comprised 'A Summer's Day at Hampton Court,' 1839; 'A Handbook to Hampton Court,' 1841; 'A Summer's Day at Windsor, and a Visit to Eton,' 1841; 'Favourite Haunts and Rural Studies, including Visits to Spots of Interest in the Vicinity of Windsor and Eton,' 1847; 'Windsor Castle and its Environs,' 1848; and 'Scenes and Tales of Country Life,' 1844, third edition, 1853. He also edited new editions of Izaak Walton's 'Complete Angler,' Gilbert White's 'Natural History of Selborne,' Hofland's 'Angler,' &c., and wrote many papers in the 'Gentleman's Magazine,' 'Once a Week,' and other journals. On his retirement on a pension in 1862, Mr. Jesse removed to Brighton, where he took an active part in establishing 'The Fisherman's Home,' and in other plans of local usefulness; and as a mark of the esteem in which he was held, his bust was in 1865 placed in the great room of the Pavilion by a subscription of the townspeople. Mr. Jesse died at Brighton on the 28th of March, 1868. His son,

* **JOHN HENEAGE JESSE**, born in 1808, is known by his 'Court of England under the Stuarts,' 4 vols. 1840; 'England under the House of Hanover,' 'Memoirs of the Pretender,' 'Memoirs of Richard III.,' 1861; 'Memorials of London,' 1847; 'London and its Celebrities,' 1850, new edition, 3 vols. 1870; 'Memoirs of George Selwyn,' and 'Memoirs of the Life and Reign of George III.,' 1867.

JOHN, FRIEDRICH, German engraver, was born at Marienburg in 1770. He served for a time in a mercantile establishment in Warsaw, but abandoned commerce for art, and eventually attained great success as an engraver. He resided in Vienna till 1832, when he retired to Mahrburg in Styria, where he died shortly after. His best plates are the 'Death of Abel,' and a portrait of Joseph II., after Füger; St. Catherine, after C. Dolce; and St. John, after Raffaele. He also engraved illustrations to the works of Klopstock and Wieland, and many other book-plates.

* **JOHNSON, ANDREW**, seventeenth President of the United States of America, was born December 29th, 1808, at Raleigh, North Carolina. His father, who had been a porter, sexton, and constable, died in 1818; and his mother, a work-woman, apprenticed Andrew to a tailor. During his apprenticeship he learned to read, and acquired a great relish for public affairs. In 1826 he removed to Lauren's Court House, where he worked as a journeyman; he then began to travel about North Carolina and Tennessee as an itinerant tailor; he married, and his wife taught him writing and arithmetic. In 1828 he was chosen alderman of Greenville, Tennessee. In 1830 he became mayor of the same place; in 1835, member of the lower House of Legislature, in the State of Tennessee; in 1841, member of the Tennessee Senate; and in 1843 member of Congress. During the earlier part of this career he was still a journeyman tailor, but gradually gave up his time and thoughts to public matters. During his ten years in Congress, he defended the Democratic or Southern party in upholding slavery, but raised his voice against the mode in which the slaveowners treated the "mean whites," the class to which he had himself belonged. In 1853, and again in 1855, he was elected governor of Tennessee, and in 1857 entered the United States Senate at Washington. Although

himself a slaveowner, he did not go with the extreme Democratic party. Shortly after the Civil War began, President Lincoln appointed him military governor of Tennessee; and the Republicans, satisfied with his conduct, elected him Vice-President of the United States in 1864. From the 4th of March, 1865, till the assassination of President Lincoln on the 14th of the following month, Mr. Johnson acted as Vice-President; but, by the terms of the Constitution, he now became President without any election. At the commencement of his presidency, Mr. Johnson startled the country by a thoughtless and intemperate speech; but, recovering his self-control, he went through the first year of office, steadily endeavouring to lessen the acerbity of North and South, and to mitigate the extreme measures which the Abolitionists wished to enforce against the Southern States after the termination of the Civil War. Difficulties commenced early in 1866; the President was much vituperated in both Houses of Congress, and he retaliated in a violent speech made at a public meeting at Washington, singling out three of the leading Abolitionists for special censure. Congress wished to treat the Southern States as a conquered people; taxing them, but without allowing them any share in the representation. To this course the President was resolutely opposed. He contended that the Southern States could not be, had not been, out of the Union; that they had been rebels, but, the rebellion having been crushed, and slavery abolished, it would be wise policy to let their representatives sit in Congress as before. All through the year did the struggle continue; the President vetoed the Freedmen's Bureau Bill, and other measures passed by Congress; while Congress passed those measures into law by a two-thirds vote over the veto; threatening, moreover, to disallow his nominations to official posts, and to reject his appropriation bills. He was frustrated in an endeavour to remove Mr. Stanton from the office of Secretary for War, an unseemly struggle on this point occurring within the walls of the War Office itself. After two or three important measures had been vetoed in the early months of 1867, Congress appointed a committee to examine whether there were grounds for impeaching the President. While this committee was sitting Mr. Johnson went to Raleigh, to be present at the inauguration of a memorial to his father; on which occasion he was moderate and careful in his speech-making. On March 4, 1868, the House of Representatives sent up to the Senate articles of impeachment against the President; he was cited; the trial began late in the month; his defence was opened on April 10, and on the 16th of May the decision was announced, there being 35 senators against him and 19 for him. As a two-thirds vote was necessary, this decision acquitted him; and his victory over Congress, narrow as it was, gave satisfaction. In this year, at a meeting of a Tailors' Union, met to do him honour, he declared that "the most pleasant hours of his life were those he had spent in his tailor's shop." At the presidential election in the autumn, General Grant was chosen President for the four years 1869 to 1873. Mr. Johnson, whose presidency did not expire till March 4, 1869, brought forward (in December, 1868) a scheme for paying off the national debt, which had accumulated to the amount of 600,000,000*l.* during five years of civil war; but the scheme, which savoured of partial repudiation, a violation of the terms on which the money had been raised, fell to the ground. Mr. Johnson continued on ill terms with both Houses of Congress, but his influence had declined long before the termination of his presidency.

JOHNSON, MANUEL JOHN, Radcliffe Astronomer at Oxford University, was born in May, 1805. After receiving a professional education at Addiscombe, he joined the East India Company's Artillery at St. Helena in 1821; the island at that time belonging to the Company. He paid great attention to the study of astronomy, and prepared a catalogue of 606 stars in the Southern hemisphere, which was published some years afterwards at the Company's expense, in the 'Memoirs of the Royal Astronomical Society,' and earned for Mr. Johnson the Society's medal. A small observatory was built on the island, from which the observations were made. In 1832, when St. Helena was transferred from the Company to the Crown, he retired, and was pensioned as a lieutenant of artillery. In the following year he entered Magdalen Hall, Oxford, graduated in 1839, and was appointed, the same year to succeed Professor Rigaud as Radcliffe Observer. The instruments at his command were not of a high character, but he succeeded in obtaining a new and efficient transit instrument in 1843. He introduced the plan of publishing a yearly volume, recording the observations and calculations made; and for ten years, with one assistant only (Mr. Lucas) he went through the

BIOG. DIV.—SUP.

labour of observing, recording, reducing, and superintending the printing and publishing, with a punctuality which was highly appreciated by astronomers generally. He devoted his chief attention to the circum-polar stars, down to lat. 40° N., determining their positions with great accuracy. The list comprised about 4,000 stars, concerning which his figures are regarded as a valuable supplement to those in Groombridge's Catalogue of 1810. In 1848 an important addition was made to his instruments by the construction of a fine heliometer by Repsold, of Hamburg, which measured the angular diameter of sun, moon, planets, and satellites with great accuracy, as well as the distance between the two components of double stars. Another assistant at the Radcliffe Observatory being now necessary, Mr. Pogson quitted Mr. Bishop's Observatory in the Regent's Park, and joined Mr. Johnson in 1849. The heliometer was fully described in the Observatory volume for 1850. A new series of observations was undertaken by Mr. Johnson with the aid of this instrument. He observed certain stars which had been catalogued by Bradley in 1755, Piazzi in 1800, and Groombridge in 1810; he compared the present angular distances apart of those stars, with the distances recorded in past years; and in so doing he rendered important service towards determining the proper motions of the stars, and of the sun as one of them, in space. Two series of heliometer observations were published, one in 1853 and the other in 1857. He prepared another catalogue of stars, selecting 1,481, which were, on various grounds, of special interest to astronomers; this was published in 1856. Mr. Johnson facilitated the making of meteorological observations at the Observatory, and the introduction of photographic registration; but astronomers afterwards regretted that these subsidiary labours had interfered with the continuance of his valuable observations with the great heliometer; for this instrument was not much used by him after 1855. His accurate measurements assisted in determining the parallax of 61 Cygni, Castor, Arcturus, Vega, and the star known as 1830 Groombridge. Mr. Johnson was elected Fellow of the Royal Society in 1856, and filled the office of President of the Royal Astronomical Society in 1857 and 1858. He died February 28, 1859.

JOHNSON, PERCIVAL NORTON, died at the age of 73 on the 1st of June, 1866. His father, John Johnson, was at one time the only commercial assayer in London. Percival worked with his father during some years, and about 50 years ago established himself as an assayer and metallurgist in Hatton Garden. He soon became celebrated in his profession, and his opinion was so much valued that he could hardly get through his work. The accuracy of his assays was a novelty at the time, and even a ground of objection; for he was the first to report the exact proportions of gold and silver in the specimens submitted to him, whereas previously the quantities had been stated approximately only. Purchasers of bullion objected to these accurate reports, since the contingent advantages in buying upon exactly known values were not so great. Johnson immediately offered to purchase all bars upon his own assays, and this led to his taking up the refining business, which he carried on with great success. He even obtained a public recognition of his skill; for when the gold bars from the Brazilian Gongo-Soco mines were refused at the Mint on account of their brittleness, Johnson undertook to refine and toughen them. He found palladium in this gold, and having succeeded in separating it, he introduced it commercially, and pointed out its appropriate uses.

During a visit to Germany Johnson met with the alloy known as "German silver," the manufacture of which was in a crude state. On his return he analysed the metal, and commenced and carried on its manufacture in this country. It now came into general use, and the working of it formed an important branch in our national manufactures.

In Germany he gave special attention to mining operations, and was now consulted professionally, and visited most of the mines in great Britain and Ireland. He was the first to introduce into Cornwall the German shaking, jigging, and washing-table, with improvements of his own. He also exerted himself to improve the social condition of the miners, and to establish schools in the neighbourhood of the mines. He likewise did much to promote schemes for relieving the men from the toil of ascending and descending the mines.

Johnson first refined and manufactured platinum on a commercial scale, and seeing its importance he made this his specialty. He also contrived several pottery colours, among which was the "rose pink," at a time when it was much wanted in our potteries. But his great skill was as an analyst, and this

was so far recognised that the other commercial assayers in London were accustomed to send him compounds or minerals of a difficult or complicated nature to report upon. As an adviser and assayer, Johnson succeeded in giving a scientific tone to his profession, and it was felt that he deserved the honour conferred upon him by the Royal Society in electing him a Fellow in 1846.

* JOHNSTON, ALEXANDER, Scottish painter, was born at Edinburgh in 1816. A student of the Royal Academy, London, he there exhibited his first picture in 1836, and has continued to exhibit ever since. His subjects have been chiefly taken from the graver side of Scottish poetry, or from the religious history of England and Scotland. Of these classes the 'Covenanter's Marriage' and 'Burial,' 'The Sabbath,' the 'Introduction of Flora Macdonald to the Young Pretender,' 'Tyndal Translating the Bible' (1854), 'The Abdication of Mary Queen of Scots' (1856), 'John Bunyan in Bedford Jail' (1861), 'The Flight of the Queen of James II.' (1869), will serve as examples. He has also painted many portraits. His 'Lord William Russell Receiving the Sacrament in the Tower' (1845) is in the National Gallery (Vernon collection). Several of his pictures have been engraved.

JOMARD, EDMÉ FRANÇOIS, geographer, was born at Versailles, November 17, 1777. He received his education at the college of Versailles, at the Mazarin Collège in Paris, at the École des Ponts et Chaussées, and at the École Polytechnique. The last was left in 1794; and in the following year he went to the school of practical geography and surveying, then conducted by Prony. In 1798 he was selected to join the scientific commission appointed by Bonaparte to draw up a description of Egypt. From July 1, 1798, to the assassination of Kleber in 1801, he was actively engaged in surveying the country and exploring its antiquities. The death of Kleber brought this work to a close, and he returned to France, but collected some notes respecting the Grecian Archipelago, where his vessel was detained by adverse winds. On reaching Paris he was commissioned by the War Department to survey a portion of Bavaria. In 1803 he was again in Paris, and was ordered to assist in drawing up the official account of Egypt. In 1807 the chief management of this work was entrusted to him, and for nearly twenty years he was chiefly occupied in superintending the printing and engraving, and in directing the labours of more than three hundred persons who were engaged upon the work, of which the first part was issued in 1809, and the last in 1826. In the course of his labours he had occasion to visit England, for the purpose of examining the monuments and antiquities of Egypt in the national collection. During this visit he became so great an admirer of the method of education pursued in the Bell and Lancaster schools, that he promoted its introduction into France. In 1816 he was appointed to direct the Bureau de l'Instruction primaire du Commerce et des Arts in the Seine prefecture. In 1818 he was elected a member of the Institute. In 1828 he was appointed to the management of the department of maps and geographical documents which was founded in that year in connection with the Bibliothèque Royale, a post for which he possessed unusual qualifications. In 1859 he helped to establish the Institut Égyptien at Alexandria, and was selected to be its first president. He was in the enjoyment of excellent health in September, 1862, and proposed making a voyage to Egypt in 1863. On the 28th of that month he performed his usual official labours, and was in the act of lifting a map down from the wall of his room when he suddenly dropped from the steps which supported him into the arms of a friend who was assisting him, and died before the day closed. His long life of 86 years was one of incessant activity. His great work was in connection with the 'Description de l'Égypte,' a large proportion of which was written by him. He was also frequently occupied in promoting the interests of Egypt. Thus, in 1826, he urged upon Mehemet Ali the desirability of sending thirty Egyptians of good birth to be educated in Paris. His proposal was adopted, and he was entrusted with the direction of their studies and the regulation of their conduct. He acquitted himself of this task with so much success, that the Viceroy of Egypt granted him an annuity of 400*l.*, but on his declining the gift Mehemet Ali wrote him a letter of thanks enclosed in a diamond-covered casket, and conferred upon him the dignity of bey. He was an enthusiastic supporter of the Suez Canal scheme, towards the successful issue of which he greatly contributed by his advice. His second most important work was the promotion of the collection of maps in the Bibliothèque Royale. As a geographer he did a great deal of other work. He was associated with

Humboldt, Laplace, Malte Brun, and others, in founding, in December, 1821, the Société de Géographie, of which he was president and vice-president for many years, and for forty-one years perhaps the most active member. He assisted most of the French travellers of his time, more especially those whose explorations were devoted to Africa, by advising them, looking after their interests, or making the results of their labours known to the world. Thus he was instrumental in publishing the travels of Cailliard, Caillé, and Cheik el Tounsy. In 1839 he commenced working on a detailed catalogue of the map collection in his charge, which was designed to be a contribution towards the history of maps. About the same time Viscount Santarem was engaged on a similar task, under the auspices of the Portuguese Government. A discussion arose as to whom the priority belonged, and an umpire was called in to decide, but as he could not settle in favour of either, both continued their respective works independently. Jomard's was published at his own expense, and absorbed a large portion of his personal fortune. It extended to eight parts, comprising eighty maps, and, amongst others, the remarkable one of the world drawn by Juan de la Cosa, one of Columbus's pilots. Jomard was a member of the Société Impériale d'Acclimation, and took an active share in its work. He also belonged to various other societies, and wrote numerous books, pamphlets, and papers.

JOMINI, HENRI, BARON [E. C. vol. iii. col. 643]. The Baron Jomini died at Passy, Paris, on the 24th of March, 1869, in his 91st year.

JONES, GEORGE, R.A., born January 6, 1786, was the son of a mezzotint engraver of ability. He became a student of the Royal Academy in 1801, began to exhibit in 1807, and practised for some years chiefly as a landscape painter, but on the outbreak of the Peninsular war entered the militia service, in which he rose to the grade of lieutenant; then volunteered for foreign service, served under Wellington, and entered Paris with the army of occupation in 1815. With the return of peace he resumed his practice as an artist. He painted continental street scenes with success, and he now added the representation of battle-fields, a class of subjects which continued for several years to be popular. The Directors of the British Institution announced that they would, in 1816, distribute 1000 guineas in premiums for finished sketches illustrative of the success of the British army in the recent war. Mr. Jones sent in two sketches of the Battle of Waterloo. From that entitled 'Waterloo, evening—the Duke of Wellington leading on the whole of the British Line in pursuit of the routed enemy,' the Directors commissioned him to paint a picture, 15 feet by 11 feet, and when it was completed in 1820, marked their approbation of his labours by presenting him with a premium of 100 guineas, in addition to the 500 guineas which they had agreed to pay for the work. The picture they presented to Chelsea Hospital, where it remains. It was much admired, obtained from the Duke of Wellington the characteristic commendation—"Not too much smoke," and secured to the painter commissions for several repetitions on a smaller scale, to one of which the Directors of the British Institution awarded in 1822 a "donation of 200*l.* in compliment for merit." His 'Battle of St. Vincent, Nelson boarding,' exhibited at the British Institution in 1827, was purchased by the Directors for 500 guineas, and presented to Greenwich Hospital. Mr. Jones continued to paint battle scenes with unwearied industry as long as he could wield a pencil, and though they lost their favour with critics and the general public, they were appreciated by military authorities, and some of his later works, illustrative of the successes of Napier and other Indian heroes, and incidents of the war in the Crimea, were especially admired by officers who had been present at the scenes depicted: several of the pictures were indeed painted under the direction of the commanders. During the last years of his life he alternated scripture subjects with battle scenes, but his attempts in this line were very feeble. Indeed, though his earlier paintings have unquestionable merit, it is probable that he will be longer remembered for the services he rendered at the Royal Academy than for his pictures. Mr. Jones was elected A.R.A. in 1822, and R.A. in 1824. In 1834 he was elected librarian, and on the removal of the Academy to Trafalgar-square, he classified, arranged, and catalogued the books. In 1840 he was made keeper, and as this officer has the superintendence of the students, Mr. Jones, in order to qualify himself for the proper discharge of his duties, visited the principal art schools of the continent, and studied their methods of instruction. He was in every respect an admirable keeper, and the students evinced their sense of his "undeviating kindness

of manner and affectionate regard for their interests, progress, and success," by presenting him, in 1845, with a silver tazza. In that year, in consequence of the illness of Sir M. A. Shee, the president, he was chosen deputy to act in his place, and he remained deputy till Shee's death in 1850. Mr. Jones survived till September 25th, 1869, retaining almost to the last something of his fine military bearing, and all his old kindness of manner. He wrote 'Sir Francis Chantrey, Sculptor. Recollections of his Life, &c.,' 8vo, 1849; and in 1852 appeared a series of 34 etchings from his drawings illustrative of Waterloo. Four pictures by him, which very fairly represent his style and range of subjects, are in the National Gallery (British School), Nos. 389—92, 'The burning Fiery Furnace,' 'Lady Godiva preparing to ride through Coventry,' 'Battle of the Borodino,' and 'Town Hall, Utrecht.'

* JONES, HENRY BENCE, chemist and physiologist, was born at Lowestoft, in 1814, and educated at Harrow and Cambridge. In 1836 he came to London, where he studied medicine. In 1846 he was elected physician to St. George's Hospital. He is a fellow of the Royal and numerous other learned societies, and the honorary secretary of the Royal Institution of Great Britain. He has written numerous articles and books, chiefly relating to animal chemistry and medicine. The more important books are 'On Gravel, Calculus, and Gout,' 8vo, London, 1842; 'On Animal Chemistry in its application to Stomach and Renal Diseases,' 8vo, London, 1850; 'Lectures on some of the applications of Chemistry and Mechanics to Pathology and Therapeutics,' 8vo, London, 1867; and 'The Life and Letters of Faraday,' 8vo, London, 1870. He has edited Du Bois Reymond's work 'On Animal Electricity,' 8vo, 1852; several editions of Fownes's 'Manual of Elementary Chemistry,' and Mulder's 'Chemistry of Wine,' 8vo, 1857. His papers include some important contributions on urine in the 'Philosophical Transactions' for 1845, 1846, 1849, 1850, and 1851; and the Croonian Lecture 'On the rate of passage of crystalloids into and out of the vascular and non-vascular textures of the body,' 8vo, London, 1868. In the latter paper he notices the use of the spectroscope for tracing the passage (sometimes very rapid) of various substances, such as a salt of lithia, through living animal tissues. He also detected the presence of a substance like quinine in animals.

* JONES, THOMAS WHARTON, oculist and physiologist, was born at St. Andrews, Fifeshire, in 1808, and educated at Edinburgh and at various places on the continent. In 1838 he settled down to medical practice in London, and soon associated himself with numerous English and foreign societies. He is the professor of ophthalmic medicine and surgery in University College, London, and ophthalmic surgeon in the hospital connected with it. He has obtained a high reputation on all subjects connected with the structure and diseases of the eye, and has written several works relating thereto, of which we may mention 'Defects of Sight and Hearing,' 8vo, London, 1st ed. 1856, 2nd ed. 1866; 'A Manual of the principles and practice of Ophthalmic Medicine and Surgery,' 16mo, London, 1st ed. 1847, 3rd ed. 1865; and 'The Wisdom and Beneficence of the Almighty as displayed in the Sense of Vision,' 8vo, London, 1851, being the Actonian Prize Essay for 1851. His papers in the scientific journals relate to the eye, the blood, and the earlier phases of development of the ova of mammals.

JOSIKA, MIKLÓS, or NICHOLÁS. [E. C. vol. iii. col. 658.] Josika published an historical romance, founded on the life of Franz Rakóczi II., 'Második Rákóczi Ferencz,' 4 vols., Pesth, 1861, and another entitled 'A Négváriak,' 3 vols., Pesth, 1865. In 1864 he removed to Dresden, where he died on the 27th of February, 1865.

JOUFFROY, THOMAS SIMON, called also THÉODORE, a distinguished French metaphysician, was born at the hamlet Des Pontets (Doubs) on the 7th of July, 1796; and, after receiving his earlier education at Pontarlier, became a student of rhetoric at the college of Dijon. He was admitted at the École Normale in 1814; and in 1817 became tutor in philosophy in that institution, with which office he conjoined a professorship at the Collège Bourbon, afterwards known as the Lycée Bonaparte. The liberality and independence of his opinions caused his deprivation in 1821, after which he opened, in the Rue Saint Honoré, classes for the study of philosophy which were attended by many of the most promising young men of the time. Here he trained the staff of 'Le Globe,' a philosophical and literary journal which he founded in 1824, in association with MM. Dubois and Damiron, and to which, up to the year 1830, he was one of the principal contributors. In 1826 he

published a translation of the Moral Philosophy of Professor Dugald Stewart, 'Esquisses de Philosophie morale de Dugald Stewart,' 8vo, Paris, which he followed by a translation of the Works of Reid, 'Œuvres complètes de Thomas Reid,' 6 vols. 8vo, Paris, 1828—36. In 1829 he became assistant professor of philosophy in the Faculty of Literature in Paris; professor-adjoint in 1830, and Master of the Conférences at the École Normale. From 1831 to 1838 he represented Pontarlier in the Chamber of Deputies, where he took part in various political discussions; became in 1833 a Member of the Académie des Sciences morales et politiques; and in 1840 a member of the Grand Conseil d'Instruction Publique. He died on the 1st of March, 1842. At his interment the funeral oration was pronounced by M. Victor Cousin.

The principal works of M. Jouffroy are his 'Mélanges Philosophiques,' 8vo, Paris, 1833, third edition, 12mo, Paris, 1860, a selection of articles which had been published in the 'Globe,' together with some inedited pieces under the divisions of 'Philosophie de l'Histoire,' 'Histoire de la Philosophie,' 'Psychologie,' and 'Morale'; 'Nouveaux Mélanges philosophiques: précédés d'une Notice, et publiés par Ch. Damiron,' 8vo, Paris, 1842, second edition, 12mo, Paris, 1861, a selection of articles which had appeared in the 'Recueil de l'Académie des Sciences Morales et Politiques,' and the 'Encyclopédie Moderne,' together with some inedited pieces; 'Cours du Droit naturel professé à la Faculté des Lettres de Paris,' 3 vols. 8vo, Paris, 1833—42, second edition, 2 vols. 8vo, Paris, 1843, third edition, 2 vols. 12mo, Paris, 1857; 'Cours d'Esthétique: suivi de la Thèse de l'Auteur sur le Sentiment du Beau et de deux Fragments inédits,' 8vo, Paris, 1843, second edition, 12mo, Paris, 1862, a work which was edited and introduced with a 'Preface' by M. Damiron. Besides contributing articles in history, geography, and general literature to the 'Globe,' Jouffroy was the author of some articles in the 'Revue des Deux Mondes,' and of one or two historical works.

Although adopting the general conclusions of M. Cousin, Jouffroy is by no means a repeater of his master's ideas, and has claims to be considered as an original scientific observer whose modes of thinking and developments are entirely his own. His thought is profound and accurate, and his style is of great transparency. He proclaims and vindicates the absolute and immutable distinction of right and wrong, the absolute law of moral obligation, and the idea of right in itself as the motive of moral action.

* JOULE, JAMES PRESCOTT, D.C.L., LL.D., was born in Salford, December 24, 1818, the son of Benjamin Joule, who carried on business as a brewer, and in which he assisted until 36 years of age, his spare time only being devoted to science. His scientific education consisted in attending private lessons by Dr. Dalton thrice a week for three or four years. These instructions implanted in him the desire of original research. His attention was at first directed to the electro-magnetic engine, and a description of one manufactured by himself appeared in the 'Annals of Electricity' for January, 1838. His researches on this subject showed the impossibility of substituting it for the steam-engine as an economical machine. The phenomenon of heat evolved by electricity followed naturally, the law of evolution being shown to be proportional to the resistance and the square of the quantity of current. Following up this fact, he ascertained in 1841 that the quantity of heat evolved by the combustion of the chemical equivalents of bodies is proportional to the intensities of their affinities for oxygen. These results indicated the mechanical nature of the origin of heat; and an elaborate series of experiments with electro-magnetic apparatus, in the year 1843, showed that, in an electro-magnetic engine, work is given out in proportion to the diminution of heat evolved by the zinc consumed in the battery. Also that the heat of the circuit per consumption of zinc can be increased by reversing the engine, so as to do work on the battery. These experiments established the fact that an equivalency existed between work and heat. This equivalent was at first stated to be 838 foot lbs. per unit of heat. But the simple method of agitating fluids afforded a much readier and more accurate means of determining this constant. Commencing in 1843, very numerous experiments were made with various fluids, the equivalent being finally placed at 772. Further experiments on the heat evolved by electricity passing through resistances measured absolutely, make him of opinion that this number is very slightly under the correct figure. The applications of the principle of the mechanical equivalent of heat thus discovered were numerous and interesting. The first of these was to the calorific phenomena observed on the

compression or rarefaction of air. Then the phenomena of shooting stars were explained. He also showed that the physical properties of gas could be explained by the motion of its constituent particles. In 1847 he formed the friendship of Professor, now Sir W. Thomson. With this eminent philosopher he commenced, in 1852, a series of researches on the thermal effects of fluids in motion, which have been extended over four memoirs, and are still in progress. A research on the effects of magnetism on the dimensions of iron and steel was commenced in 1840. These remarkable phenomena were made manifest to a large audience in the lecture-room of the Victoria Gallery of Manchester. Dr. Joule is the author of several new processes and instruments; in particular, he was the first to construct and use calibrated thermometers in this country, and to use small needles in tangent galvanometers. He is the constructor of an instrument for the delicate absolute measurement of currents of electricity, and of an instrument for observing the magnetic dip in which the needle is suspended on an original principle. Dr. Joule is a fellow of the Royal Societies of London and Edinburgh, a corresponding member of the Academy of Sciences of Paris, and a member of various other learned bodies.

* JOWETT, BENJAMIN, an eminent scholar and divine, was born at Camberwell in the year 1817; and after receiving his earlier education at St. Paul's school, became, in 1836, a scholar of Balliol College, Oxford, of which, whilst still an undergraduate, he became a Fellow in 1838. In 1837 he obtained the Hertford scholarship; and, having taken his B.A. degree in the first class of *Literæ Humaniores* in 1839, proceeded M.A. in 1842, in which year he was made a deacon by the Bishop of Oxford, who admitted him to priest's orders in 1845. In 1841 he carried off the Chancellor's prize for the best Latin essay, which was published with the title of '*De Etruscorum Cultu, Moribus, et Legibus, eorumque apud Romanos Vestigiis Oratio*, in *Theatro Sheldoniano habita*,' 12mo, Oxford and London, 1841. In 1842 he commenced his career as a tutor, the duties of which office he discharged with singular devotion and success. He was Examiner in the Classical Schools in 1849—51, and again in 1853; and he held the office of Moderator in 1859—60. In 1854 he was named a member of the Commission appointed to consider the examinations and terms of admission to be exacted from candidates for the Indian Civil Service, whose report, dated November, 1854, was conceived in the idea of securing the highest education and the most complete efficiency, and published with the title of '*The Indian Civil Service*. Report to the Right Hon. Sir Charles Wood, Bart., M.P., &c., by the Right Hon. T. B. Macaulay, the Right Hon. Lord Ashburton, the Rev. Principal H. Melvill, B. Jowett, Esq., and the Hon. the Speaker of the House of Commons,' 8vo, London, Calcutta, and Bombay, 1855. In the last-mentioned year, Mr. Jowett was appointed, on the recommendation of Lord Palmerston, to the Regius Professorship of Greek in the University of Oxford; and published his Commentary on '*The Epistles of St. Paul to the Thessalonians, Galatians, and Romans*,' 2 vols. 8vo, London, 1855, second edition, 1859, a work which, owing to the breadth of opinions therein expressed, occasioned him many years of opposition, controversy, and pecuniary loss. In 1860 he contributed to '*Essays and Reviews*' a remarkable article '*On the Interpretation of Scripture*,' in which he was charged with having denied the inspiration of the Bible, and its agreement with the creeds of the Church, as he had been said to have denied the Atonement in his Commentary. Various members of the High Church and rigidly orthodox party, having taken an opinion on the '*Case as to the Legal Position*,' &c., 8vo, London, 1862, proceeded to procure a citation which should compel Professor Jowett to appear in the Chancellor's Court, in the Apodyterium of the Convocation House, in February, 1863, there to answer certain articles or interrogatories touching his infraction of the Statutes and Privileges of the University, by having, in the years 1859, 1860, 1861, and 1862, written, uttered, or published, within the precincts of the University and elsewhere, a certain book entitled '*The Epistles of St. Paul*,' &c. In this book, and also in the article contributed to '*Essays and Reviews*,' Professor Jowett was charged with having "advisedly promulgated, maintained, declared and affirmed certain erroneous and strange doctrines, positions, or opinions, contrary to and inconsistent with the doctrines of the Church of England, the Thirty-nine Articles of Religion agreed upon in the Convocation holden at London in the year 1562, and the Catholic faith; thereby contravening the laws and statutes of the said University, and against the peace and

unity of the Church." The promoters of the citation prayed that the Professor, on legal proof of the charges, should be duly corrected and punished, and be inhibited from promulgating or publishing such erroneous doctrines or opinions. On the 20th of February, 1863, Mr. Jowett's proctor entered a formal protest against the jurisdiction of the court; and at the second sitting, on the 27th of the same month, the Assessor, whilst expressing himself with reserve and hesitation about the question of jurisdiction, expressed himself also as being perfectly clear as to the inapplicability of the statute under which the proceedings had been instituted. The case is given in detail in a pamphlet entitled '*Pusey and others v. Jowett*. The Argument and Decision as to the Jurisdiction of the Chancellor's Court at Oxford,' 8vo, London and Oxford, 1863.

Although the opponents of Professor Jowett were thus discomfited, they were powerful enough to perpetuate for two years longer an injury under which he had all along been suffering. The original endowment of each of the five Regius Professorships established by King Henry VIII. was a stipend of 40*l.* a year; and with this payment, so far as the Professors of Divinity, Hebrew, and Greek are concerned, the Dean and Chapter of Christ Church are charged, as being in possession of certain lands which were originally set apart for the emoluments of these chairs. It was long a cause of scandal and irritation, both within the University and without its limits, that the stipend of the Regius Professor of Greek was kept down to its original amount of 40*l.*, notwithstanding that no other professor had a smaller income than 400*l.*, and that the lands in question had so much increased in value that the canons of Christ Church, whose stipends were first fixed at 15*l.* each, were in actual receipt of eighty times as much, or 1200*l.*, per annum. It was contended that the Dean and Chapter were bound, legally and morally, to increase Professor Jowett's salary to at least the minimum amount enjoyed by other professors. The Attorney-General, however, and several other eminent lawyers were of opinion that the Christ Church authorities were under no obligation to increase the emoluments of the Greek chair; and it was, therefore, with great satisfaction that it became known, in February, 1865, that the Dean and Chapter, on the ground of "general expedience," and "considering the great difficulties which had, now for some time, attended the proposal to endow the Greek chair, had agreed to take such measures as might be necessary for increasing the yearly salary of the Regius Professor of Greek to the sum of 500*l.*" On the 7th of September, 1870, Mr. Jowett received the reward of thirty years of self-denying, devoted, and successful labour as a tutor, by his election to the Mastership of Balliol College, left vacant by the promotion of Dr. Scott to the Deanery of Rochester. The latest result of the diligence and scholarship of Professor Jowett is a work upon which he has spent a large proportion of his life, entitled '*Plato's Dialogues*, translated into English, with Analysis and Introductions,' 4 vols. 8vo, London and Oxford (Clarendon Press), 1871.

* JUAREZ, BENITO, President of the Republic of Mexico, was born at Tixtlan, in that country, in or about the year 1807. Although with some Spanish blood, he may more nearly be regarded as an Indian, being descended from the race of the Tapatecos. He studied law, and became an advocate at the bar, entered the Mexican Congress in 1846, and in 1848 was chosen governor of the State of Oaxaca. As a member of the liberal party, he was exiled during the dictatorship of Santa Anna, and lived at Havana and New Orleans from 1853 to 1855. On the restoration of republican government, under Alvarez, he was elected to the new Congress in 1856, and chosen President of the Supreme Court in the following year. In 1858, the clerical party overthrew the liberal President Comonfort; Juarez refused to recognise the usurper Zuluaga, retired to Vera Cruz, secured to himself the greater half of the customs' duties received at that port, set up a provisional government, and assumed the title of Constituent President. Miramon, who had supplanted Zuluaga as president of the republic, prepared to attack Juarez early in 1859. Juarez frustrated an attack made by Miramon at Vera Cruz in 1860, and defeated him at Miguelito. Miramon having fled to Europe, Juarez entered the city of Mexico, and in June, 1861, caused himself to be elected president of the republic for four years. Embarrassed by financial difficulties, he decreed the suspension, for two years, of indemnities due to England and France, which had been secured by the hypothecation of customs' duties. This proceeding, and the numerous outrages permitted to be made upon Europeans, led to an agreement between England, France, and Spain, and the sending of a

combined force by those powers. Vera Cruz was taken and held by the allies as security. England and Spain formally withdrew from the alliance in April, 1862, having obtained the avowed objects of their intervention; but the French remained. Juarez proclaimed a sort of guerilla war against the French, and contracted a loan with the United States Government for 25,000,000 dollars. The war became one in which Juarez was backed by the United States; while the clerical party, under Miramon and Almonte, were supported by the French. Juarez defeated the French at Puebla in May, 1862; he was defeated by them about a year later at the same place, and afterwards at Mexico and San Luis de Potosi; and in 1864 he removed his government to Monterey. Then it was that the French set up the hapless Archduke Maximilian as Emperor of Mexico under their protection. In 1865 Maximilian issued a decree, announcing the extinction of the republic, and sentencing to death all Juarists taken in arms. The United States, friendly to Juarez, and not wishing to see an empire under European protection close to their frontier, assumed so threatening an attitude, that in 1866 the French withdrew from Mexico altogether, leaving the new emperor to struggle on alone. The struggle was not of long continuance; he was defeated at Queretaro, taken prisoner, and put to death by Juarez (June 19th, 1867). Mexico and Vera Cruz being recovered, Juarez was re-elected president in October. There were many revolts in 1868, some headed by Ortega; but they were suppressed. In April, 1869, with the consent of his Congress, he proclaimed an amnesty for all the adherents of Maximilian; and about the same time removed some of the restrictions which had been laid upon the press. On opening the 15th Congress of the Republic of Mexico, in September, 1869, President Juarez congratulated the country on being at peace at home and abroad.

JUKES, JOSEPH BEETE, geologist, was born near Birmingham, October 10, 1811. He was educated at the Merchant Taylors' School, Wolverhampton; King Edward's School, Birmingham; and at St. John's College, Cambridge, which he entered in 1830, taking his B.A. degree in 1836, and his M.A. degree in 1841. Professor Sedgwick's genial enthusiasm did much to induce him to devote himself to geology, and his earliest papers consist of sketches of the geology of Leicestershire, Derbyshire, and Staffordshire, in 'The Analyst' for 1838 and 1839. In 1839 he was appointed geological surveyor of Newfoundland, and the results of his researches there were published in 'Excursions in and about Newfoundland during the years 1839 and 1840,' 2 vols. 12mo, London, 1842. In 1842 there also appeared his account of the geology of Charnwood Forest, in Potter's history of that district. From 1842 to 1846 he was engaged as naturalist on board H.M.S. Fly, which had been sent to survey the great barrier reef along the east coast of Australia. The results obtained by him appeared in a 'Narrative of the Surveying Voyage of H.M.S. Fly,' 2 vols. 8vo, London, 1847. This work contains a large fund of information relative to coral reefs, the distribution of mollusca, physical geography, and other branches of science. In September, 1846, he joined the Geological Survey of Great Britain, and did good service in assisting to survey North Wales, which occupied his summer months, while during the winter he was engaged in surveying the South Staffordshire coal field. This last work resulted in one of his most important contributions to literature, viz., the Geological Survey memoir entitled 'The South Staffordshire Coal Field,' 8vo, London, 1853, 2nd ed. 1859. In 1850 he succeeded Professor Oldham as Local Director of the Geological Survey of Ireland, in which capacity he directed the survey of about one-half the area of Ireland, and contributed to most of the memoirs explanatory of the maps resulting from that survey. For many years he was professor of geology to the Royal Dublin Society, and to the Royal College of Science in Dublin. This occupation led to his writing several educational works, such as 'Popular Physical Geology,' 8vo, London, 1853; 'The Student's Manual of Geology,' 12mo, Edinburgh, 1857, 2nd ed. 1862, forming an excellent book of reference, and one or two others. At the time of the earliest gold discoveries in Australia he lectured and wrote on the geology of that continent. He wrote numerous scientific papers, mostly geological. The most noteworthy are those 'On the formation of some of the river valleys in the south of Ireland,' in 'Quarterly Journal Geol. Soc.' xviii., pp. 378—403 (1862), in which he advocated the view that those valleys have been cut through high ridges by the rivers, which originally flowed on a level with the summit of those ridges, and have gradually deepened their beds; and on the carboni-

ferous slates of Ireland, and the Devonian rocks of England, in which he attempted, though unsuccessfully, to prove that the Devonian rocks of Devonshire are of carboniferous age. In 1866 his health broke down, and, although he rallied somewhat, his disease gained on him, and carried him off on August 1, 1869.

JULIEN, STANISLAS-AIGNAN [E. C. vol. vi. col. 1008].

JUNG, JOACHIM, naturalist, was born at Lübeck, Oct. 21, 1587. His education was conducted amidst great difficulties, owing to poverty. For five years he was professor of mathematics at Giessen, which post he quitted owing to his strong predilection for natural history. In 1618 he settled at Rostock, and proposed to found a society for advancing the natural sciences, a proposal which exposed him to much opposition, on the supposition that he was one of the chiefs of the Rosicrucian brotherhood. The intrigues against him prevented him from obtaining a professorship till 1624, and soon after compelled him to quit Rostock. He returned in 1626, and in 1629 he finally left the place, and lived for the rest of his life, which ended September 23, 1657, at Hamburg, where he filled the position of rector of St. John's School. Jung wrote largely on philosophy, mathematics, minerals, invertebrates, and botany, but, owing to a fire many of his works have been lost or rendered very scarce. Those that exist were collected by J. P. Albrecht, under the title of 'Opuscula Physica botanica,' Cobourg, 1747. Jung was probably the first botanist who saw the necessity of a binomial nomenclature, but this detracts in no way from the merits of Linnaeus, who not only had the same idea, but fully developed it without being aware of Jung's opinion. Jung also seems to have acquired a sufficient mastery of the specific differences of plants to form some notion upon what characters a good classification should be based.

JUNGHUHN, FRANZ WILHELM, naturalist, was born at Mansfeld, in Prussian Saxony, October 26, 1812. Early in life he entered the Prussian army as a surgeon, but owing to a duel he was imprisoned for nearly two years. He afterwards joined the Dutch army in Java, and in 1836 commenced the long series of investigations into the natural history of Java upon which his reputation is based. His principal works are a 'Java Album,' oblong fol., Leipzig, 1856; 'Java, deszelfs gedaante bekleedende en invindige structuur,' 4 vols. 8vo, and fol. atlas, Amsterdam, 1850—1853; 'Topographische und naturwissenschaftliche Reisen durch Java,' 8vo, and oblong fol. atlas, Magdeburg, 1845. The Dutch work on Java was translated into German by Hasskarl, and published at Leipzig in 1852; it contains the best account known of the geology and volcanoes of Java. He collected a large number of plants, which were described by himself, Göppert, De Vriese, and others, in 'Plantæ Junghuhnianæ,' 8vo, Leyden, 1851. He also wrote numerous papers in Dutch and German periodicals on the plants and physical geography of Java. He died at Lombang, April 24, 1864.

JUSSOW, HEINRICH CHRISTOPH, German architect, was born at Cassel, October 9th, 1754. He was educated with a view to the law; but preferring architecture, he in 1780 went to Paris, where he studied for two years under Wailly; then spent some time at Rome, Naples, &c., investigating the principal buildings, and finally, by order of the Landgrave of Hesse-Cassel, Wilhelm IX., proceeded to England to make himself acquainted with the laying out of the parks and gardens. Returning to Cassel in 1790, he was appointed director of public works; added a new wing to the Palace of Wilhelmshöhe, and laid out the adjacent park; built a city gate, the Friedrichsthor; a church at Neustadt, &c. During the French occupation, Jussow was continued in his office by King Jerome Bonaparte, for whom he designed the so-called Chinese Gallery. On the return of Wilhelm, now elector, Jussow was commissioned to build the new Palace of Haltenburg, at Cassel, on a vast scale; but only the ground story was completed at the death of Wilhelm in 1821, and it has not been carried farther. Jussow died, July 26th, 1825.

JUSTUS OF PADUA, an eminent Italian painter, whose real name was Justus or Giusto di Giovanni de' Menabuoi, was born at Florence in the second quarter of the 14th century. He was a follower, though not a scholar, of Giotto; settled in Padua, where he was admitted a citizen in 1375; executed numerous frescoes in the churches of that city, and died there September 29th, 1400. Easel pictures by him are rare. The National Gallery possesses a small but very interesting triptych by him, No. 701, 'The Coronation of the Virgin,' with representations of the principal events in her life. It is on panel and bears on the plinth the date 1367. It formed a portion of the

Oettingen Wallerstein Collection presented by the Queen to the National Gallery in 1863.

JUVARRA, FILIPPO [IVARA, F., E. C. S.].

JUXON, WILLIAM, an English prelate of the 17th century, was born in the year 1582, and was educated at the University of Oxford, in which he served the office of Vice-Chancellor in 1626. On the 29th of November, 1621, he was elected President of St. John's College, in the chapel of which he was buried. He was made Dean of Worcester in January, 1628; was elected to the Bishopric of Hereford in 1633, but before his consecration was preferred, October 23rd, to the see of London. He was appointed to be High Treasurer of England on the 6th of March, 1635, and held this office till 1641. He suffered, in common with other bishops, during the rebellion and the Commonwealth, and retired to his manor of Little Compton, in Gloucestershire. A few months after the

Restoration he was translated, September 20th, 1660, to the see of Canterbury; in the incumbency of which he died at Lambeth on the 4th of June, 1663, and was interred in St. John's College chapel, Oxford, on the 9th of July following. The archbishop owes his principal claim to notice to the circumstance of his having attended King Charles I. in his last moments; and he deserves to be remembered for the faithful counsel which he gave the same unhappy sovereign, when consulted by him as to the attainder of Strafford—"not to do anything against his conscience for the world." His very scanty contributions to literature include 'The Subjects' Sorrow: or, Lamentations upon the Death of Britain's Josiah, King Charles. A Sermon,' 4to, London, 1649; and 'Some Considerations upon the Acts of Uniformity: with an Expedient for the Satisfaction of the Clergy within the Province of Canterbury. By a Servant of the God of Peace,' 4to, London, 1662.

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KALKBRENNER, CHRISTIAN, German composer and musical writer, was born September 22nd, 1755, at Minden, Hanover. His father, Michael, a musical professor, placed him, at the age of fifteen, under Becker, court organist at Cassel; lessons on the violin were also given to the youth by Rodwald; and at the age of seventeen young Kalkbrenner entered the chorus at the Opera. In 1777 a symphony won for him a gift of fifty thalers from the landgrave, and a mass for four voices was favourably received by the Philharmonic Academy of Bologna. He was appointed kapellmeister at Berlin, in 1788; and afterwards to a similar post, under Prince Henry of Prussia, at Rheinsberg. Turning his attention to French opera, he composed 'La Veuve du Malabar,' 'Démocrite,' 'La Femme et le Secret,' and 'Lanassa.' After a few months' sojourn at Naples he settled at Paris, filled a post at the Opera, and remained there till his death, which took place August 10th, 1806. Besides the operas above mentioned, Kalkbrenner composed 'Cenone,' 'La Descente des Français en Angleterre,' 'Olympie,' and minor pieces for the stage. With Lachnith he produced two Oratorios, 'Saul,' and 'La Prise de Jericho,' French adaptations of German models. Many other pieces of music were composed by him; but he is chiefly known as a musical writer of four works—'Theorie der Tonsetzkunst, mit 13 Tabellen,' 8vo, Berlin, 1789; 'Kurzer Abriss der Geschichte der Tonkunst, zum Vergnügen der Liebhaber der Musik,' 8vo, Berlin, 1792; a book which formed the basis for a larger work in French, 'Histoire de la Musique,' 2 vols. 8vo, Paris, 1802. Both works are, however, so full of errors as to be of little value. A more useful, though not original, work was a new edition of the treatise by Richter, 'Traité d'Harmonie et de Composition, par Fr. Xav. Richter; revu, corrigé, augmenté, et publié avec quatre-vingt-treize planches,' 4to, Paris, 1804. His son,

FRIEDRICH WILHELM KALKBRENNER, was born at Cassel in 1784. After studying music at Cassel and Naples, he entered M. Adam's piano class in the Conservatoire at Paris in 1798, and studied harmony under Catel in the following year. Visiting Vienna in 1805, he closely studied the style of pianoforte fingering introduced by Clementi; and on returning to Paris in the following year, he attracted notice by the brilliancy of his playing. After eight years of composing and teaching in Paris, he spent 1814 to 1823 in London. His services were in constant requisition as a teacher of the pianoforte; he was engaged all day long giving lessons at the rate of one guinea for forty minutes. In 1818 he joined Logier in introducing the "chiroplast" method of teaching the pianoforte; concerning which he wrote 'Méthode pour Apprendre le Piano-forte à l'aide de guide-mains,' &c., which was speedily translated into English, German, and Italian. In 1823 Kalkbrenner joined Dizi, the harpist, in a musical tour in Germany. In 1824 he and Camille Pleyel established a pianoforte factory at Paris, which, like most of his undertakings, was a source of emolument to him. In later years he paid successful visits to England, Belgium, France, and other countries. His compositions for the pianoforte were very numerous, but displayed little originality. He died at Paris, June 11th, 1849.

KALL, ABRAHAM, a Danish historian and philologist, son of the orientalist, Professor Johan Christian Kall, and descending from a German family, was born on the 2nd of July, 1743, at Aarhus, in Jutland. After receiving his earlier education from his father, he repaired in 1763 to the University of Göttingen, from which he returned after a three years' stay to Copenhagen. After filling various offices of minor importance in the university of the latter city, he was appointed, in September, 1770, to the professorship of Greek, which he exchanged in 1781 for that of history and geography. He was soon afterwards appointed to the newly-instituted chair of mythology and art-history at the Academy of Arts; a post which he resigned about the year 1808. In the course of his life he filled various extra-academical offices, having been a member of the Royal commission on public instruction, a member of the Royal Academy of Sciences at Copenhagen, and historiographer of the kingdoms of Denmark and Norway. He died at Copenhagen on the 5th of December, 1821, having contributed articles of learning and interest to various periodicals, and having published several works of value in Greek philology, and in the history and antiquities of his native country.

KANE, ELISHA KENT, Arctic voyager, was born at Philadelphia, February 3, 1822. As a boy, he was averse to all systematic restraint, and so repugnant to him was the usual routine of education that he derived little benefit from his schooling. He, however, contrived to pick up a considerable fund of knowledge, since his delight was to make chemical experiments, contrive mechanical toys, study the weather from the tops of trees and houses, and to amuse himself with perilous enterprises involving courage and agility. When about 16 he began to feel the necessity of preparing for some occupation, and, selecting civil engineering, he sought admission to Yale College, but found his studies were not sufficiently advanced. He went to the University of Virginia, where he devoted himself more especially to geology and the allied sciences, but always worked with a view to civil engineering. His intense application brought on so severe an illness that he was compelled to leave the university after having been there a year and a half. In his eighteenth year he had inflammation of the lining membrane of the heart, and for a long while his life was despaired of, and when he recovered strength he was told that he was liable to be carried off at any moment. Indeed, the heart disease never left him, and he ultimately died from it. The result of his illnesses so weakened his constitution that his friends considered he could not follow the profession of an engineer, and persuaded him to adopt that of medicine in order that he might be able to manage his own case. He was placed with Dr. Harris, and in 1840 was elected a resident physician in the Pennsylvania Hospital at Blockley. While occupying this position his health was very delicate, and he could only sleep with the body in a raised position. Although constantly contemplating sudden death, he was buoyant in spirits and enthusiastic in the performance of his duties. In 1841 he became one of the four senior resident physicians of the hospital. Soon after this he graduated in medicine, and wrote a thesis which was

much applauded. The hospital life proving to be too sedentary an employment for him, he obtained the post of physician to an embassy to China. On the voyage to China he stopped at several places, and frequently made inland excursions of great length, which were generally spiced with some personal adventure or bold piece of daring. Thus from Rio de Janeiro he went to the eastern Andes of Brazil; while at Bombay he went to the cave temples at Karli and into Ceylon; and while at Macao he visited the island of Luzon, and went down into the crater of Taal volcano for the purpose of collecting some of the water in it—a feat which was exceedingly difficult, and nearly cost him his life. In August, 1844, the embassy returned home, but he, wishing to explore some of these eastern regions, resigned his post of physician, intending to practise his profession in China until he had collected funds sufficient to defray his travelling expenses. About the end of 1844 he was struck down by a fever, which compelled him to relinquish his plan and return home. He sailed for Europe in January, 1845, visited Singapore, spent some months in exploring India, and, joining the suite of Dwaganoth Tagore, he accompanied that prince through Persia and Syria to Egypt on his way to a visit to England. The prince proceeded to Europe, but Dr. Kane resolved to make a tour through Egypt, and he visited most places as far south as Sennar. He made large collections of antiquarian and natural objects, but these, together with nearly all his property were lost by the upsetting of his boat. On reaching Alexandria he had an attack of the plague. On recovering from this he walked through Greece, and then passed rapidly through Italy, France, and England from whence he took ship to the United States. Arrived at home, he offered himself for active service, hoping he would be sent to Mexico, with which country war had been declared by the United States; he was sent to Africa, where he visited the King of Dahomey, and early in 1847 he caught the coast fever, which left him in so reduced a condition as to compel his being sent home as the only chance of saving his life. For several weeks after reaching home he was confined to his room, but as soon as he found strength to walk about he requested permission from his Government to proceed on duty to Mexico. He went, charged with the conveyance of some important messages which previous individuals had failed to carry to their destination. His journey was a perilous one, and he got engaged in a conflict in which he displayed extreme courage and force of will, but one result of which was that he was wounded in the abdomen, and laid up with typhus fever. The medical attendants announced his case hopeless, but after some weeks he rallied and so far recovered as to permit of his going about. In 1849 and 1850 great efforts were being made to find Sir John Franklin; Dr. Kane's enthusiasm to join in the search impelled him to offer his services, which were accepted, and he joined the expedition under De Haven. The expedition left New York in May, 1850, and returned in September, 1851. Notwithstanding Dr. Kane's broken-down constitution, his indomitable will and unflinching courage bore him up, and carried him through the hardships incident to a winter in the Arctic regions. In 1852 and 1853 he wrote his account of the voyage with a view to stir up public sympathy and support in favour of another search. Book writing, lecturing, and preparations for a second Arctic voyage broke his strength down more than once. In 1853 he again started for the North, and sailed up Smith's Straits, but was obliged to return home without finding the object of his search. He reached New York in November, 1855. Although the primary object of this expedition was not attained, he and his party, including Messrs. Hayes, Sontag, and Brookes, added considerably to our knowledge of the northernmost reached portions of Greenland. His crew went farther north than any previous travellers had been, and discovered a large sheet of open water. A full account of this voyage is given in *E. C. S. GEOG. DIV., art. NORTH POLAR COUNTRIES*. In 1856 he was busily occupied in drawing up his narrative of his second polar expedition. As soon as it was finished, though in very feeble health, he sailed for England, but there cold and fogs were so prejudicial that he started for Cuba. On the voyage he was seized with paralysis, which deprived him of the use of his limbs and tongue. He lingered for some weeks after reaching Havana, where he died February 16, 1857. His books comprise two narratives, one entitled 'The U.S. Grinnell Expedition in Search of Sir J. Franklin,' 8vo, London, 1854; and 'Arctic Explorations: the Second Grinnell Expedition in Search of Sir John Franklin, 1853—4—5,' 2 vols. 8vo, Philadelphia, 1856. These were the popular accounts of his voyages, but his intention was, if possible, to publish full details

of the scientific observations he had made. Biographies of him have been written by Dr. Elder, Dr. M. Jones, and Mr. Smucker; while shorter notices occur in most of the dictionaries and in several presidential addresses.

KAPELLER, JOSEPH ANTON, Austrian painter and engraver, was born at Imst, in the Tyrol, in 1760, and educated at Vienna. In 1787 he went, at the invitation of Prince Jablonowsky, to Warsaw, where he remained till the capture of that city (1794), when he settled in Vienna, practised painting in oil, crayons, and miniature, as well as engraving; and, in conjunction with Holer, founded an artistic establishment, at which many superior works were produced, and in which H. Rahl, and other excellent engravers were trained. In 1802 he removed to the neighbourhood of Gratz, where he died in 1806. Out of Austria Kapeller is best known by his engravings of Tyrolese scenery and costumes, but he has the reputation of being a good designer and colourist.

KARAJICH, VUK STEPHANOVICH [*E. C.* vol. iii. col. 684] died February, 1864.

* KATE, HERMAN FREDERIK CAREL TEN, a distinguished Dutch painter, was born at the Hague, on the 22nd of February, 1822. He was a pupil of Cornelis Kruseman, but completed his professional studies at Paris, and then settled in Amsterdam. His pictures are usually representations of incidents of a semi-historical character, as 'Calvinist Prisoners, time of Louis XIV.,' 'Council of War, 17th Century,' in the Museum, Rotterdam; interviews, with incidents of a soberly humorous kind, like 'The Surprise,' 'The Marquis's Levee,' and 'Political Discussion;' or busy out-door scenes, as 'Sunday Mornings, Isle of Marken,' and 'The Fête Champêtre.' They are mostly small in size, and painted with great care, taste, and skill, and amply justify the esteem in which he is held by his countrymen.

KEAN, CHARLES [*E. C.* vol. iii. col. 693]. In 1859 appeared, in two octavo volumes, 'The Life and Theatrical Times of Charles Kean, F.S.A.; including a Summary of the English Stage for the last Fifty Years, and a Detailed Account of the Management of the Princess's Theatre, from 1850 to 1859.' By John William Cole, an ill-written but curious work compiled for Mr. Kean, and from materials supplied by him. To this book the reader desirous of fuller information about the actor and manager will do well to refer: the foolish and indiscriminate praise will not disguise the weakness nor altogether conceal the good qualities of the actor or the man, and the book altogether throws much light on the career of a prosperous performer and on the state of the stage during the period to which it refers. Mr. Kean retired from the management of the Princess's Theatre in 1860. A few months later, a public dinner was given to him as a mark of the esteem in which his private and professional career was held. It was presided over by the late Duke of Newcastle, and it was said that 600 noblemen and gentlemen were present; and, shortly afterwards a service of plate, of the value of 2000*l.*, was presented to him at a meeting at which Mr. W. E. Gladstone took the chair. Mr. Kean played subsequently in London and the provinces, and in 1863 made, with Mrs. Kean, a visit to California, and other parts of the United States, Canada, Panama, Jamaica, and Australia, returning in 1866. By this tour he is said to have realised upwards of 20,000*l.*; but he returned in broken health, and died on the 23rd of January, 1868. He was born on the 18th of January, 1811.

KEBLE, REV. JOHN [*E. C.* vol. iii. col. 695]. In 1859 Mr. Keble developed his views on Eucharistic Adoration in a work entitled 'The Worship of Our Lord and Saviour in the Sacrament of Holy Communion,' which has since passed into a third edition. In 1863 appeared, as a part of the Anglo-Catholic Library, his 'Life of Thomas Wilson, D.D., Lord Bishop of Sodor and Man,' a work on which he had been long occupied, and which was, as stated on the title-page, "compiled chiefly from original documents." The work is carefully and well executed, but it deals much more with the bishop than with the man, and especially with that portion of his labours to which the bishop and his biographer attached most importance—his persistent efforts for the revival of church discipline. Keble's health in these years was very feeble, and he was constrained, more, however, on his wife's account than his own, to spend his winters away from Hursley, in one or other of the warm sheltered sea-side retreats of Devon, Cornwall, or Dorset. During the winter of 1865—66 he was at Bournemouth, watching with tender assiduity the flickering health of his wife, who seemed to be fast hastening to the grave. But Keble was the first to be released. He died on the 29th of March, 1866; his

wife followed him on the 11th of May, and they were laid side by side in Hursley churchyard. Keble's death was widely mourned. He was regarded as the originator of the Oxford Tract movement,—in the words of his biographer, "John Keble was its true and primary author,"—and of the revival of confession in the Church of England, and this caused some to look on him with distrust, but even those who differed most from him in doctrinal views venerated the author of the 'Christian Year,' and recognised in his saintly life the ideal parish priest and Churchman. Up to the time of his death his 'Christian Year' retained its extraordinary popularity; "in the nine months immediately following his death seven editions were issued of 11,000 copies" (Coleridge), and there has been a steady continuous demand for it ever since. It is the devotional companion of persons of all sects, and is almost as much in favour in America as in England. Since his death a Selection from his Poems and one or two volumes of his parochial sermons have been published. The only important work not mentioned in the original memoir was his standard edition of Hooker's Works, prepared for the Delegates of the University Press, Oxford, 1836, the preface, notes, and text of which are alike admirable for learning and candour.

Shortly after Mr. Keble's death a meeting of his friends and admirers was held at Lambeth Palace, under the presidency of the Archbishop of Canterbury, to consider the propriety of raising a suitable memorial to the author of the 'Christian Year.' The proposal was warmly responded to, and, subscriptions being offered with remarkable liberality, it was determined that the memorial should take the form of a new college at Oxford, which should bear Mr. Keble's name, be distinct from, and in its government independent of any existing foundation, and have for its specialty the training of young men in simple and religious habits and strict fidelity to the Church of England. The preliminary steps necessary to the inception of such an institution occupied much time, but on the 25th of April, 1868, the first stone of Keble College was laid by the Archbishop of Canterbury, and in 1870 the building was opened for students: the college has not yet been formally admitted into union with the University, but the act giving it its legal status will be proposed at the Convocation to be held April 18, 1871. The buildings at present completed, which are of parti-coloured bricks and of an early Gothic character, designed by Mr. Butterfield, provide rooms for a hundred students, but the hall, chapel, and gatehouse are only provisional.

(*Memoir of the Rev. John Keble, M.A.*, by the Right Hon. Sir J. T. Coleridge, D.C.L., 1869.)

KEITH, HON. JAMES FRANCIS EDWARD, a field-marshal in the Prussian service, the younger son of William, ninth Earl Marischal of Scotland, was born at the family seat of Inverugie Castle, in Aberdeenshire, on the 11th of June, 1696. He was originally destined for the profession of law, and was sent to Edinburgh for the prosecution of his studies in that faculty. But his inclination led him to a military career; and sharing in the pique and disappointment of his brother, the Earl Marischal, and other members of the Tory party, at their non-employment under the new dynasty, and instigated by his mother, who was a Catholic, he declared for the Pretender at the commencement of the insurrection of 1715. He was wounded at the battle of Sheriff-muir, November 13th, 1715; and, a few months after, escaped from the Hebrides to France, where he landed on the 12th of May, 1716, at St. Paul de Léon, in Brittany. He repaired at once to Paris, and continued there in pursuance of his military studies, until the beginning of the year 1718; having, in June, 1717, endeavoured unsuccessfully to obtain service from Peter the Great, of Russia, who was at that time in Paris. Early in 1719 he went to Madrid, and received a colonel's command in the expeditionary force sent out by the King of Spain for the restoration of the Stuart family in Great Britain. The enterprise came to an end by the defeat at Glen-shields on the 10th of June, and the surrender of the Spaniards on the following day to General Wightman. Keith escaped, after many dangers and difficulties, to Madrid. In October, 1722, he accompanied the Duke of Liria to Paris, and continued there until the beginning of 1725, when he once more returned to Spain. Finding his Protestantism to stand in the way of his employment and promotion in the Spanish service, he secured a recommendation from the King of Spain to the sovereign of Russia, who honoured it by admitting Keith into that service as major-general, in the commencement of 1728. Keith now repaired to Moscow; and, soon after his arrival in Russia, was promoted to the command of a regiment of guards, and was

further preferred to be one of three inspectors of army details, receiving as his department the frontier of Asia, with the country on both sides of the Volga and the Don, together with part of the frontier of Poland. In 1734, Keith had attained the rank of lieutenant-general; and highly distinguished himself against the Turks in 1737, especially at the taking of Oczakow, where he was severely wounded in the knee. In 1741 and 1742 he commanded against the Swedes, especially distinguishing himself in the former year by his victory in the fiercely contested battle of Williamstrand. At length, after a career of many years in the service of Russia, which had been signalised by valour, conduct, and great results, and which had been rewarded with various honours and with a fame that was spread all over Europe, Keith accepted, in 1747, an offer made to him by Frederick the Great, of Prussia, by whom he was raised to the rank of field-marshal, and invested, in 1749, with the governorship of Berlin and the order of the Black Eagle, with a pension of 12,000 dollars besides his pay. He was honoured with the intimacy and confidence of the king, to whom he acted as a trusted counsellor in the most momentous affairs whether of peace or war, and as a principal companion in times of relaxation and amusement. After a series of important services in the war which Frederick waged against Austria, Keith attained his final distinction as a brave soldier and a great commander, at the battle of Hochkirchen; where, at the head of the Prussian infantry, he obstinately maintained the combat against the whole weight of the Austrian army. Though wounded, he refused to quit the field; and, having by his persevering valour, repulsed the Austrians, was already in pursuit of them, when he received a fatal bullet in the breast, on the 14th of October, 1758. Marshal Keith left an interesting but unfinished autobiography, which has been lately edited for the Spalding Club, by Mr. Constable.

KELLER, JEAN BALTHAZAR, Swiss sculptor and bronze founder, was born at Zurich, in 1638. He was brought up as a goldsmith, but having studied sculptural design, joined his brother, who was a cannon founder at Paris. Jean Keller soon came to be regarded as an able designer, and as the most skilful founder of his time. To him were entrusted the execution of several of the bronze statues for the garden of Versailles, and various works for the royal palaces; but his most important undertaking was the casting of Girardon's colossal equestrian statue of Louis XIV., which was regarded as the greatest achievement of its kind in modern times. This immense work, which with its bronze pedestal was twenty-one feet high, and weighed sixty thousand pounds, was cast by Keller at once, or in a single jet, and with entire success. An account of the process was published by G. Boffrand, 'Description de ce qui a été pratiqué pour fondre d'un seul jet la Statue Equestre de Louis XIV. en 1699.' The statue was erected in the Place Vendôme, but was destroyed by the populace in 1792; it is now only known by the engraving of it by M. Simonau. Keller was in 1697 appointed director of the royal foundry, and inspector of the foundries at the various arsenals. He died at Paris in 1702.

* KELLER, JOSEPH, German line engraver, was born March 31st, 1811, at Linz, on the Rhine, and studied in the Düsseldorf Academy. Herr Keller is one of the ablest engravers of the day. He has a good eye for colour and chiaroscuro, works with a firm yet delicate line, and employs indifferently, with skill and freedom, the dry point, the needle, or the burin, in order to produce the effect he desires. He is known by various prints after Overbeck, including 'The Triumph of Religion,' 'The Four Evangelists,' &c.; also by a 'Salvator Mundi' and 'Regina Cœli,' after Deger; 'The Holy Woman,' after Raffaele, &c.; but his masterpiece is his large plate (thirty-six inches by twenty-four) from Raffaele's famous 'Dispute of the Sacrament,' a work which cost him twelve years of labour, and which stands out among the best modern productions of the burin. Keller was appointed professor of engraving in the Düsseldorf Academy in 1839, and elected a corresponding member of the French Institute in 1859.

KELLERHOVEN, MORITZ, painter and engraver, was born in 1758, at Altenrath, in the Herzogenberg; studied in the Düsseldorf Academy and at Antwerp, and practised for a while in Vienna. In 1804, after visiting Italy, he returned to Bavaria, where he was appointed court painter, and in 1808 professor in the Academy of Munich. Kellerhoven painted several historical pictures, but he is best known as a portrait painter. His portrait of Maximilian-Joseph in the senate house, Munich, is

much admired. He painted numerous portraits of the king and of different members of the royal family and other notables of Bavaria. Kellerhoven engraved several of his own portraits, and some pictures by the old masters. He died in 1830.

KELLY, MICHAEL, singer and musical composer, was born in 1764 at Dublin. When a mere boy he played the pianoforte with great facility, and was taught singing by Rauzzini. He entered the Conservatorio at Naples at the age of sixteen, stayed there five years, and studied singing under Fenaroli and Aprile. He performed with success as a tenor singer at Leghorn, Florence, and Venice; then went to Vienna, where Mozart composed for him the music of Basilio in 'Le Nozze di Figaro.' After this continental experience, Kelly returned to England in 1787, and acted as principal tenor at Drury Lane Theatre in the (now forgotten) opera of 'Lionel and Clarissa'; he also sang at the King's Theatre and at the Concerts of Ancient Music; but the later years of his life were mostly passed in the duties of musical director of Drury Lane Theatre, and director of the King's Theatre. Between 1797 and 1819 he composed no less than sixty operas and musical dramas, mostly of a light and lively character. Those of which the names are best known at the present day are the 'Castle Spectre,' 'Blue Beard,' 'Of Age To-morrow,' the 'Forty Thieves,' 'Love Laughs at Locksmiths,' and 'We Fly by Night.' It is very rarely that any of them are now performed; while they are wholly unknown on the Continent. Some of the separate songs, however, are still in favour for their sweetness of melody. It was said by his detractors that he made rather too free use of the music of Italian and German operas, and when he set up as a wine merchant Sheridan suggested that he should inscribe over his door, "Michael Kelly, Composer of Wine and Importer of Music." Shortly before his death he published 'Reminiscences of Michael Kelly, of the King's Theatre and the Theatre Royal Drury Lane, including a Period of nearly half a Century; with Original Anecdotes of many Distinguished Personages, Political, Literary, and Musical,' 2 vols. 8vo, 1826. It is an amusing farrago, but not entirely trustworthy: for this, however, Kelly was only in part responsible; he furnished the materials, but the book was written, or remodelled throughout, by Theodore Hook, without much regard to plain fact. Kelly died October 9th, 1826.

KEMBLE, JOHN MITCHELL [E. C. vol. iii. col. 699]. Mr. Kemble published in 1857, 'State Papers and Correspondence, illustrative of the social and political state of Europe from the Revolution of 1688 to the accession of the House of Hanover,' illustrated by a valuable introduction and notes. He lived to publish no more, dying prematurely at Dublin on the 26th of March, 1857; but he had for some time been engaged on a work of much research and erudition, 'Horæ Ferales, or Studies in the Archæology of the Northern Nations,' which was completed by Dr. Latham, and published in 1864.

KEMPELEN, WOLFGANG VON, was born at Pressburg, 23rd January, 1734. His name has become celebrated from its association with the famous automaton chess-player, as it is improperly called, since it is not a machine performing its work by automatic means, but a deception or conjuring apparatus for concealing a living player. Von Kempelen was Aulic Counsellor to the Royal Chamber of the Domains of the Emperor of Germany, and being at Vienna in 1769, on business relative to his office, he witnessed some magnetic games or performances which were being shown to the Empress Maria Theresa. During the exhibition the Empress conversed with Von Kempelen, and he ventured to hint that a machine might be made of a more surprising and deceptive character than anything she had seen at this magnetic exhibition. He was requested to undertake the invention, and at the end of half a year he again appeared at the court of Vienna, in company with his so-called automaton. He had been led to the idea of a chess-playing machine by the fondness of the Empress for the game, which he had frequently played with her.

It is not necessary in this place to describe the deception; it will be sufficient to refer to Tomlinson's 'Amusements in Chess' (1845), the sixth chapter of which contains a minute account of the whole affair, together with specimens of the games played by the automaton during its visits to London.

Von Kempelen's real skill as a mechanic has been overlooked in the interest felt in this toy. In 1778 he produced a speaking machine in which a bellows, when set in motion, gave sounds as of a child of three or four years of age, uttering distinct syllables and words. In 1791 he published at Vienna a work on the Mechanism of Human Speech, illustrated by twenty-seven copper-plate engravings. He died at Vienna, 26th March, 1804.

BIOG. DIV.—SUP.

KEN, THOMAS, an Anglican divine and poet, the son of a solicitor, of Furnival's Inn, who descended from an ancient family seated at Ken Place, in Somersetshire, was born in July, 1637, at Berkhamstead, in Hertfordshire, and received from his "virtuous parents, an education pious, careful, mild." Anne, the elder of his two sisters, was married to Izaak Walton, the famous angler and biographer. On the 30th of January, 1651, he was admitted to Winchester College; and in 1656, in default of a vacancy at New College, he was entered of Hart Hall, which then occupied the site of the present Magdalen Hall, Oxford. He took his bachelor's degree on the 3rd of May, 1661; proceeded M.A. on the 21st of January, 1665; and became B.D. and D.D. respectively on the 6th of July, 1678, and the 30th of June, 1679. He received ordination soon after taking his B.A. degree; and on the 17th of August, 1663, was admitted, on the presentation of William, Lord Maynard, to the living of Easton Parva, which he resigned early in 1665. In 1666, he was elected to the vacant fellowship in Winchester College; and, upon his going to reside there, was welcomed by Bishop Morley, to whom he became domestic chaplain, and by whom he was preferred to the rectory of Brixton, in the Isle of Wight, and collated, on the 11th of April, and again on the 29th of May, 1669, to a stall in his cathedral, and finally presented to the rectory of Woodhay, which last benefice Ken presently resigned into the hands of his patron. About this time he composed his 'Manual of Prayers for the Use of the Scholars of Winchester College,' 8vo, London, 1675, which has gone through nearly fifty editions, amongst the latest being those in 12mo, Oxford, 1840, and 12mo, Oxford and London, 1868; and his 'Morning, Evening, and Midnight Hymns,' the pious simplicity of which have attracted a wonderful popularity. In 1675, the year of the papal jubilee, he accompanied his nephew, the son of Izaak Walton, and afterwards a prebendary of Salisbury, to Italy; and although some professed to discover in this tour a tendency to the Romish doctrine and Church system, he affirmed that his Protestantism was fortified by the near view it afforded him of papal corruption. In 1679 he was appointed chaplain to the Princess of Orange at the Court of the Hague. He filled this office for a year, and then returned to England. In September, 1683, he sailed with Lord Dartmouth in the expedition sent out to destroy the fortifications of Tangier, a town on the coast of Africa, which had formed part of the dowry of the Infanta of Portugal on her marriage with Charles II., and to bring home the garrison. During the voyage, from which he returned on the 2nd of April, 1684, he composed an epic poem called 'Edmond,' founded upon the history of a king of the East Angles.

Ken had been already appointed chaplain to the king; and on St. Paul's day, January 25th, 1685, he was consecrated at Lambeth to the bishopric of Bath and Wells, to which he was expressly nominated by the king, upon the translation of Dr. Peter Mew to the diocese of Winchester. Bishop Ken attended Charles II. in his last illness (February 2—8, 1685); but although, as Burnet says, "he spoke with great elevation both of thought and expression, like a man inspired," all his pious prayers and ejaculations seem to have passed the dying king without arresting his attention. Ken was a laborious and devoted bishop, constant in earnest and eloquent ministrations; and one of his first objects was to secure the competent and religious instruction of the young, in whose behalf he established many schools, and for whom he composed his 'Exposition of the Church Catechism: or, the Practice of Divine Love,' 8vo, London, 1685, which in its parts, as well as in its integrity, has gone through numerous editions, and of which an Italian version, by the Count di Tergolina, was lately published with the title of 'La Pratica del Divino Amore: ossia una Esposizione sul Catechismo della Chiesa d'Inghilterra,' 8vo, London, 1665.

Ken was one of the seven bishops who, in May, 1688, were committed to the Tower for refusing to order the reading and distribution throughout their dioceses, of the Declaration of Indulgence. They were released upon their own recognizances on the 15th of June, tried on the 29th, and acquitted, to the great and grateful joy of the people. The loyalty of Bishop Ken forbade him, however, to transfer his allegiance from James II.; and, as a non-juror, he suffered the deprivation of his episcopal emoluments, on the 1st of February, 1691. Although he did not surrender his dignity without a protest, he limited his opposition to a public announcement in the cathedral, of his readiness, at all times, to fulfil the duties of his episcopal office, and he retained the title until he resigned the see in favour of his friend Dr. Hooper. He retired to Longleat, the seat of Lord Weymouth; where he varied his stay by occasional visits to his

nephew, at Salisbury, to Mrs. Thynne, of Leweston, Dorsetshire, and other friends in the West of England.

During his leisure from diocesan business, and his intervals of freedom from the pains of a disease which afflicted him for more than ten years, he composed many pious works, both in poetry and prose, which were afterwards collectively published as 'The Works of the Right Reverend, Learned and Pious Thomas Ken, D.D., late Lord Bishop of Bath and Wells,' 8vo, London, 1721. His 'Prose Works,' to which were added "some of his Letters, never before published," were collected by the Rev. James Thomas Round, in 8vo, London, 1838; whilst a more recent selection from his poems has been issued with the title of 'Bishop Ken's Christian Year of Hymns and Poems for the Holydays and Festivals of the Church,' 4to, London, 1868. Ken died at Longleat on the 19th March, 1711, and on the 21st of the same month was buried at the east end of the churchyard at Frome Selwood. His funeral took place at sunrise, and the attendants upon the occasion, having seen his body committed to the tomb, broke forth in salutation to the day in the strains of his 'Morning Hymn.' In his last will he found it expedient to defend his memory against the possible recurrence of the charges of popish predilections which had occasionally been brought against him in his life-time. "As for my religion," he wrote, "I die in the holy Catholic and Apostolic faith, professed by the whole Church before the disunion of East and West; more particularly, I die in the communion of the Church of England, as it stands distinguished from all Papal and Puritan innovations, and as it adheres to the doctrine of the Cross."

Several works have been produced in illustration of the life and career of Bishop Ken, amongst the more copious and important of which may be mentioned one by the Rev. William Lisle Bowles, entitled 'The Life of Thomas Ken, D.D., deprived Bishop of Bath and Wells. Including some Account of the Fortunes of Morley, Bishop of Winchester, his first Patron and the Friend of Izaak Walton, Brother-in-Law of Bishop Ken,' 2 vols. 8vo, London, 1830—31; and another by a "Layman," Mr. J. L. Anderson, entitled 'The Life of Thomas Ken, Bishop of Bath and Wells,' 8vo, London, 1851, second edition, 2 vols. 8vo, 1854.

* KENNEDY, BENJAMIN HALL, an English scholar and divine, eldest son of the late Rev. Charles Rann Kennedy, incumbent of St. Peter's, and second Master of King Edward's School, Birmingham, who attained some distinction as a poet and translator, was born on the 6th of November, 1804, at Summer Hill, near Birmingham. He received his earlier education at King Edward's School in that town, and at the Grammar-school, Shrewsbury. He entered St. John's College, Cambridge, in 1823, and in his first year carried off the Pitt University Scholarship. He was Sir William Browne's medallist for Greek and Latin Odes in 1824, and for Epigrams in 1825, his prize productions being entitled respectively, 'Carmen Græcum [on the Greek Insurrection]. Numismate annuo dignatum, A.D. 1824,' 8vo, Cambridge, 1824; 'Carmen Latinum [Aleppo Terræ Motu eversa]. Numismate, &c., A.D. 1824,' 8vo, Cambridge, 1824; and 'Epigrammata. Numismate, &c., A.D. 1825,' 8vo, Cambridge, 1825. In 1823, 1824, and 1826, he took the Porson prize, which is given to such resident undergraduates as shall make the best translation of a proposed passage in Shakspeare, Ben Jonson, Massinger, or Beaumont and Fletcher, into Greek verse. He took his B.A. degree as senior optime and first in the first-class classical tripos in 1827, and was also senior Chancellor's medallist; gained the University member's prize for the bachelors' Latin essay in 1828, in which year he was elected fellow of his college; proceeded M.A. in 1830; and took the degree of D.D. in 1836. He was made a deacon by Bishop Sparke of Ely in 1829, and a priest in 1830 by Bishop Kaye of Lincoln. In the last-named year he became an assistant-master at Harrow; and in 1836 was elected by St. John's College to succeed his former tutor, Dr. Butler, then preferred to the see of Lichfield, in the head-mastership of Shrewsbury School, which he held for a period of thirty years. He was admitted, in January, 1843, to the prebend of Gaia Major in Lichfield cathedral; and in 1865 was presented to the rectory of West Felton, in Shropshire, both which preferments he resigned on his appointment to the Regius Professorship of Greek in the University of Cambridge in 1867, an office which is endowed with a canonry in Ely cathedral. Since his appointment he has lectured on Thucydides, Aristotle, Pindar, and Aristophanes. Whilst at Shrewsbury, Dr. Kennedy, besides labouring successfully as a schoolmaster, interested himself warmly in behalf of technical and popular education; and he

has for some years been President of the Royal College of Preceptors, London. His contributions in furtherance of the cause of classical education comprise 'An Elementary Grammar of the Latin Language,' 12mo, London, 1847; 'The Child's Latin Primer: or, First Latin Lessons, extracted (with model Questions and Answers) from an "Elementary Latin Grammar,"' 12mo, London, 1848, "new edition, adapted to the Principles of the 'Public School Primer,'" 12mo, London, 1868; 'Græcæ Grammaticæ Institutio prima,' &c., 12mo, London, 1847, second edition, 12mo, 1848; 'A Latin Vocabulary, arranged on Etymological Principles,' &c., 12mo, London and Shrewsbury, 1848, second edition, London, 1856; 'Palæstra Latina,' &c., 12mo, London, 1850; 'Palæstra Stili Latini: or, Materials for Translation into Latin Prose,' &c., 12mo, London, 1855; 'Tirocinium: or, an Elementary Latin Reading Book,' &c., new edition, 12mo, London, 1855; 'Palæstra Musarum: or, Materials for Translation into Greek Verse,' 12mo, London, 1856; 'Curriculum Stili Latini,' &c., 12mo, London, 1858; and contributions, with two others, to 'Sabrinæ Corolla,' 8vo, London, 1850, third edition, 1867. He has likewise edited 'Hymnologia Christiana: or, Psalms and Hymns selected and arranged in the Order of the Christian Seasons,' 8vo, London, 1863. He was appointed select preacher in his university in 1860; and he has published 'Faith and Love the Commandments of God. A Sermon [on 1 John iii. 23], 8vo, Shrewsbury, 1837; and 'A Sermon [on Matthew xxiii. 23] preached in the Abbey Church, Bath, on the Occasion of the Tercentenary Commemoration of King Edward VI., 28th December, 1853. With Notes,' 8vo, Bath, 1854.

* KENNEDY, JOHN PENDLETON, American writer and politician, was born at Baltimore, Maryland, October 25th, 1795. After graduating at Baltimore College in 1812, he served as a volunteer in the army in 1814, fighting in the battles of Bladenburg and North Point. In 1816 he began to study the law; but gradually settled down to literature and politics. In conjunction with Peter Hoffman Cruse, he brought out a fortnightly periodical of light literature, called the 'Red Book,' which continued from 1818 to 1820. In 1820 he became member of the Maryland House of Delegates, and gradually assumed a position as an advocate of protective legislation in matters of commerce. Three novels by him, viz., 'Swallow Barn,' 1832; 'Horseshoe Robinson,' 1835; and 'Rob of the Bowl,' 1838, met with considerable success as pictures of some of the peculiarities in American life. In 1838 he was elected to the House of Representatives at Washington, where he joined the Whig party. 'Quodlibet,' a political satire, was published by him in 1840. Appointed by Congress chairman of the Committee of Commerce in 1841, he drew up a report on reciprocity treaties, and their effects on the shipping interests of the United States. In 1846 he became speaker of the Maryland House of Delegates. In 1849 appeared his 'Life of William Wirt, Attorney-General of the United States,' 2 vols. 8vo. When secretary of the navy, in 1852, he was instrumental in planning and fitting out the United States expedition to Japan, and also Dr. Kane's second voyage for the discovery of Sir John Franklin. After paying two visits to Europe, between 1855 and 1860, he published in 1861 'The Border States, their Power and Duty in the present Disordered Condition of the Country,' urging the citizens of his native State of Baltimore, and others on the border, to remain firm against the Confederates in the Civil War then commencing. In 1864 he edited 'Autograph Leaves of our Country's Authors.' He has printed several speeches, addresses, and political pamphlets. Mr. Kennedy has been provost of the University of Maryland, and vice-president of the Maryland Historical Society.

KERGUÉLEN-TREMAREC, YVES JOSEPH DE, navigator, was born in Bretagne in 1745. He entered the navy when very young, and in 1767 was placed in command of a vessel in which he made two voyages to Iceland. In 1769 he was commissioned to report on Grenier's proposed route to India, and on the extent and nature of land about the Antarctic pole. He reported favourably on Grenier's route, and in February, 1772, he discovered a long extent of coast, which was afterwards more carefully examined by Captain Cook, who named it Kerguelen's Land, and proved it to be an island. Kerguelen, however, announced that he had discovered the great antarctic continent, but his discovery was questioned, and some persons suggested that it was only a mass of ice. He returned in order to verify his discovery, and touched on many parts of the coast; but he left without attempting to ascertain its form or size. Soon after his second return to France in September, 1774, numerous complaints were made against him

for want of enterprise and neglect of his crew. He was brought to trial, condemned, and imprisoned. While in prison he prepared his 'Relation d'un Voyage dans la mer du Nord, etc., 4to, Paris, 1771; and 'Relation de deux Voyages dans les mers Australes et des Indes, faits de 1771 à 1774,' 8vo, Paris, 1782. After a few months' incarceration he was released, and was frequently engaged in contests with the English. He wrote an account of the naval war of 1778 between France and England, as also a description of Madagascar. He died March, 1797.

KERHALLET, CHARLES PHILIPPE DE, hydrographer, was born in Bretagne in 1809. His first important work was to continue the survey of the Brazilian coast, from San Luiz de Maranhao, where Admiral Rousin's labours terminated, to Para. This occupied him from 1837 to 1840, and the results appeared in 1841 in 'Instruction pour remonter la côte du Brésil, depuis San Luiz le Maranhao jusqu'au Para.' In 1847 he was engaged to survey the west coast of Africa, and the maps prepared were accompanied by a 'Manuel de la Navigation à la côte occidentale d'Afrique,' 3 vols. 8vo, 1851—53. In 1857 he and Vincendon-Dumoulin surveyed the coast of Morocco, and wrote a 'Description nautique de la Côte nord de Maroc,' 8vo, 1857; and 'Manuel de la Navigation dans le Détroit de Gibraltar,' 8vo, 1857. He also prepared several other guides for the African pilot, based partly upon his own knowledge, but largely upon the works of others, such as the large work on the west coast of Africa already noticed; a 'Manuel de la Navigation dans la mer des Antilles,' 8vo, 1862; and a 'Guide du Marin,' 1863. He gave considerable attention to the winds and other meteorological phenomena of the Atlantic, Indian, and Pacific Oceans, with a view to facilitating navigation. His works on this subject appeared in 1851 and 1856. They are still valuable, but have been to a certain extent superseded by the more extensive data collected by Maury. Kerhallet died in February, 1863.

* KERN, JEAN CONRAD, a Swiss statesman, and son of a wealthy merchant, was born in 1808 at the village of Berlingen, near Arenenberg, in the canton of Thurgau, and received his earlier education successively at the town-school of Diesserhofen on the Rhine, and at the Gymnasium at Zürich. He quitted the study of theology, which he commenced at the University of Basel, in order to devote himself to law, which he prosecuted at the Universities of Berlin, Heidelberg, and Paris, and in which faculty he took his doctor's degree. On his return to Switzerland, he began to interest himself in public affairs; and in the anxious year 1833 sat in the Diet as representative of the canton of Thurgau, in which he became, in 1837, president of the Supreme Court of Judicature, and of the Council of Public Instruction. He took an active part in the revision of the cantonal institutions; and, whether in the Diet or in the National Assembly, distinguished himself by the liberality of his views and the power of his eloquence. After the unsuccessful attempt of Louis Napoleon at Strasburg in 1836, the prince was sent to the United States of America, whence he escaped to Switzerland in 1838. Fearing new conspiracies and new attempts at insurrection, the French Government instructed its ambassador, the Duc de Montebello, peremptorily to demand the expulsion of the prince. Great agitation followed; and Dr. Kern, as deputy for the canton of Thurgau, in which Louis Napoleon enjoyed the rights of citizenship, energetically protested against the demand of France, and vindicated the right of his canton to the exercise of hospitality and of the prince to liberty. "Do your duty at all hazards," he said; and the whole country adopted the formula with enthusiasm, and rose in arms to defend its right of asylum, when the voluntary departure of Louis Napoleon for London, September 20th, 1838, put an end to the quarrel. On other occasions, in matters connected both with the internal and external affairs of his country, Dr. Kern has distinguished himself for his intelligent patriotism; and especially in the tact and success with which he conducted the negotiations at the Court of the Tuileries, to which he was accredited as envoy extraordinary in order to bring about a peaceful solution of the Neuchâtel difficulty, between Switzerland and Prussia, in 1857.

In 1861 he returned to Paris as Swiss plenipotentiary; and in this character he was the first to recognise in person the government of M. Thiers, in February, 1871.

KESSEL, FERDINAND LEONARD VAN, son of Jan van Kessel the elder, was born at Antwerp, in April, 1648, and died there in 1696. Like his father, whose pupil he was, he painted highly-finished landscapes of cabinet size. His pictures are inferior to those of his father, but are still much valued. In his

own day they were greatly sought after. John Sobieski so highly admired his pictures that he built a cabinet for their exclusive reception, and invited the artist to Breda. He was also patronised, among others, by Prince William of Orange.

KESSEL, JAN VAN, Dutch painter, born at Antwerp, in April, 1626, was a successful imitator of the manner of Breughel, his maternal grandfather. He painted small landscapes, in which he imitated the details of herbage, &c., and introduced birds, insects, and the like, with minute accuracy. He also painted some flower pieces. He died towards the end of the century.

KESSEL, JAN VAN, the younger, nephew of the above, born at Antwerp in 1648, imitated the manner of Teniers, painting village fêtes, boors carousing, and the like. He succeeded to the property of his relative, Ferdinand van Kessel; when he gave up painting, and, being of intemperate habits, he became impoverished; he then took to portrait painting, and went to Madrid, where he was patronised by the Court, and where he died in 1708.

KESSEL, THEODOR VAN, engraver, was born at Antwerp in 1620. His engravings and etchings, which are numerous, are executed in a free and spirited manner, but are deficient in precision. They include scriptural and historical subjects after Giorgione, Guido, and other Italian masters; a boar hunt, landscapes, and allegories after Rubens; a 'Virgin and Child,' after Vandyck, and many more. His name is also attached to a folio volume of vases and ornaments, designed by Adam van Viane, and ten plates of animals, designed by G. van der Hecke. The year of his death is unknown; his latest dated engraving is 1656.

KEYSER, HENDRIK DE, an eminent Dutch architect, was born at Utrecht in 1565, and early distinguished himself by the skill with which he designed in that modification of the Renaissance style which prevailed in Holland. When only 29 he was appointed architect to the city of Amsterdam, and he erected there two or three churches, the Haarlem Gate, and the Bourse, an important work, but which is surpassed in architectural character by the Stadthouse erected by him at Delft. He was also distinguished as a sculptor: the famous monument of William I., Prince of Orange, one of the richest works of the kind in Europe, was completed by him in 1619, and the no less celebrated statue of Erasmus at Rotterdam is attributed to him. He died in 1621.

* KEYSER, NICAISE DE, an eminent Belgian painter, was born August 26th, 1813, at Sandvliet in the province of Antwerp, and studied in the Antwerp Academy under Van Brée. One of the earliest of his pictures which attracted attention was a 'Christ on the Cross,' painted in 1834 for a Roman Catholic church at Manchester. Since then he has painted many religious subjects of great merit, including a 'Calvary,' 'Jephtha's Daughter,' 'St. Dominic,' 'St. Elizabeth giving Alms,' a work of considerable freshness and power, painted for King Leopold; also numerous historical and genre pieces, as the 'Battle of Worringen,' for the national palace at Brussels; the 'History of the Flemish School of Painting,' on the walls of the vestibule of the Museum at Antwerp; the 'Battle of Spiers'; 'Dante in the Atelier of Giotto,' and several portraits. De Keyser is director of the Antwerp Academy, and keeper of the Antwerp art-treasures.

KEYSER, THEODOR DE, Dutch painter, the son of Hendrik de Keyser, was born at Amsterdam about 1595. His pictures are seldom large, and he is most celebrated for his small full-length and carefully-finished portraits. His finest works are perhaps 'The Burgomasters of Amsterdam in Council,' in the Stadthouse, and an archery piece, dated 1633, in the new Town-hall, Amsterdam. Theodor de Keyser was living in 1660, but probably died soon after. The National Gallery possesses a good example of his pencil, No. 212, 'A Merchant with his Clerk,' which has the painter's monogram, T. D. K., and the date 1627.

KINASTON, SIR FRANCIS, poet and founder of Minerva's Museum, was born at Otley, Shropshire, in 1587; entered at Oriel College, Oxford, but removed to Cambridge, where he graduated. He obtained employment at court and the favour of the king, by whom he was knighted in 1618, and created one of the four Esquires of the King's Body. Kinaston's poetical works consist of a Latin translation of the first two books of Chaucer's 'Truillius and Cressida'; 'Muses Querulæ de Regis in Scotiam profectio.' The Muses' Complaint of the King's Journey into Scotland,' 12mo, London, 1633; 'Coronæ Minervæ, a Masque,' 4to, 1635; 'Muses Aulicæ Arthurii, interprete F. K.,' 1635; and 'Leoline and Sydanis, an heroic Romance of the Adventures

of amorous Princes: together with sundry affectionate Adresses to his Mistress under the name of Cynthia,' 4to, London, 1642. These are not of any value, and have long been forgotten by all but book collectors. What chance he has of being remembered arises from his connection with the premature attempt to found a sort of London University, or "Academy," where "noblemen and gentlemen" might be taught "philosophy, physick, astronomy, geometry, musick, languages, and defence" (which last was explained to comprise "skill at all weapons and wrestling, also riding, dancing, and behaviour"), and to each of which arts a professor was allotted. The scheme was warmly approved by the king, who granted a special licence under his seal, June 26, 1635, for the foundation of the 'Museum Minervæ' as it was to be called, and for the erection of a suitable building for it in Covent Garden; and appointing Sir Francis Kinaston to be regent or governor, and six other persons to be professors. The Academy was fairly commenced, but the times were unpropitious, and though Kinaston published a tract, entitled 'The Constitutions of the Musæum Minervæ,' 4to, 1636, in order to set forth its real purpose and great utility, and for "a further and more full satisfaction of all men, as well ignorant detractors as vertuous favorers of this designe," yet it gained little support from those it was intended to serve, and came to a speedy end. Kinaston died in 1642.

KISS, AUGUST [E. C. vol. iii. 721]. This popular German sculptor died on the 24th of March, 1865, in his 63rd year.

KISSLING, LEOPOLD, Austrian sculptor, was born in 1770, at Schöneben in Upper Austria; studied in the art academy at Vienna; and was then sent by Count Cobenzl to Rome. Here he remained several years, during which he executed various models in plaster; and an 'Achilles and Ajax,' and other classical figures in marble. In 1810 he returned to Vienna; executed for the Emperor, at the suggestion of Canova, a marble group of 'Venus and Mars, with Cupid,' which was sent by the present Emperor to the International exhibition of 1862, and later several busts of the Emperor and members of the Royal family, for the imperial palaces: a colossal bust of his patron, Count Cobenzl, his finest work of this order; several classic groups and single figures, and the monument erected in memory of the orientalist, Von Hammer. Kissling died at Vienna in 1827.

* KLEIN, JOHANN ADAM, German painter and engraver, was born at Nürnberg, November 24th, 1792. He studied under the landscape painter Bemmle, and the engraver A. Gabler, also in the academy of Vienna, besides making several sketching tours in Styria, Hungary, Poland, and along the Rhine. In 1819 he went to Rome, through the aid of Prince Ludwig, afterwards king of Bavaria. After staying in Italy about three years he returned to Nürnberg, and soon attained great and well-merited popularity by his paintings of scenes of military life, landscapes, market-waggons with peasants, and other pictures in which horses formed a principal object. Herr Klein is also an able engraver; his prints, chiefly from his own designs, are very numerous, and he has published several series of etchings from sketches made during his various travels. An account of Klein and his works has been published by C. Jahn, under the title 'Das Werk von J. A. Klein, Maler und Kupferstecher zu München,' with portrait, 8vo, Munich, 1863.

KLENZE, LEO, RITTER VON [E. C. vol. iii. col. 721]. This very distinguished German architect died, full of years and honours, on the 27th of January, 1864. He was born on the 29th of February, 1784.

KMETZ, GENERAL GEORGE (Ismail Pasha) [E. C. vol. iii. col. 733]. In 1861, Ismail Pasha was appointed governor of the disturbed province of Candia. He died April 25, 1865.

KNAPP, JOHANN, botanist and fruit and flower painter, was born at Vienna in 1768, and studied in the art academy of that city. He was a designer in the tapestry works at Erdberg until 1791, when he joined the army and remained with it till the treaty of 1797. He settled at Schönbrunn, where he was appointed by the Archduke Anton to a post in connection with the botanical garden, and became exceedingly skilful and popular in the representation of plants and fruits. He painted many fruit and flower pieces in oil, but is best known by the collections of folio plates from his drawings. Of these the chief are—'Native Fungi,' two hundred and eighty plates; 'Exotic Plants,' one hundred plates; 'The Fruits of Austria,' four hundred plates; 'The Grapes of Austria,' 'Flora Alpina,' &c. He died at Schönbrunn in 1831.

KNAPTON, GEORGE, portrait painter, was born in 1698. He was a pupil of Richardson; then went to Italy, and acquired reputation for knowledge of the theory as well as practice of

art, and a critical acquaintance with the works of the old masters. He found patrons in the highest circles, and his gentlemanly and social habits obtained him admission into the aristocratic art-club, known as the 'Dilettanti Society,' which, in 1740, passed a resolution, "That every member of the Society do make a present of his picture in oil colours, done by Mr. George Knapton a member, to be hung up in the room where the Society meets." Knapton accordingly painted twenty-three of the members, all well-known personages—the Duke of Dorset, the Duke of Bedford, the Earl of Beesborough, Lord Le-Despencer, the Earl of Sandwich, Viscount Barrington, &c.—all, or nearly all of whom were represented in fancy dresses, the libidinous Sir Francis Dashwood of the Medmenham Abbey orgies as a tonsured monk adoring a statue of Venus, the Earl of Holderness as a waterman, and so forth. These pictures have long been famous, and it is by them that Knapton will be remembered. In reality they are feeble, insipid productions, but they are invaluable as memorials of the men and the time. The Dilettanti Society preserves them with jealous care, but liberally permitted the entire series to be shown at the Exhibition of National Portraits in 1868. Other of Knapton's portraits had been exhibited in the collection of the previous year. Knapton executed portraits in crayon as well as in oil. He is said to have engraved some plates; at any rate he was a partner with Pond in publishing the collection of heads of illustrious persons, engraved by Houbraken and Vertue. On the death of Stephen Slaughter in 1765 he was appointed surveyor and keeper of the royal pictures, and removed to Kensington, where he died in 1778.

* KNIGHT, CHARLES. When the Biographical Division of the English Cyclopædia was published, Mr. Knight, as its conductor, refused to allow a memoir of himself to be inserted; but now that the supervision is in other hands, it would be as unfair to the reader as unsatisfactory to ourselves to issue a Supplement without supplying the deficiency.

Charles Knight was born on the 15th of March, 1791, in a house close to the entrance of the lower ward of Windsor Castle, in which his father carried on the business of a bookseller and publisher. His school training was completed at the then celebrated classical school of Dr. Nicholas of Ealing, where he remained from 1802 to 1805, when he was removed to be apprenticed to his father. On the completion of this term he came to London, in order to obtain some practical insight into journalism, previous to starting, with his father, the 'Windsor and Eton Express,' of which the first number appeared August 1, 1812, and which he continued to edit till 1826. It was commenced in the belief that he "might do some good socially and intellectually with such an instrument." The leading articles "were written under a strong sense of the serious nature of the vocation of a public writer." It did good service in the furtherance of social reform and local improvements, and it afforded an excellent preparation for the future career of its editor. But journalism and bookselling were even then far from satisfying his activity. He widely extended his acquaintance with literature, and, especially with our earlier English authors, wrote poems and a tragedy ('Arminius,' which, though not played, was printed), as well as newspaper leaders, and began to collect old books; made his first essay (1820) in publishing a cheap miscellany, 'The Plain Englishman,' and began the publication of the 'Etonian,' of which Præd was the editor, and Macaulay, Henry Malden, Nelson Coleridge, and Moultrie were leading contributors.

In 1820 Mr. Knight removed to London, having purchased the 'Guardian' newspaper, to which he gave a literary turn, and which he continued to edit till the end of 1822, when he sold it in order to commence business as a publisher in Pall-mall. He had been partly led to take this step by the wish expressed by the leading contributors to the 'Etonian,' no longer Eton boys but Cambridge men, to set up a new magazine under his auspices. 'Knight's Quarterly Magazine' was accordingly the first important venture of the new house. It contained some of Macaulay's sparkling prose and vigorous lyrics, and Præd's brightest verses, but the contributors were wilful as well as witty, and the magazine came to an end with its sixth number. Milton's 'Christian Doctrine' was perhaps the most remarkable of the works issued by Mr. Knight at this period; but more characteristic was his comprehensive scheme of a 'National Library'—"a cheap series of books which should condense the information contained in voluminous and expensive works," and for which he "settled the subjects of about 100 volumes in history, science and art, and miscellaneous literature." The scheme

appearing too large for a single publisher to undertake, others were offered a share; but then came the great commercial crisis in which so many publishing houses were involved, and the Library, which had been adopted by the newly-formed Society for the Diffusion of Useful Knowledge, was ultimately abandoned. Mr. Knight's establishment was broken up, and he, in 1827, undertook the superintendence of the Useful Knowledge Society's publications.

His connection with the Society continued for nearly twenty years, and was the great central incident in his career. The superintendence of the Society's publications required judgment and discretion, as well as enterprise, but it was marked also by that originaive activity which has most distinguished him as a caterer for the public information. Not only did he sketch the broad outline of series of works, or of particular books, but valuable suggestions were, as we know, often afforded by him as to the mode of treatment and sources of information. The 'British Almanac,' and the 'Companion to the Almanac,' were projected by him in 1828; the former a vast improvement on all existing almanacs, the latter a handbook of great current value, and forming as a whole an important work of reference. Mr. Knight edited both the Almanac and the Companion for forty years, and they are still flourishing. But besides providing a better almanac than previously existed, he exerted himself to get rid of the stamp they bore, and a report which he drew up in 1833, led to the total repeal of the duty on almanacs. The 'Library of Entertaining Knowledge,' an offshoot from the 'National Library,' originated with, and was throughout published as well as edited by him, he having in view of the issue of this work resumed in 1829 his business as a publisher. For this Library he wrote the volumes entitled 'Menageries,' and 'The Elephant.' In 1830, in the hope of removing some of the popular prejudice against the use of machinery as tending to abridge employment and reduce wages, he wrote 'The Results of Machinery,' as one of the volumes of a serial entitled the 'Working Man's Companion,' and in the following year produced a sequel, 'The Rights of Industry; or, Capital and Labour.' Both had an immense circulation, and undoubtedly did much to bring about a sounder feeling on the subjects of which they treat.

In 1832 he began the publication of the 'Penny Magazine,' which at once obtained an unparalleled circulation, it having by the end of the year "reached a sale of 200,000 in weekly numbers and monthly parts." Mr. Knight was its editor as well as publisher, and remained so till its discontinuance in 1845. 'The Penny Cyclopædia' was commenced in 1833. As projected by Mr. Knight, it was to form "a moderate-sized book of eight volumes;" it grew into a bulky work of 27 volumes: it was intended to be a kind of companion and sequence to the Penny Magazine and Entertaining Knowledge series: it ultimately took its place as the most learned and original, as well as the most complete work, of the kind in the language. Though the Cyclopædia of the Useful Knowledge Society, it was published by Mr. Knight at his own risk, and it entailed on him a heavy pecuniary loss. Concurrently with these works, was proceeding the Society's Gallery of Portraits, of which Mr. Knight was the publisher. In 1832 and following years Mr. Knight was engaged in bringing out a remarkable series of illustrated works—'The Pictorial Bible;' 'Prayer Book;' 'Palestine;' 'London;' the 'Thousand and One Nights;' and the 'Shakspeare'—works which, with the 'Penny Magazine,' gave an immense stimulus to the art of wood-engraving, and created a revolution in illustrated literature. The 'Shakspeare,' an admirable book, was Mr. Knight's own work—text, notes, and biography—"one of the most pleasant labours," he terms it, of his life—and one with which his name will be permanently associated.

In these last years the Society for the Diffusion of Useful Knowledge, its task having been pretty well accomplished, was relaxing its efforts, and gradually subsiding into abeyance; whilst Mr. Knight's activity was directed in a very different direction. A great change had been wrought in the laws for the management of the poor, a change which his writings had a considerable share in bringing about, and when the new Poor Law Board was established, his familiarity with the subject was found of great value in the preparation of the numerous forms required for use in the several unions, and he was appointed publisher to the Board. With him also originated the proposal of a penny stamp for franking newspapers by post, a suggestion afterwards applied with such marked success when the penny postage was adopted for letters.

With the year 1844, Mr. Knight originated a new serial called

the 'Weekly Volume,' and later, when issued monthly, 'The Shilling Volume,' for which he wrote the first volume, 'William Caxton; a Biography,' and suggested several of the more successful works of the series, as well as acted as editor to the whole. In 1846 appeared 'Old England,' in part written by himself, and other illustrated works of a similar class. To 'The Land We Live in,' 1847, &c., a more ambitious serial, which extended to four volumes, he also contributed some papers. The selections, the best of the kind yet published, entitled, 'Half Hours with the Best Authors,' 'Half Hours with the best Letter-writers,' &c., were compiled, and the introductory notices of the several authors written by him.

The publication of the 'English Cyclopædia' commenced in 1853, and was completed under his superintendence in eight years. During its progress Mr. Knight was occupied in writing an entirely original work, the 'Popular History of England.' It occupied him seven years, 1854–61, and forms eight thick 8vo volumes. The 'Popular History of England' is a work of substantial value, but it is something more: it is the only complete library history of England—ranging over the whole period from the Roman occupation to the reign of Victoria—the production of the same writer; and it consequently possesses a unity of design and harmony of treatment peculiar to itself. At the same time it is the most comprehensive history we possess, being as much a history of the people as of the kingdom, of social progress as of political events. And it is written fairly, conscientiously, with an animation which seldom flags; fuller of facts than opinions, but never shrinking from the expression of personal views when they seem called for.

This long and heavy labour by no means exhausted the activity of the author. He withdrew from direct participation in business, but he employed his well-earned leisure in remodelling his 'Results of Machinery' and 'Capital and Labour' into a single volume, entitled 'Knowledge is Power;' his 'Caxton,' &c., into 'The Old Printer and the Modern Press,' and in collecting some of his miscellaneous essays into a volume entitled 'Once upon a Time.' In 1865 he published an original work, 'Shadows of the Old Booksellers;' in 1867, a romance of the Commonwealth period, 'Begg'd at Court;' and in 1868 a new series of 'Letter Writers, Autobiographers, and Diarists.' One other work of these later years remains to be noticed—'Passages of a Working Life during Half a Century,' 3 vols. 8vo, 1864–65. This book is, in fact, an autobiography, brought down to the year of publication, but referring to the work in which he had been engaged rather than to his private life. It is unnecessary to say that it has been our chief authority for this sketch, which, brief as it is, and referring only to his larger literary labours, will suffice to show that the life has been emphatically "a working life," and one in which the fixed purpose has been to assist in bringing wholesome literature within the reach of every one, in the removal of class prejudices, and in the general extension of social and political knowledge.

KNOLLES, or KNOWLLES, RICHARD, a scholar and historian, and a member of a family whose residence was at Cold Ashby, Northamptonshire, was born in that county about the year 1543, and about 1560 was entered of Lincoln College, Oxford, of which, after taking his B.A. degree on the 26th of January, 1565, he was elected fellow. He proceeded M.A., on the 4th of July, 1570, and whilst his future career was still undeclared, received, through the influence of Sir Peter Manwood, the appointment to the head-mastership of the free grammar-school at Sandwich, in Kent, where he laboured with great assiduity, and successfully prepared many young men for the Universities. He died at Sandwich, according to Wood, "before he had quite attained to the age of man," in the latter end of June, 1610, and was buried in St. Mary's Church on the 2nd of the following month.

His works comprise, 'Grammaticæ Latinæ, Græcæ, et Hebræicæ Compendium: cum Radicibus,' 4to, London, 1600, &c.; an English translation of Jean Bodin's 'Six Livres de la République,' entitled 'The Six Books of a Commonwealth,' folio, London, 1606; and a manuscript translation in folio, of which the original is still preserved in the Ashmolean Museum at Oxford, of Camden's 'Britannia,' &c. But his most important work is one which was praised in the 'Rambler' (No. 122), as "displaying all the excellencies that narrative can admit. . . . Nothing could have sunk the author in obscurity but the remoteness and barbarity of the people whose story he relates." This work is entitled 'The Generall Historie of the Turkes, from the first Beginning of that Nation to the Rising of the Othoman Familie: with all the notable Expeditions of the Christian Princes

against them. Together with the Lives and Conquests of the Othoman Kings and Emperours, faithfully collected out of the best Histories, both auncient and moderne, and digested into one continuat Historie untill this present Year 1603,' with a dedication to King James I., folio, London, 1603, second edition, "unto the year 1610," folio, London, 1610, fifth edition "with continuation," &c., 1638. The best edition, however, is the sixth, which appeared as 'The Turkish History, &c. With a Continuation to this present Year, MDCLXXXVII. Whereunto is added the present State of the Ottoman Empire. By Sir Paul Rycart, late Consul of Smyrna,' 3 vols. folio, London, 1687, of which an 'Abridgment,' by Mr. Savage, "revised and approved by the late Sir Paul Rycart," was published in 2 vols. 8vo, London, 1701, &c.

KNOWLES, JAMES SHERIDAN [E. C. vol. iii. col. 738]. Mr. Knowles died on the 1st of December, 1862, in his 79th year: he was born on the 12th of May, 1784. He had for some years been in receipt of a pension from the Civil List of 100*l.* per annum.

KOBELL, HENDRICK, Dutch painter, was born at Rotterdam in 1751. The son of a merchant, he was brought up to commerce, and in that pursuit accompanied his father to England, but on his return to Amsterdam in 1788 took to painting, and in 1770, was elected member of the Amsterdam Academy. Later, he returned to Rotterdam, where he died in 1782. Hendrick Kobell's best pictures are marine subjects, especially naval fights, which he painted with great spirit. Many of them have been engraved, mostly in mezzotint, but some in aquatint. He also painted landscapes, made numerous tinted drawings, and etched a few plates.

KOBELL, JAN, son of the above, was born at Delfshaven in 1779. He was brought up in the orphan asylum till he was of age to be placed with W. R. Van der Wall, the animal and landscape painter. Jan Kobell adopted the same line of art as his master, but took as his model Paul Potter, whom he is considered to have approached more nearly than any other of his imitators. His paintings of animals were in great request during his life, and they have become more so since his death. He was a member of the Institute of the Netherlands, and in 1812 received the gold medal of the Exposition at Paris. There are a few plates of animals etched by him. He died September the 14th, 1814.

KOBELL, WILHELM VON, was born at Mannheim in 1766. From his father, Ferdinand Kobell, he learned the rudiments of his art, completing his training in the Düsseldorf academy. He settled in Munich; became famous for his battle-pieces, and landscapes with animals; was in 1808 nominated professor in the Munich academy, and in 1816 was ennobled. He was much patronised by the king, Maximilian Joseph, and his successor Ludwig. He died at Munich, July 15th, 1853.

* KOCH, KARL HEINRICH EMMANUEL, botanist and traveller, was born at Weimar in 1809, and educated in the universities of Wurzburg and Jena, from which last corporation he received his degree of doctor about 1833. In 1836 he commenced his travels through the southern portion of Russia, and gave his experience in 'Reise durch Russland nach dem Kaukasischen Isthmus in den Jahre 1836, etc.,' 2 vols. 8vo, Stuttgart and Tübingen, 1842—43. In 1839 he was appointed assistant professor of botany at Jena, but in 1843 he resigned the post in order to devote himself to exploring, in conjunction with George de Rosen, Turkey, Armenia, and the countries contiguous to the Caspian Sea. This afforded him the materials for his 'Wanderungen im Oriente während der Jahre 1843 und 1844,' 3 vols. 8vo, Weimar, 1846—47. The third volume was reprinted in 1854, under the title of 'Die Krim und Odessa,' 8vo, Leipzig, 1854, and of which two or three English translations were published during the Crimean war. He has also written several other geographical works on these eastern regions, on the Danube, and on Xenophon's account of the retreat of 10,000 Greeks. His botanical works comprise 'Hortus Dendrologicus,' 2 vols. 8vo, Berlin, 1853—54, which is a catalogue of nearly all the trees that have been cultivated in the open air in the central portions of Europe, and of which a second edition, under the modified title of 'Dendrologie,' appeared in 1869; 'Das natürliche System der Pflanzenreichs nachgewiesen in der Flora von Jena,' 8vo, Jena, 1839; and 'Beiträge zu einer Flora des Orients,' 8vo, Halle, 1848—1854.

KOEKKOEK, BAREND CORNELIS, Dutch landscape painter, was born at Middelburg, October 11, 1803. His father, Jan Hermann Koekkoek (born 1778, died 1851), a marine painter of ability, was his earliest teacher, and he studied three

years in the Amsterdam academy. He learned most, however, from nature, and the works of the earlier painters of the Netherlands. Koekkoek painted a large number of landscapes—almost exclusively of the scenery of the Low Countries—which rank among the best of their kind and time. They exhibit breadth of manner, combined with patient regard to the minutest details of nature; at the same time they are poetical in feeling and well coloured. He established himself at Beek, but removed to Cleves, where he founded an art academy, and where he died, April 5th, 1862. Koekkoek was a knight of the legion of honour, of the orders of Leopold of Belgium, and of the Lion of the Netherlands. He published 'Erinnerungen und Mittheilungen eines Landschaftmalers' (Recollections and observations of a Landscape-painter), Amsterdam, 1841. Three of his brothers are honourably known as painters—JAN KOEKKOEK, a marine painter of promise (born 1811, died 1831); MARINUS-ADRIAN, and HERMANUS, born 1815, landscape and marine painters, who reside at Amsterdam.

* KOHL, JOHANN GEORG, traveller, was born at Bremen, April 28, 1808. He studied at Göttingen, Heidelberg, and Munich, and on leaving the University engaged himself as tutor in the families of Baron Manteuffel and Count Medem. He resided five years in Livonia, and in returning home he took the opportunity of visiting various other parts of Russia. He wrote a work on the country, which was so favourably received that it was followed up by others on Russia, to which he added in rapid succession accounts of travel in Austria, Bavaria, Denmark, Schleswig Holstein, the British Isles, Canada, and the United States, amounting in all to some thirty or forty octavo volumes, and forming a series which has attained great popularity in Germany. In addition to these he has written some works involving more research and thought, such as 'Beiträge zur Geschichte,' 8vo, Königsberg, 1834; 'Die Donau von ihrer Ursprünge bis Pesth,' 4to, Triest, 1854; 'Der Rhein,' 2 vols. 8vo, Leipzig, 1851; 'Der Verkehr und die Ansiedelungen des Menschen in ihrer Abhängigkeit von der Gestaltung der Erdoberfläche,' 8vo, Dresden, 1841; 'Skizzen aus Natur und Volkenleben,' 2 vols. 8vo, Dresden, 1851; 'Geschichte der Entdeckung America's von Columbus bis Franklin,' 8vo, Berlin, 1861; 'Die beiden ältesten Generalkarten von Amerika ausgeführt in den Jahren 1527 in 1529, erläutert von J. G. Kohl,' fol. Weimar, 1860; 'Kitchi-Gami,' 2 vols. 8vo, 1859; and 'Geschichte des Golfstroms und seiner Erforschung von den ältesten Zeit bis auf der grossen Amerikanischen Burger Krug,' 8vo, Bremen, 1868. From 1854 to 1858 he was engaged in travelling in North America, and since the last mentioned year he has chiefly resided at Bremen.

KOLBE, KARL WILHELM, German engraver and author, was born at Berlin, November 20th, 1757. Until his twenty-sixth year he was professor of the French language in the Philanthropium of Dessau; but on the breaking up of that establishment he resolved, in accordance with the advice of his relative, the engraver Chodowiecki, to trust to his artistic talent. He accordingly entered the Berlin academy, and studied landscape design and engraving, making rapid progress in both. He learned to sketch with wonderful facility, and engraved many of his sketches; was elected a member of the academy in 1795; and ultimately recalled to Dessau as professor in the art-school. In 1796 he published a series of forty-nine plates of landscapes; in 1805 a set of folio etchings from the paintings and drawings of Solomon Gessner; and in 1825 a series of eighteen studies of herbage. His engravings, one hundred and twenty-five in all, were republished in a collected form. Kolbe used the pen with as much facility as the graver. Late in life he published several works of a philological character, chiefly on the characteristics of the French and German languages; and his autobiography, 'Mein Lebenslauf und meine Werke im Fache der Sprache und der Kunst,' 8vo, Berlin, 1825. He resigned his professorship in 1829, and died January 15th, 1835. His nephew,

KARL WILHELM KOLBE, born at Berlin in 1781, was a student in the art academy there, and attained considerable reputation as an historical painter. He executed numerous oil paintings, several mural pictures, and a series of cartoons of events in German history, to be painted on glass for the windows of the Castle of Marienburg, and in oil for the Crown Prince of Prussia. He was elected a member of the Berlin Academy in 1815, and professor in 1819; and died, April 8th, 1853.

KONIG, FRANZ NIKOLAUS, German painter and engraver, was born at Berlin in 1760, and learned painting and engraving of S. Freudenberger. His paintings and drawings of Swiss and mountain scenery are much esteemed; as are also his

etchings and aquatints—about fifty in number. He resided chiefly in Switzerland, and died at Berne in 1832.

KONIG, FRIEDRICH, chief inventor of the printing-machine, was born at Eisleben, Prussia, in 1775. Printing was his boyish amusement, with his mother's mangle as a press. He afterwards learned the trade in a regular way at Leipzig, in the printing office of Breitkopf. He invented a new printing-machine, to effect a saving in manual labour; but his rough model failed to find favour in Germany, and in 1806 he brought it to England. He succeeded after a time in making an arrangement with Bensley the printer, who, in 1807, agreed to furnish capital enough to make a complete machine from the model. König modified many of the working parts, and employed three years in developing what was virtually a new machine, for which, in 1810, he took out a patent. It was not till April, 1811, however, that the first sheet of a book was printed by a steam-worked printing-machine; this was sheet H of the 'Annual Register' for 1810. The machine acted on the platen system, the pressure being produced by two flat plates, not by a cylinder; while the ink was applied by rollers, not by padded balls. Two other printers, Woodfall and Taylor, joined Bensley and König in a partnership for the manufacture and sale of printing machines. König made numerous improvements, and on October 30, 1811, took out a patent for a machine presenting many new features. A cylinder was substituted for the two platens; the two forms of type travelled to and fro under it on a cast-iron table, with strong spiral springs at either end. He even included a double-cylinder machine in his patent. The first single-cylinder machine was ready in December, 1812, and the first work it performed was to print sheets G and H of Clarkson's 'Life of Penn,' which it did at the rate of 800 per hour. Mr. Walter, of 'The Times,' who went to see the work, at once ordered the construction of two double-cylinder machines. König took out two other patents; one, in 1813, for improving the inking apparatus, and using endless tapes to keep the sheets well up to the cylinder; the other, in 1814, for numerous minor improvements. Surmounting numberless mechanical difficulties, as well as trade difficulties with the pressmen, Mr. Walter at length printed the first newspaper by steam-machine, 'The Times' of November 29, 1814, at the rate of 1100 copies per hour. König's fourth patent enabled him to increase the speed to 2000 per hour. In 1816 he made for Messrs. Bensley a single-cylinder registering machine, for book-work, which struck off 1000 sheets per hour, printed on both sides. The first entire book thus printed by steam was Elliotson's translation of Blumenbach's 'Physiology,' and the first weekly periodical the 'Literary Gazette.' He also made the double-cylinder machine first employed on the 'Weekly Dispatch.' But the ingenious inventor made little by his exertions; his patents were disregarded and evaded by other machine-inventors; his relations with Bensley were unsatisfactory; and about the end of 1816 he quitted England in disgust. After his departure, attempts were made to deprive him of the credit of being the real inventor of steam-printing; but it is now generally admitted that his claim is valid. Mr. Walter steadily supported the good name of König. In 1823 he wrote to him, inviting him to return to England and construct a far finer machine than any up to that time known; but König, wearied with his experience of English patents, declined. On December 3, 1824, Mr. Walter wrote and published in 'The Times' a full exposition of the German's ill-requited merits. König settled as a printing-machine maker in Germany, where he constructed machines printing 1200 sheets per hour on both sides, or 2400 on one side. His establishment was at Oberzell, near Würzburg, in Bavaria, in an old deserted monastery granted to him on easy terms by the Government. Here he was joined, in 1817, in partnership with Andrew F. Bauer, who had been his assistant in London. It was not, however, till 1821 that they were able to turn out two single-cylinder machines, so difficult was it to obtain good tools and workmen in a secluded village; but by 1825 they had supplied seven double-cylinder machines; in 1829 the number had risen to fifty-one, and about a hundred persons were employed. König, who was also a partner with Bauer and Cotta in a paper-mill, died at Oberzell in 1833. Mr. Smiles has published, in 'Macmillan's Magazine' for December 1869, a memoir of him, partly based on a pamphlet published by Bauer, and partly on information supplied by König's sons, who now carry on the establishment at Oberzell.

KONING, PHILIP DE, an eminent Dutch painter, was born at Amsterdam in 1619. He was the pupil of Rembrandt, whose general feeling for tone and colour he assimilated with his own natural manner. He painted some religious and historical

pieces, and in his own day enjoyed a high reputation as a portrait painter; but he is now most esteemed for his landscapes, which are among the very finest of their kind. His especial excellence lies in the representation of extended stretches of the level country of the Netherlands, in which the aspects of space, air, and sky are rendered with exquisite truth and refinement. The galleries at Amsterdam, the Hague, and Rotterdam possess fine examples of his pencil; but his best works are probably in English collections. 'A Landscape: Cleves in the distance,' in the collection of the Marquis of Westminster, exhibited among the works of the old masters, 1871, is a very celebrated specimen; but still finer, perhaps the finest extant, is the large 'Landscape, with sandy hills in the distance,' recently purchased from Sir Robert Peel for the National Gallery (1871). Philip de Koning died at Amsterdam in October, 1689.

KONING, or KONINCK, SALOMON, a celebrated Dutch painter, the son of a jeweller at Antwerp, was born at Amsterdam in 1609. He was a pupil of N. Muijaert, but formed his style on that of Rembrandt, whom in his best works he closely approaches. He painted historical, religious and domestic subjects, and portraits, and etched a few plates with great brilliancy. His pictures are found in most of the principal public and private galleries. He was admitted a member of the guild of painters, Amsterdam, in 1630, and died in that city in 1668.

* KOPP, JOSEPH EUTYCHE, an historian, who has been called the Niebuhr of Switzerland, was born at Munster, in the canton of Lucerne, in 1793. He became successively rector of the Lyceum at Lucerne, and president of the department of public instruction for that canton. Professor Kopp has done much towards freeing the antiquities of his country from the mythical element, and has even had the boldness to challenge the authenticity of the legend of William Tell. His principal works are, a collection of nearly 100 Documents connected with the History of the Swiss Confederation, 'Urkunden zur Geschichte der eidgenössischen Bünde. Herausgegeben und erläutert vom Prof. J. E. Kopp,' 8vo, Lucerne, 1835, in which he establishes the ancient sovereignty of the House of Hapsburg over the three Waldstetten, or Forest Cantons; a History of the Swiss Confederation, 'Geschichte der eidgenössischen Bünde. Mit Urkunden,' 5 vols. 8vo, of which the first four volumes were published at Leipzig, 1845—57, and the fifth at Berlin, 1858, a work which, the result of twenty years' labour, commenced with 'König Rudolf und seine Zeit,' and terminated with 'Die Gegenkönige Friedrich und Ludwig und ihre Zeit, 1322—1330.' Besides other enterprises, alone or associated with others, of an archaeological kind, and various contributions to periodicals, Kopp has signalled his skill in dramatic poetry, by the publication of a work entitled 'Dramatische Gedichte,' in two small volumes, the first of which, published in 8vo, Lucerne, 1855, contained 'Count Bero of Lenzburg. The Camp before Basel,' 'Graf Bero von Lenzburg. Das Lager von Basel,' and the second, a dramatic poem in two parts, entitled 'Rudolf von Habsburg,' 8vo, Lucerne, 1856.

KRAFFT, PETER, an Austrian painter, was born at Hanau, September 17th, 1780. The son of an enamel painter, he entered the Academy of Vienna in 1799, and completed his studies in Paris and Rome. At first he painted mythological subjects, such as Europa, Hebe, Sappho, &c.; then on returning to Vienna, battle-pieces and court ceremonials, which were highly esteemed, and a few scriptural and poetical subjects, including an 'Adam and Eve,' illustrations of Goethe's Hermann and Dorothea; a 'Belisarius,' and 'Ossian.' In 1833 and following years he painted in encaustic, on the walls of the Imperial palace, a series of subjects illustrating the recent history of the House of Hapsburg. He also painted many portraits of members of the imperial family. He held the offices of professor in the Imperial Academy, and director of the Gallery of the Belvedere. He died October 28th, 1856. His brother, JOSEPH KRAFFT, born in 1787, died in 1828, was a fashionable portrait painter in Vienna.

KREIL, KARL, Austrian astronomer and magnetician, was born November 4th, 1798, at Ried, in Upper Austria; and after passing through the Gymnasium at Kremsmünster, studied law at Vienna. His natural taste, however, leading him rather to science, he paid close attention to astronomy and mathematics. In 1826 he acted as assistant at the Vienna Observatory; next at the Milan Observatory; in 1830 was appointed joint observer at Prague; and in 1845, director of the Prague Observatory. In 1851 he went to Vienna to direct the department of Meteorology and Terrestrial Magnetism. In the fulfilment of these several duties he published elaborate reports and tables, which occupy

an extensive series of volumes. Between 1836 and 1838 appeared two volumes on terrestrial magnetism, forming a supplement to the Milan 'Effemeridi Astronomiche.' Between 1839 and 1850 appeared eleven more volumes on the same subject, in connection with the scientific records of Prague Observatory. Between 1846 and 1851, similar volumes appeared relating to the magnetic phenomena observed in Bohemia and other parts of the Austrian Empire, 'Magnetische und geographische Ortsbestimmungen im österreichischen Kaiserstaate,' 5 vols. In 1850 he published a memoir on the influence of the Alps on the terrestrial magnetism of the neighbouring countries. Between 1854 and 1861 he published eight annual volumes of observations made in the magnetic and meteorological department. Other memoirs by him related to comets, the influence of the moon on the atmosphere, and the influence of the moon on the magnetic direction and intensity of the horizontal component of the earth's magnetism. Kreil closed a laborious and useful life on the 21st of December, 1862.

* KREMER, PETER, one of the ablest and most prolific of the historical and genre painters of Belgium, was born at Antwerp in 1801, and studied under M. van Brée. He is somewhat dry in execution, but intelligent and sympathetic in his conception of a subject. His works generally refer to some domestic or biographical incident connected with the history of the Netherlands, or some circumstance in the life of one of the great old Flemish painters. Several of his pictures have been engraved.

KREUTZER, KONRADIN, German musical composer, was born November 22nd, 1782, near Möskirch, Baden. After learning singing, the violin, and the pianoforte, he became at nine years old a choir-boy at the Monastery of Zwiffallen; where a monk, named Weinrauch, taught him composition. In 1796 he removed to the Monastery of Schussenried. When his voice broke, he served for a time as organist and teacher, and then went to Vienna, where he studied under Albrechtsberger. He composed two operas, 'Konradin von Schwaben,' and 'Der Taucher,' but failed to get them performed. He joined Lepping, inventor of the 'panmelodion,' on which he played with great success. For some years he was director of the Conservatorium at Stuttgart, where his opera 'Feodora' found favour with the Court. From 1817 to 1827, he travelled about Germany, composing, and endeavouring to get his compositions accepted by managers. After a brief visit to Paris, he returned to Vienna in 1828; and filled the post of director of the Josephstadt Theatre from 1833 to 1840. He next became musical director at Cologne; and in 1846 was appointed kapellmeister at Riga, where he died December 14th, 1849. He composed about thirty operas, only five of which obtained success in his day; and even those are now nearly forgotten. He also composed an oratorio, 'Moïse,' a sacred cantata, three grand masses, six minor masses, Te Deums, offertories, and graduals. In instrumental music he produced numerous compositions for violin, pianoforte, and orchestra; and there are by him some unaccompanied part songs.

KREUTZER, RUDOLF, musician, was born at Versailles, November 16th, 1766. When quite a boy, he learned the violin under Stamitz; and at the age of thirteen played a concerto of his own composition. In 1782, he succeeded his father as violinist at the royal chapel. After producing two lyrical dramas, 'Jeanne d'Arc,' in 1790, and 'Paul et Virginie,' in 1791, he composed his opera of 'Lodoiska.' Another opera, 'Lodoiska,' by Cherubini, was brought out at another Paris theatre at the same time; there was a consequent rivalry between the composers; but Cherubini's bore off the palm. Between 1792 and 1796 Kreutzer composed many other operas; in 1801 he became first violinist at the opera, in 1816 second chief of the orchestra, and in 1817 chief. He received the appointment of maître de chapelle to Louis XVIII.; and became musical director of the opera in 1825. In conjunction with Baillot, he prepared the 'Méthode de Violon,' adopted by the Conservatoire de Musique. Although his operas, musical dramas, and ballets amount to nearly fifty in number, they have little merit. The only piece from his operas that lives, is the overture to Lodoiska, which to this day is a stock favourite among instrumentalists, although held of little account by composers. He also produced numerous symphonies-concertante, concertos, romances, quartettes, trios, duets, and sonatas, for the violin; these are better known than his operas. Kreutzer died at Geneva, January 16th, 1834.

KRÜDNER, BARBARA JULIANE, BARONESS VON, a celebrated pietist and enthusiast, was the wife of the Baron von Krüdner, a Russian diplomatist, who was ambassador at Venice, Copenhagen, and Berlin, in which last city he died in 1802.

Her father, the Baron von Viestinghoff, one of the wealthiest nobles of Courland, was governor of Riga, in which city she was born on the 21st of November, 1764. She was early remarkable for her intelligence, and for a tendency to reverie and melancholy, which was fostered by the solitary grandeur and wildness of the summer residences of her father, by whom she was taken to Paris in 1777. Here she enjoyed considerable educational advantages, and intercourse with the most distinguished men of the day, as Diderot, d'Alembert, Helvetius, and Grimm. In 1783 she became the wife of Baron von Krüdner, whom she accompanied in 1784 on his mission to Venice, and in a tour of the other cities of Italy, and afterwards to Copenhagen. Meanwhile the romance of her disposition was so developed by indulgence, which, though unguarded, is believed to have been innocent, as to lead to a separation from her husband in 1791, at which time she was the mother of two children. She now repaired to Riga, where she spent some years, and where she began to exhibit proofs of that charitable zeal by which she was afterwards distinguished. In 1796 she quitted Riga, and commenced a limited course of travel, in which she took up her temporary abode in various cities of Germany, and even joined her husband, at that time ambassador at Berlin, for some months in the years 1800 and 1801. Towards the end of the latter year she visited Geneva, from which she went to Paris, where she published her romance of 'Valérie; ou, Lettres de Gustave de Linar à Ernest de G***,' 2 vols. 12mo, Paris, 1803, which created a great sensation, and which has gone through many editions. In this work the romance of her nature is very distinctly expressed, and her sentiments and adventures, more or less amplified, enter so largely into it as to constitute it a partial autobiography. Yet her claim to its authorship has been disputed by M. Tournachon de Montvéran, one of her lovers, in favour of another of her admirers, a certain Oratorian of the house of Montmorency, who is said to have followed her from France to Switzerland, where, to beguile the time, he composed the romance of 'Valérie.' He died, bequeathing to the baroness a certain sum for the expenses of the publication of his book, which took place, indeed, but under the name of his executrix. (Querard, 'Les Supercheries Littéraires,' vol. ii. p. 332.) Being at Berlin in 1816, the baroness sought, with slight success, to acquire an ascendancy over the mind of the Queen Louisa Augusta, after whose death, July 19th, 1810, she gave herself up to a greater and greater extravagance of mysticism, in which she even surpassed Jung Stilling, to whom she attached herself for some time at Carlsruhe. Her correspondence for several years abounds in mystical effusions, and reveals her double tendency to illuminism and to worldly frivolity. She believed that she had received a mission for the re-establishment of the kingdom of Christ upon earth, and traversed Germany, distributing alms, and preaching, especially at Heidelberg, where she commenced her progress, in the public prisons, and to the most abandoned of the population. On the fall of Napoleon, she followed the Emperor Alexander to Paris, whose interest she had excited by a vague prophecy of the escape of Napoleon from Elba, his triumphant return to Paris, and the second exile of the Bourbons. The fulfilment of some of her prognostications gave her great influence over the mind of the Russian sovereign; and to her has been referred the first conception of the idea of the Holy Alliance (September, 1815). Leaving Paris on the 22nd of October, about a month after the departure of the Emperor, who had invited her to St. Petersburg, the Baroness Krüdner paid a visit to Switzerland, and caused such a commotion at Basel, that she was expelled by the authorities for the disturbance to which the promulgation of her doctrines had given rise. The example of Basel was followed by city after city, and state after state, so that at length she was conducted through Leipzig and Königsberg into Russian territory, where, owing to the waning of the Czar's belief in her pretensions, she found herself interdicted from Moscow and St. Petersburg. Her final effort after the fulfilment of her mission was made by her undertaking a philanthropic journey in 1822 to the Crimea, for the purpose of opening a house of refuge for criminals and social offenders. She died at Karasu-Bazar, on the 25th of December, 1824. She left a few inconsiderable works behind her, of which need be mentioned only the 'Camp des Vertus; ou, la grande Revue de l'Armée Russe dans la Plaine de ce Nom par l'Empereur Alexandre,' 8vo, Paris, 1815; and a Journal for the Poor, 'Armenzeitung,' 5th May, 1817, of which only the first number was published, and which is with considerable probability referred alternatively to Kellner, the agent of the baroness, as its author. Amongst the works which have been written to throw light upon her life

and character may be enumerated a volume entitled 'Frau von Krüdener in der Schweiz,' 8vo, St. Gall, 1817; and the several volumes of J. B. H. R. Capéfigue, 'La Baronne de Krüdener, l'Empereur Alexandre 1^{er} au Congrès de Vienne et les Traités de 1815,' 12mo, Paris, 1866; of Charles Eynard, 'Vie de Madame de Krüdener,' 2 vols. 8vo, Paris, 1849; and the Rev. W. Ziethe's Lecture delivered in the Hall of the Evangelical Alliance, entitled 'Juliane von Krüdener. Ein Vortrag gehalten im Saale des evangelischen Vereins für Kirchliche Zwecke den 29 Febr., 1864,' 16mo, Berlin, 1864.

KRUG, LUDWIG, an old German goldsmith and engraver, was the son of a goldsmith in Nürnberg, where he was born towards the end of the 15th century. Neudörffer, who knew him, says that he worked as a master in Nürnberg in 1523; that he was of an inventive and philosophical mind, and that he executed artistically gold and silver work, chasing, repoussé, sculpture, painting, and portraiture. It is as an engraver, however, that he is remembered, and it is remarkable that a contemporary and fellow-townsmen of Albert Dürer, and working when his style was being everywhere imitated, Krug, both as designer and engraver, shows a much closer approximation to the manner of Lucas van Leyden. Among his well-known prints are a 'Nativity,' a 'Christ crowned with thorns,' 'The Adoration of the Magi,' the 'Virgin Mary,' and 'The Fall.' De Jongh and some others have assigned the prints of 'The Fall,' 'The Nativity,' &c., which bear Krug's monograph, a jug (Germ. Krug) between the letters L. and K., to Lucas Cornelisz of Leyden, but apparently on insufficient grounds. Krug died, according to Neudörffer, after 1536. The British Museum possesses fine impressions of some of his prints; in the Berlin Museum is a small rilievo in stone ascribed to him. (Bartsch, *Peintre Graveur*, vol. vii. 535; Passavant, vol. i. 228, vol. iii. 132; Neudörffer, *Nachrichten von den vornehmsten Künstlern so innerhalb hundert Jahren in Nürnberg gelebt haben*; Nagler, *Künstler-Lexicon*.)

KRÜGER, FRANZ, German painter, born September 3rd, 1797, at Radegast, Anhalt-Dessau, was in the main self-taught. He settled at Berlin, drew portraits, military subjects, hunting-pieces, and landscapes with animals, in depicting which he had acquired great facility. He was named member and professor of the Academy, and appointed court painter, and found thenceforward abundant occupation in painting official pictures, and equestrian and other portraits of the sovereigns of Germany and the more distinguished personages of their courts. His works have been much praised, and they are favourable examples of their class. Franz Krüger was an officer of the Red Eagle, and a knight of several other German orders. He died January 21st, 1857.

KRUPP, FRIEDRICH, proprietor of the largest cast-steel works in the world, was born at Essen, in Rhenish Prussia. His father established a small work in the midst of a rich coal and iron district, with only two workmen in his employ, in 1827; and this has gradually developed into a concern of vast magnitude, chiefly under the management and ownership of Friedrich. His experiments led him to modes of procedure by which he was able to produce masses of cast-steel larger than had been before known. At the Great Exhibition in Hyde Park in 1851, his ingot or block, weighing 45 centners (a little under 45 cwt.), attracted much attention; at the Munich Exhibition in 1854, this weight was greatly exceeded; still further, at the Paris Exhibition in 1855; while at the International Exhibition in London, in 1862, the display was little less than marvellous. One specimen was a solid cylinder of cast steel, 9 feet long, 44 inches diameter, and weighed 400 cwt.; it was purposely broken into two parts, and did not exhibit the slightest flaw, even when examined through a lens. What is known as 'Krupp's Steel' is made from a highly crystalline variety of cast iron called 'Spiegeleisen,' by decarburisation in a puddling-furnace; and its excellence depends conjointly on the choice of materials and the care observed in the processes. Until 1846 Herr Krupp was chiefly engaged in the manufacture of steel rails, tyres, cranks, axles, pump-rods, &c.; but in that year he began to manufacture steel guns. He sent his first six-pounder to the Hyde Park Exhibition in 1851; his progress after this was so rapid, that by the end of 1865 he had made 2600 steel guns for the Prussian, Austrian, Italian, Belgian, Dutch, Turkish, and Japanese governments. The largest in size and weight was displayed at the Paris Exhibition in 1867. Its weight was 50 tons, or 1000 cwt., calibre 14 inches, length 17 feet; it had 40 rifle grooves, took a charge of 110 lb. to 130 lb. of powder, and propelled a shell of 1080 lb., or a shot of 1212 lb. This mighty gun took sixteen months to manufacture, working night and day; it was valued at

15,750*l*. Lieutenant-Colonel Owen, who wrote an official report on the artillery at the Paris Exhibition, stated that in that year (1867) Krupp's works at Essen occupied 450 acres of ground, about one-fourth under cover; 8000 men were employed at Essen, besides 2000 more at various coal and iron works belonging to the firm; there were 112 smelting, reverberating, and puddling furnaces; 195 steam-engines, from 2 to 1000 horsepower; 49 steam-hammers, from 1 to 50 tons weight; 110 smith's forges, 318 lathes, 111 planing-machines, 61 cutting and shaping machines. The firm had up to that year delivered 3500 steel guns, valued at 1,050,000*l*., and had received orders for the immediate delivery of 2200 more. During the Franco-German war, 1870-71, Krupp's steel guns were largely used by the Germans; but the heaviest siege guns, from which great results were expected, had not long been brought into position when the armistice put an end to the firing. In the competitive trials made in Prussia in 1869, between Krupp's and Armstrong's large guns, the superiority of the English guns was most decided in every trial, whilst their cost was much less; but Krupp has been busy experimenting since then, and has had Armstrong guns to work by, so that he may possibly have succeeded in removing the former disparity. Herr Krupp's personal history has been absorbed in that of his great establishment. He was offered a patent of nobility in 1864, by the King of Prussia, but declined it. The qualities of the Krupp steel have been made the subject of G. Weber's 'Expériences faites relativement à la Force de Cohésion et à la Torsion de l'Acier fondu pour bouches à feu de M. Krupp . . . avec une Plaque,' Paris, 1864.

KRUSEMAN, CORNELIS, a celebrated Dutch painter, was born at Amsterdam, September 25th, 1797; and studied in the art-academy of that city under C. H. Hodges. He at first painted interiors, but the contemplation of the great historical paintings in Italy led him to devote himself entirely to the higher walks of art. Among his more important scriptural pictures were a 'St. John Preaching,' of colossal dimensions, which was much admired, and 'St. Mary Magdalen at the Sepulchre,' which is in the collection of the King of Holland. He also painted a 'Holy Family,' a 'Belisarius asking Alma,' several subjects from Dutch history, &c. In 1826 he published an interesting account of his professional tour in Italy, 'Aanteekingen van C. Kruseman, betrekkelijk des zelfs Kunstreis en verblyf in Italie,' which was translated into German by C. Mayboom, in 1832. C. Kruseman died November 14th, 1857. His brother,

JAN ADAM KRUSEMAN, born at Haarlem, February 12th, 1804, studied in the Amsterdam Academy, of which he was for some years sub-director. He painted many scriptural pieces, one of which, 'Elisha and the Shunamite Woman,' is in the Haarlem Museum; subjects from ancient and modern history; and familiar life and portraits. He died at the Hague, March, 1862.

KRUSENSTERN, ADAM JOHANN VON, hydrographer, was born in Esthonia in 1770. In 1793 he entered the British navy, and served for two years in the Chinese seas. He observed that a trade in furs was being carried on between the Russian possessions in North-west America and China, the goods being conveyed at considerable risk by the overland route. He proposed an expedition to the Russian government for the purpose of opening up a safer and quicker route by sea. The proposition was favourably received, and Krusenstern was appointed to conduct the expedition. His first difficulty was to find ships, there being none in Russia suited for a long sea voyage; and he was ultimately compelled to buy two in England. The expedition started from Kronstadt, June 26, 1803. Cape Horn was doubled January 3, 1804. At the Sandwich Isles the vessels parted company, one proceeding to Russian America, the other to Kamtschatka. Krusenstern's ship passed by Japan, and stayed there four or five months, endeavouring, but without success, to induce the Japanese authorities to receive one of the party, M. de Resanoff, as the ambassador for Russia. On April 18, 1805, he left Nangasaki, passed through the Japanese seas, correcting much of the geography about Sangar Strait and the island of Yesso, and discovering several of the Kurile islands. He explored the mouth of the Amur, and verified the previous observations of La Pérouse. In returning home he passed through the Chinese Sea, rounded the Cape of Good Hope, and reached Kronstadt, August 7, 1806. The Emperor Nicholas, and his successor Alexander, conferred many honours upon him, such as the orders of Santa Anna and the Red Eagle; appointed him a member of a standing scientific

committee for improving the construction of ships for the Russian navy; and raised him to the rank of vice-admiral. He was elected a member of numerous societies in Russia and elsewhere. His voyage is noteworthy, partly on account of the geographical discoveries which resulted from it, and partly because it was the first Russian circumnavigatory expedition. The details of the voyage are given in 'Reise um die Welt in den Jahren 1803—1806,' etc., 4to, St. Petersburg, 1810—1811. Translations of it have been given by Hoppner in English, and by Eyries in French. He also wrote 'Wörter Sammlungen aus den Sprachen einiger Völker des östlichen Asiens und die Nordweste Kuste von America,' 4to, St. Petersburg, 1843; 'Recueil de Mémoires hydrographiques pour servir d'Analyse et d'Explication à l'Atlas de l'Océan Pacifique,' 3 vols. 4to, with folio atlas, St. Petersburg, 1824—1835, which contains valuable information on the winds, currents, and tides of the Pacific Ocean; and several papers on ships' compasses, Plymouth Harbour, discoveries in the South Pacific and Atlantic Oceans, and Middel-dorf's journey in Northern Siberia. He died at Revel in 1846.

KUGLER, FRANZ THEODOR [E. C. vol. iii. col. 755]. Dr. Kugler died on the 18th of March, 1858. A new edition, being the fourth, of his 'Handbuch der Kunstgeschichte,' in 2 vols. 8vo, was published in 1861, under the editorial care of Von Lübke.

KUNTZ, KARL, German animal painter and engraver, born at Mannheim, July 28th, 1770, was a pupil of J. Rönger. After travelling in Italy and Switzerland, he settled in Karlsruhe, where he was appointed court painter and director of the grand-ducal picture-gallery, and where he died, September 8th, 1830. As a painter, Kuntz imitated Paul Potter, whose famous 'Cow' forms the subject of one of the best of his engravings. Another celebrated engraving is the 'Abraham and Agar' of Claude Lorrain. He also engraved several landscapes in aquatint. His son, RUDOLF KUNTZ, born at Mannheim, September 10th, 1797, died at Karlsruhe, May 8th, 1848, was widely known by his paintings and lithographs of horses; while a second son, LUDWIG KUNTZ, born July, 1810, has published a collection of lithographs of his father's sketches, 'Thierstudien nach der Natur gemalt von Karl Kuntz,' 4to, Karlsruhe, 1837; and several series of sketches from nature.

KÜRSCHNER, CONRAD, a learned divine of the Reformed Church, the son of Roman Catholic parents who were in humble circumstances, was born on the 8th of January, 1478, at Ruffach, in Alsace, where he received his earlier education. In 1491 he entered upon a sixteen months' residence at Heidelberg, upon which occasion, at the dictation of his uncle, Jodocus Galle, to whom he was indebted for assistance, he assumed the name of Pellican. He returned to Ruffach in 1492, where he became assistant to a schoolmaster, and received encouragement in his studies from the monks of a neighbouring convent of Cordeliers, into whose order he entered in 1493, without the knowledge of his parents. In 1494 he was ordained sub-deacon; and in 1496, at the instance of his uncle, repaired for the completion of his studies, first to Basel, and afterwards to Tübingen. Here, in 1499, he commenced, with the assistance of a converted Jew, who was a member of his order, the study of Hebrew, in which he subsequently attained so great proficiency as to be reckoned, after Reuchlin, the most eminent Hebrew scholar in Germany. He was ordained priest at Pfortzheim, and celebrated his first mass in his convent at Ruffach in 1501; and in the following year was appointed professor of theology in a Minorite convent at Basel. Here he was employed by Amerbach, the printer, on an edition of the works of St. Augustine, which was published in 9 vols. folio, 1506; and he also superintended an edition of the Psalter in four languages. In 1508 he removed to Ruffach, where he officiated as divinity professor; in 1511, became guardian of the convent of his order at Pfortzheim, and, in 1519, of the convent at Basel. The reading of the works of Luther precipitated the doubts as to the validity of the Romish Church which the study of the Scriptures had already raised; and he became a firm adherent of the principles of the Reformation. For some time he professed the Reformed doctrines with some reserve; but,

growing bolder in his propagandism, he was accused of heresy in a chapter of his order in 1522. He defended himself successfully; and when in 1523, upon the visitation of the convent by the provincial, Gaspar Sazgar, steps were being taken to depose him from his office, these were stayed by the interference of the Senate, by whom he was made fellow-professor of divinity with Ecolampadius, and continued to act in that capacity in the university even after a more successful effort had been made to deprive him of his position as guardian of the convent. In 1526, on the invitation of Zwingle, he repaired to Zürich, where he became professor of divinity and of Hebrew; and soon afterwards contracted marriage, in order to signalise the completeness of his protest against the Romish system in general, and against the immorality incidental to enforced clerical celibacy in particular. By this step he forfeited the friendship of the more temporising scholar, Erasmus. Kürschner died on the 5th of April, 1656, having produced works which are said to have been published together in 7 vols. folio; but this is to be understood of the aggregate bulk of his works rather than of any collective edition that can be identified or authenticated. He had great reputation as a Biblical commentator, and as an expert in Rabbinical literature.

KÜSELL, or KYSELL, MATTHIAS, German engraver, was born at Augsburg in 1621; settled in Munich, and engraved a large number of portraits, two or three Scriptural subjects, and a set of forty-six etchings of scenes, &c., from the opera 'Il Poma d'Oro,' all of which are in much request among collectors. He also published a folio volume on the fine arts, 'Nobilissima Artis Graphice soboles.' He died in 1682.

KÜSELL, or KYSELL, MELCHIOR, brother of the preceding, born at Augsburg in 1622, was a pupil of M. Merian, and stayed for a while in Frankfurt, but returned to Augsburg in 1655. His style is more refined and spirited than that of his brother; his etchings are especially admirable. He engraved several portraits; the 'Life and Passion of Christ,' oblong folio, twenty-five plates; and about ninety landscapes, marine views, architectural and miscellaneous subjects, and a series of plates illustrating Ovid's 'Metamorphoses,' oblong 4to, 1681, all after J. W. Baur; a set of two hundred and forty-nine plates in quarto (1679), from the Old and New Testaments; one hundred and eighty-two plates of 'Spiritual Emblems,' after Strauch; and sixty plates of the 'Adventures of Ulysses,' after N. Kraus. Nagler gives a full list of his works. He died in 1683.

*KÜTZING, FRIEDRICH TRAUGOTT, botanist, was born at Ritterbourg, in Thuringia, December 8, 1807. His education was completed at Halle. His earliest papers were on the genera *Viola* and *Callitriche*; but, in 'Flora' for 1833, he published a paper on an 'Algologische Excursion am salzigen See im Mansfeldischen in Jahre 1832'; another in 'Linnæa' for the same year, giving a systematic résumé of all the genera of Diatoms; which was succeeded by a long account, in the 'Annales des Sciences Naturelles' for 1834, of the origin and development of the simpler Algæ. These and a few other papers by him attracted considerable attention, and, in 1835, the Academy of Berlin commissioned him to draw up a report on the plants growing in the Adriatic and Mediterranean. On his return he was elected professor of natural history in the Realschule of Nordhausen. He is now recognised as one of the highest authorities on the *Algae*. Most of his principal works are devoted to their description; and amongst others we may cite 'Die Kiesel-schaligen Bacillarien oder Diatomeen,' 4to, Nordhausen, 1844; 'Die Umwandlung niederer Algenformen in höhere, sowie auch in Gattungen ganz verschiedener Familien höherer Cryptogamen,' Haarlem, 1839; 'Phycologia generalis,' 4to, Leipzig, 1843; 'Phycologia Germanica,' 8vo, Nordhausen, 1845; 'Tabula Phycologia,' 2 vols. Nordhausen, 1845—52, a work containing 200 plates of figures; and 'Species Algarum,' 8vo, Lipsiæ, 1849. He has also written some students' books on botany, chemistry, and geography, of which the most noteworthy is 'Grundzüge der philosophischen Botanik' 2 vols. 8vo, Leipzig, 1851—52.

KYNASTON, SIR FRANCIS [KINASTON, SIR FRANCIS, E. C. S.].

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LABADIE, JEAN DE, a French enthusiast, son of Jean Charles de Labadie, governor of Bourg, in Guienne, was born in that town on the 13th of February, 1610. At six or seven years of age he was sent to Bordeaux to be educated at the College of the Jesuits there, and was received into their society about the year 1624, after the death of his father, who had been opposed to such a step. Finding his aspirations after perfection and his mystical tendencies to be incapable of satisfaction in this community, he was released in 1639; and, after having made a preaching tour of Guienne, repaired to Paris, where he preached in various places, and attracted the favourable regard of M. de Gondren, general of the Oratoire. His zeal and eloquence procured for him the patronage of Caumartin, bishop of Amiens, who presented him to a prebend in his cathedral church of St. Nicholas. He left Paris the more willingly because he believed he had already made himself obnoxious to the ecclesiastical authorities by his opinions concerning grace, predestination, and penitence. At Amiens he aimed at being a director of consciences, and, arrogating to himself the title of a second John the Baptist, sent into the world as the forerunner of a second Messiah, presently found himself at the head of a devoted band of admirers and adherents. His reputation for sanctity was exploded by the discovery of an intrigue in a nunnery at Abbeville, and by the suspicion of others; and he avoided arrest by escaping to Paris. He sojourned for a time at Port Royal, where, however, he did not continue long, as he found the subtlety and intelligence of the society at that place too great for the validity of his pretensions. Accordingly, he repaired first to Bazas, and afterwards to Toulouse, where Archbishop de Montchal became his patron, and gave him the direction of a female convent of the third order of St. Francis. Here his desire to restore the notions of primitive purity led him into various indecent familiarities; and it is even said that he, in the costume of Adam, preached twice or thrice a week to a female auditory in the costume of Eve. The scandal caused by his irregularities at length necessitated his flight from Toulouse; and in 1650 he became a convert to Calvinism at Montauban, upon which occasion he published a 'Déclaration de J. de L'Abadie, cy-devant Prestre, contenant les Raisons qui l'ont obligé à quitter la Communie de l'Eglise Romaine pour se ranger à celle de l'Eglise Réformée,' 8vo, Montauban, 1650, which was followed by a 'Lettre à ses Amis de la Communie Romaine touchant sa Déclaration. Divisée en deux Parties,' 8vo, Montauban, 1651. He officiated for eight years as pastor of the Reformed Church at Montauban, from which he was expelled for exciting a sedition; and, having found a temporary asylum at Orange, repaired in 1659 to Geneva. Being obliged to quit this city on account of the commotions which he excited, he became, in 1666, pastor of the church at Middleburg, where he caused such disorders that he was cited to appear before the Synod at Dort, by which he was formally deposed from his office. His most notable exploit about this time was his gaining over Mademoiselle Schurmann, of literary celebrity, as one of his most ardent adherents, who in her turn made a proselyte of Elizabeth, the Princess Palatine, who offered an asylum to the fugitive disciples of Labadie. After various adventures in Germany and Holland, in the course of which he established a printing-press at a kind of communistic settlement between Utrecht and Amsterdam, from which many of his works were issued, he repaired finally to Altona, in Holstein, where he held private conferences, and where he died of the colic on the 2nd of February, 1674. The sect of the Labadists, as his followers were called, after a distinct existence which continued till the 18th century, became merged into other mystical communions. They held that the regenerate alone could be admitted to the sacraments, and glorified the illumination of the spirit to the prejudice of the letter, which, they held, led to idolatry. They asserted the dignity and the necessity of manual labour, and their social life was modified by communistic doctrines.

The more remarkable of the numerous works of Labadie are—'Le Hérault du grand Roi Jésus,' 12mo, Amsterdam, 1667; 'Le véritable Exorcisme; ou, l'unique Moyen de chasser le Diable du Monde Chrétien,' 12mo, Amsterdam, 1667; 'Le Chant royal du Roi Jésus-Christ,' 12mo, Amsterdam, 1670; 'Les saintes

Décades,' 8vo, Amsterdam, 1671; 'L'Empire du Saint-Esprit,' 12mo, Amsterdam, 1671; 'Traité de Soi: ou, le Renoncement à Soi-même,' &c., &c. The biography of Labadie was published as 'Vie de Jean Labadie,' 12mo, the Hague, 1670; and an apology for his career was published in French and Dutch, with the title of 'Preuves véritables de la Piété du Sr. J. de Labadie, tirées de son Livre, intitulé Nouvelle Conviction manifeste des Calomnies semées par les Ennemis du Sr. J. de L. contre sa Vie,' &c., 4to, Utrecht, 1670.

LABBÉ, PHILIPPE, a learned Jesuit, was born at Bourges, July 10th, 1607. He entered the Jesuit College at Bourges in 1623; afterwards taught there theology and philosophy till about 1644, when he removed to a similar chair at Paris. He ranks among the most learned members of the society. His memory was prodigious, and his diligence untiring; but his judgment was not conspicuous; he had little critical acumen, and his style is tedious and slovenly. He produced a vast number of books; but many are compilations, and of little value. It will suffice to name such works as 'De Byzantinæ Historiæ Scriptoris,' fol., Paris, 1648; 'Nova Bibliotheca Manuscriptorum Librorum,' fol., 1657, of which only two out of the five volumes announced appeared; 'Bibliotheca Bibliothecarum,' fol., Paris, 1664, 1672, and 1686, and 4to, Geneva, 1680; 'Chronologie française, ou Abrégé Chronologique de l'Histoire sacrée et profane,' 5 vols. 12mo, Paris, 1666; 'Concordia Chronologica,' 5 vols. fol., 1670; and 'SS. Concilia ad regiam editionem exacta,' written in conjunction with the Père Cossart, 17 vols. fol., Paris, 1672, and of which a second edition was published at Venice, in 1728, by N. Coleti, in 25 folio volumes. Besides these, the Père Labbé published a vast number of other works on ecclesiastical and French history and chronology; a 'Bibliotheca anti-Janseniana,' 4to, 1654, and other polemical works, chiefly directed against the Jansenists; several books on geography and general history, bibliography, philology, and Greek poetry, and some of a devotional character, whilst others with which he had made more or less progress were stopped by his death, which occurred at Paris on the 25th of March, 1687. Chaudon has fairly characterised his endless and bulky volumes:—"They have been so far useful, in that they have furnished the means of doing better, and have abridged the labours of later writers."

LABILLARDIERE, JACQUES JULIEN DE, botanist, was born at Alençon, October 23, 1755. From the school at Alençon he went to Montpellier, where he studied botany under Gouan, and afterwards proceeded to Paris, from the university of which city he took his degree in medicine in 1780. From this period his life was almost wholly spent in botanical research, and a large portion was occupied in personally exploring many and widely separated regions. He visited England, and there examined the large collection formed by Banks; then he traversed the Alps contiguous to the boundary between France and Italy. In 1786 Syria was visited, and some valuable observations made on the remnants of the forest of Mount Lebanon, as well as on the Druses who dwell there. In 1791 he was attached to Entrecasteux's expedition in search of La Pérouse, and was thus enabled to examine the botanical productions of the Cape of Good Hope, Van Diemen's Land, New Caledonia, and numerous other islands in Polynesia, New Guinea, Amboyna, Australia, and Java. On this voyage he collected upwards of 4000 species, of which about 3000 had not previously been described. The materials which he thus brought together, and whose study occupied him several years, formed one of the most important additions ever made by one individual to our knowledge of the plant-growth of the southern hemisphere. The principal results of his researches are given in 'Icones plantarum Syriæ rariorum descriptionibus et observationibus illustratæ,' 4to, Paris, 1791—1812, which is enriched with excellent plates by Redouté; 'Relation du Voyage à la recherche de La Pérouse fait par ordre de l'Assemblée constituante pendant les années 1791, 1792,' &c., 2 vols. 4to, with a folio atlas, Paris, 1800; 'Novæ Hollandiæ Plantarum Specimen,' 2 vols. 4to, 1804—1806; and 'Sertum Austro-Caledonicum,' 2 parts, 4to, 1824—1825, 80 plates. He also wrote a few short papers in the 'Mémoires' of the Institute and of the Museum of Natural History, as also in the 'Bul-

letins' of the Société Philomathique de Paris. He died at Paris, January 8, 1834.

LACORDAIRE, JEAN BAPTISTE HENRI DOMINIQUE, a French divine, and one of the greatest of modern orators, was born on the 12th of May, 1802, at the village of Recy-sur-Ouche, in the arrondissement of Châtillon-sur-Seine. At four years of age he lost his father, a physician of some distinction, and was taken by his mother to Dijon, the Collège of which he entered in 1812, and presently gave promise of eminence as a rhetorician. From the Collège he migrated in 1819 to the École de Droit, where for several years he devoted himself successfully to jurisprudence, history, philosophy, and general literature, cherishing all the time an ardent republicanism and a theological system dictated by Voltaire, and "respiring scepticism," as he afterwards said, "with the air in the University." Having graduated in law, he repaired, in 1821, to Paris, where he became a *stagiaire*, or probationary advocate, and pursued his studies for two years under the direction of M. Guillemin, an advocate of the Cour de Cassation. In 1824, having discovered a way for the reconciliation of philosophy and Christianity, he determined upon devoting himself to the Church, and entered, May 12th, 1824, the Seminary of Saint-Sulpice. He was ordained priest on the 22nd of September, 1827, and was appointed by Archbishop de Quélen as almoner of the Visitation. He gave his leisure to the study of Plato and the fathers of the Church; and preached his first sermon—the only sermon, it is said, which he ever wrote beforehand—at the Collège Stanislas, on Christmas-day. In 1828 he became almoner-adjoint to the Collège Henri IV.; and having laboured with success as a preacher to the young, was on the eve of leaving for America, where the Bishop of New York had offered him the post of Vicar-General, when he was kept back by the revolution of 1830. He now connected himself closely with the Abbé de Lamennais, by whose character and talent he was fascinated, and by whom he was moulded into one of the most brilliant contributors to the democratico-Catholic journal, 'L'Avenir,' which they founded together on the 15th of October, 1830, in association with the Abbé Gerbet and the Comte de Montalembert, adopting as the motto of their literary venture the words "Dieu et la Liberté," which was regarded by its authors as nearly synonymous with "Le Pape et le Peuple." Cited, jointly with M. de Lamennais, on the 31st of January, 1831, before the Cour d'Assises of Paris to answer for the appearance of two articles in the 'Avenir,' Lacordaire said:—"I stand here near the man who began the reconciliation of Catholicism with the world. Let me tell him how affected I am by the part that God has made for me in giving me him as my master and my father." The advocacy was successful; but the 'Avenir' brought its conductors into collision with the Pope as well as with the government of July; and Lacordaire, having made a journey to Rome to defend his opinions, submitted them to the authority of his Holiness. On his return to Paris, he resumed, by permission of Archbishop de Quélen, his modest position as almoner of the Visitation, occupying his leisure, as before, with the study of Plato and of St. Augustine, whom, of all the Christian fathers, he prized the most for the profundity of his theological speculations. In 1834 he began his conferences at the chapel of the Collège Stanislas, and in the following year at Notre Dame, where he attracted crowds by the freedom and eloquence with which he introduced the treatment of political and social affairs into his discourses. He discussed, with a boldness which laid him open to ecclesiastical censure and suspicion, the topics of the day and of the moment—nationality, liberty, railroads, and the general resources and the development of industry. In 1836 he repaired for the second time to Rome, where he was well received by the Pope, and where he wrote a 'Lettre sur le Saint-Siège,' which, however, he did not publish till two years after, and in which he solemnly retracted the doctrines promulgated in the 'Avenir,' and glorified faith, which was of God, to the prejudice of human reason, which was a child of naught, and came from the devil. He preached at Notre-Dame during Lent, 1838, and revived the disquiet of the more rigidly conservative of the clergy. He paid a third visit to Rome; and, in order to be able to preach with greater freedom from episcopal control, he took the habit of the Preaching Friars at their Convent of Santa Maria sopra Minerva, on the 9th of April, 1839, and the next day retired, for the performance of his noviciate, to a convent in the neighbourhood of Viterbo. Here he wrote an apology for the religious orders, entitled 'Mémoire pour le Rétablissement en France de l'Ordre des Frères Prêcheurs,' 8vo, Paris, 1840. On taking the vows of the order, on the 6th of

April, 1840, he added to his Christian names that of the founder, of whom he produced a Life, 'Vie de Saint Dominique,' 8vo, Paris, 1840, second edition, 12mo, Paris, 1841—a work which, especially on account of the boldness with which it apologised for the Inquisition, achieved a considerable circulation in several European languages. Returning to France, he made his first re-appearance in the pulpit of Notre-Dame in February, 1841, in the habit of a Dominican, and startled his auditory by dwelling mainly on the historical glories of France. His fame as an orator soon spread everywhere. He was called upon not only to advocate the cause of various charities in Paris, but also to preach at Bordeaux, Lyons, Nancy, Grenoble, and other principal towns in France, where the novelty he had introduced into pulpit oratory excited mingled wonder and admiration. On the breaking out of the revolution of February, 1848, he was elected a member of the Constituent Assembly for the department of Bouches-du-Rhône. He took his place, in his habit of a Dominican friar, two benches below the seat of his old ally, Lamennais; but a few weeks' trial convinced him that he had mistaken his sphere, and he resigned. In 1850 he went to Rome as representative of M. Sibour, Archbishop of Paris, who had condemned the editors of 'L'Univers' for their bitterness of political feeling. It was on this occasion that the Pope recognised the convents of the Dominicans in France as constituting a province, and conferred upon Lacordaire the office of Provincial, which the latter held for four years, and then refused to be nominated for re-election. His last great sermon in Paris was preached in 1853 in the church of Saint-Roch, and touched perilously on the then recent extensions of the Imperial prerogative. Complaint was made to the ecclesiastical authorities on account of his political allusions; and, before the year was out, Lacordaire was offered and accepted the direction of the free College of Sorrèze, in the department of the Tarn. Early in 1861 he visited Paris for the purpose of being received into the Académie Française, to which he was elected on the death of M. de Tocqueville. The introduction of the new member devolved on M. Guizot; and whilst the speech of the former upon his reception was published as 'Discours de Réception à l'Académie Française par H. D. Lacordaire, 24 Janvier, 1861,' 8vo, Paris, 1861, the interest of the public in the transaction, which they regarded as having a political significance, was partially represented by a brochure entitled 'Un Moine à l'Académie,' 8vo, Paris, 1861. Lacordaire returned to his seminary at Sorrèze, where he died on the 21st of November, 1861.

The several or collective works of M. Lacordaire include 'Conférences prêchées à Lyon et à Grenoble,' &c., 8vo, Lyon, 1845; 'Conférences de Notre-Dame de Paris,' 4 vols. 8vo, Paris, 1844—51, English translation, vol. i. 8vo, London, 1851; 'Éloge funèbre du Général Drouot, prononcé dans le Cathédrale de Nancy, le 25 Mai, 1847,' 8vo, Paris, 1847; 'Éloge funèbre de Mgr. Charles Auguste de Forbin-Janson, Evêque de Nancy et de Toul, prononcé dans le Cathédrale de Nancy le 28 Août, 1844,' 8vo, Paris, 1844; 'Conférences de Toulouse, suivies de divers Opuscules,' 8vo, Paris and Tours, 1857; 'Discours sur le Droit et le Devoir de la Propriété,' &c., 8vo, Toulouse, 1858; 'Œuvres,' 6 vols. 8vo and 12mo, Paris, 1858; 'Lettres à un jeune Homme sur la Vie Chrétienne,' 3 parts, 8vo, Paris and Tours, 1858, another edition, 1860; 'Sainte Marie-Madeleine,' 12mo, Paris and Tours, 1860, second edition, 1860; 'De la Liberté de l'Italie et de l'Eglise,' 8vo, Paris, 1860; 'Lettres du Père Lacordaire à des jeunes Gens, recueillies et publiées par H. Herreyve,' second edition, 12mo, Paris, 1863, third augmented edition, 8vo, Paris, 1863; 'Lettres à Madame la Comtesse E. de la Tour du Pin, publiées par Madame D***,' 8vo, Paris, 1864; and 'Jesus Christ. Conférences delivered at Notre-Dame,' 8vo, London, 1869.

The literature illustrative of the life and career of Père Lacordaire is very voluminous, and includes 'Les derniers Moments du R. P. H. D. Lacordaire, par un Religieux de l'Ordre des Frères Prêcheurs,' 8vo, Paris and Toulouse, 1861; 'De l'Influence du R. P. Lacordaire sur la Génération actuelle,' 8vo, Paris and Toulouse, 1862; 'Le Révérend Père Lacordaire: sa Vie, sa Mort, ses Funérailles, son Portrait,' 16mo, Paris and Toulouse, 1862; 'Le Père Lacordaire: ses Œuvres et sa Doctrine, par Ernest Hello, extrait de la "Revue du Monde Catholique" du 25 Janvier, 1862,' 8vo, Paris, 1862; 'Lacordaire: sa Vie, ses Œuvres, par M. François Beslay, précédé d'une Lettre du Père Lacordaire à l'Auteur,' 8vo, Paris, 1862; 'Le Père Lacordaire, dans l'Audace et dans l'Humilité de son Génie,' &c., par M. Alexandre Guillemin, Docteur en Droit, &c.,

8vo, Paris and Tours, 1862; 'Le Père Lacordaire, par le Comte de Montalembert,' &c., 8vo, Paris, 1862, English translation, 8vo, London, 1863; 'Le Père H. D. Lacordaire. Étude historique et biographique par Maxime de Fourcheux de Montrond,' 12mo, Lille and Paris, 1863; 'Le R. P. H. D. Lacordaire, de l'Ordre des Frères Prêcheurs: sa Vie intime et religieuse par le R. P. B. Chocarné, du même Ordre,' 2 vols. 8vo, Paris and Tours, 1866, English translation, 'The Inner Life,' &c., 8vo, Dublin, 1868; 'Lacordaire,' 8vo, Edinburgh, 1867, by Miss Dora Greenwell; and a Life in E. de Mirecourt's (C. J. B. Jacquot) 'Histoire Contemporaine,' 8vo, Paris, 1867, &c.

LACORDAIRE, JEAN THEODORE, entomologist, elder brother of the Abbé Lacordaire, was born February 1, 1801, at Recey-sur-Ource. He was educated at Dijon for the law, but travelling and natural history being more to his liking, he went to sea in 1825, and during the following seven years repeatedly visited South America, and once went to Senegal. On his return home in 1832, he worked for several scientific journals, and in 1835 he accepted the offer of the chair of zoology in the University of Liège, to which that of comparative anatomy was added a few years after. He translated several books and pamphlets from the English and German, and frequently contributed notices and reviews of the more important books of travel to the 'Revue des Deux Mondes'; but his reputation is mainly based upon his articles and books on insects, of which the following may be mentioned:—'Mémoire sur les Habitudes des Insectes Coléoptères de l'Amérique méridionale,' in the 'Annales des Sciences Naturelles,' xx. pp. 185–291 (1830); xxi. pp. 149–194; 'Essai sur les Coléoptères de la Guyane Française,' in the 'Nouvelles Annales du Muséum d'Histoire Naturelle,' ii. pp. 35–94 (1833); 'Monographie des Coléoptères subpentamères de la Famille des Phytophages,' in the Memoirs of the Royal Society of Science at Liège, vol. iii. pp. 1–740 (1845), v. pp. 1–390 (1848); 'Introduction à l'Entomologie,' 2 vols. 8vo, Paris, 1834–1838; and the 'Histoire Naturelle des Insectes, Genéra des Coléoptères,' etc., both of which works form part of the series called 'Suites à Buffon.' The last mentioned is his greatest production, and is a very elaborate and remarkable one. It is devoted entirely to the Beetles, or *Coleoptera*, and consists of eight octavo volumes, the first published in 1854, and the eighth in 1868; but the work is not completed, and probably one or two more volumes would have been required to terminate it. The author died August 31, 1870.

LAFAGE, RAIMOND, a celebrated French designer and engraver, was born October 1st, 1856, at Lisle, in Albigeois. He was a pupil of Rivalz, and spent several years in Rome and other cities of Italy. He led a dissolute life, and died in poverty, in Paris or Lyons, November 4th, 1890. Lafage was a singularly rapid, dexterous, and brilliant designer, and a clever engraver. His subjects were Biblical, historical, mythological, and bacchanalian; and he executed his pen-drawings especially with great spirit. His drawings are still, as they always have been, in great request in France, but are comparatively rare in this country. A series of 86 plates from his designs was published at Paris shortly after his death.

LA FARINA, GIUSEPPE, an Italian politician, antiquary, and journalist, who at the age of thirteen was for eleven months the partner of the political imprisonment of his father, who was distinguished as a lawyer, archaeologist, littérateur, and liberal, was born at Messina, in Sicily, on the 20th of July, 1815, and was educated at the University of Catania, where he took his doctor's degree in civil and ecclesiastical law in 1834. The youthful ardour of his liberalism led him to become one of the promoters of the popular rising in 1837; and after the defeat of his party, he took refuge abroad. Returning to Sicily after a two years' expatriation, he devoted himself to his profession as an advocate, but especially interested himself in political affairs, to further his views in which he started successively three or four journals, which were successively repressed. His principal work about this time was his 'Messina ed i suoi Monumenti,' 8vo, Messina, 1840. When at length he was interdicted from every kind of journalistic or literary activity, he repaired to Florence, where he found a freer scope for his energies. He here published three illustrated works, entitled respectively, 'La Germania Renana, coi suoi Monumenti e le sue Leggende, descritta,' &c., 8vo, Florence, 1842; 'L'Italia coi suoi Monumenti, le sue Rimembranze ed i suoi Costumi, descritta,' &c., 4to, Florence, 1842, &c.; and 'La Svizzera storica ed artistica, descritta,' &c., 4to, Florence, 1842–43, each of which formed a part of a collection entitled 'Italia, Grecia, Svizzera, e Germania Renana,' &c.; 'Studi sul Secolo decimoterzo,' 8vo, Florence,

1842, &c.; 'La China considerata nella sua Storia, ne' suoi Riti, ne' suoi Costumi, nella sua Industria, nelle sue Arti e ne' più memorevoli Avvenimenti della Guerra attuale. Illustrata,' &c., 4 vols. 8vo, Florence, 1843–47; and 'Storia d'Italia narrata al Popolo Italiano (568–1815),' 7 vols. 8vo, Florence, 1846–54. In June, 1847, he established a journal called 'L'Alba' (The Dawn), which was conceived and conducted in the interests of the unification of Italy on a democratic basis. It was his purpose "fare l'Italia," to achieve the independence and the unity of Italy; and when the revolution of 1848 broke out in Sicily, he repaired thither, landing at Messina on the 22nd of February, when he was immediately elected one of the vice-presidents of the War Committee, and colonel of the 11th battalion. In March following he was elected to represent Messina in the Sicilian Parliament, which assembled at Palermo, and on the 13th of April proposed the deposition of Ferdinand from the throne of Sicily, and the election of a constitutional successor from one of the royal houses of Northern Italy. La Farina, whilst declaring that the first and most urgent care should be the organisation of their resources and the demonstration of confraternity with the rest of Italy, limited the choice of a sovereign for Sicily to members of the families of Tuscany and Savoy. It was accordingly decreed that Ferdinand and his dynasty had for ever fallen from the throne of Sicily, and that, after the reform of the *Statuto*, or constitution, the crown should be offered to an Italian prince. By a decree of the Sicilian Parliament, of the 11th of July, the crown was offered to the Duke of Genoa, second son of Charles Albert, King of Sardinia, by whom, however, it was declined. Against this offer, to give effect to which La Farina was at once accredited with a mission to the courts of Rome, Turin, and Florence, the King of Naples drew up a formal protest, which he fortified by sending an expedition against Messina, which, after fierce fighting and a bombardment of five days and nights, was compelled (September 7th) to surrender. But the Council of Ministers of the Provisional Government—in which, from the 13th of August, La Farina (having returned to Palermo on the 22nd of July) had held the portfolios of the Interior, Public Instruction, and Public Works, and in which, after the fall of Messina, he assumed the Ministry of War and Marine—held out until the 22nd of April, 1849, when the keys of Palermo were surrendered to General Filangieri, and unqualified submission was offered to the king's authority. Thus came to an end the insurrection, or "holy war," of which La Farina furnished a history, entitled 'Istoria documentata della Rivoluzione Siciliana (1848–1849),' 2 parts, 8vo, Capolago, 1850, which form the 19th and 20th fascicoli, or numbers, of the collection of 'Documenti della Guerra santa d'Italia,' 26 fascicoli, 8vo, Capolago and Turin, 1848–51. La Farina was not in office at the time of the catastrophe; for, not finding all the energy of resistance which he desiderated in his colleagues, he resigned in February, 1849, and on the 23rd of April once more expatriated himself, to seek refuge in France. He lived at Paris until June, 1853, afterwards at Tours, and finally went to establish himself at Turin on the 21st of August, 1854. Here one of his first labours was the establishment and direction of the 'Rivista Enciclopedica Italiana,' 8vo, Turin, 1854, &c.; and he otherwise gave proofs of great literary industry, initiating new works, or completing those already begun, the most important being his valuable and exhaustive 'Storia d'Italia dal 1815 al 1850,' 6 vols. 8vo, Turin, 1851–52, 'seconda Edizione, corretta dall'Autore e continuata fino al 1861,' 2 vols. 8vo, Milan, 1864; 'Gli Albighesi, Romanzo storico,' 6 vols. 8vo, Genoa, 1845; 'Dei Fatti più notevoli della Repubblica Romana, Dialoghi,' 16mo, Turin, 1857. On the 1st of June, 1856, he published No. 1 of the 'Piccolo Corriere d'Italia,' which, in the beginning of 1858, became the organ, "bollettino settimanale," of the "Società Nazionale Italiana," which La Farina succeeded in constituting, August 1st, 1857, in furtherance of a plan conceived by Daniele Manin. He was one of the most active and influential promoters of the war declared against Austria on the 26th of April, 1859, and was closely concerned in all the movements having for their end the independence of Italy, for which, after the peace of Villafranca, he laboured more strenuously than ever. In March, 1860, he was chosen as deputy to the first Italian Parliament by six different electoral colleges; on the 27th of October following was named Councillor of State; and on the 2nd of December landed in Sicily as director of the Interior and of Public Safety, to which office he had been appointed on the 10th of November, and which he resigned on the 1st of June, 1861. He returned to Turin, where he pursued his patriotic labours in the Società Nazionale, in the Consiglio di Stato, and in the Parlamento,

until his death, on the 5th of September, 1863. His correspondence, occupying nearly 1200 pages, and consisting of letters addressed (1835–1863) to most of the liberal leaders of Italian opinion, was published as 'Epistolario di Giuseppe La Farina. Raccolto e Pubblicato da Asonio Franchi,' 2 vols. 8vo, Milan, 1869, which called forth on Professor Franchi, for the political and personal bias with which he was alleged to have executed his task, the animadversions of Dr. Agostino Bertani, in a small volume entitled 'L'Epistolario di Giuseppe La Farina. Ire politiche d'oltre Tomba. Raccolte da Agostino Bertani,' 8vo, Florence, 1869.

LAGRÉE, ERNEST MARC LOUIS DE GONZAGUE DOUDART DE, French traveller, was born at St. Vincent de Mercuze, March 31, 1823. From the École Polytechnique he passed into the navy, and took so distinguished a part in the Crimean war of 1854, that he was decorated with the Legion of Honour. In 1862 he went to Cambodia, where he became the commander of the French forces stationed there. In 1866 he was selected to command an exploring expedition through Cochin China. Soon after commencing the journey, he had several attacks of indisposition; but, in spite of his sufferings and the advice of his doctors to return to Saigon, he persisted in proceeding, until at last he became seriously ill on reaching Tung-chuan, January 18, 1868. The expedition was obliged to proceed without him, under the command of M. Garnier. Lagrée lingered for a few weeks, and died at Tung-chuan, March 12, 1868. The general results of this important journey have already been given under GARNIER, M. J. F., in this Supplement.

LA GUÉRONNIÈRE, LOUIS ÉTIENNE ARTHUR DUBREUIL HELION, VICOMTE DE, a French statesman and man of letters, whose elder brother, the Comte Alfred de La Guéronnière, is known for his works entitled 'Les Hommes d'État de l'Angleterre au XIX^e Siècle,' 18mo, Paris, 1854, and 'Vues politiques historiques,' 8vo, Limoges, 1840, was born near Limoges in the year 1816, of a noble family of Poitou distinguished for the strength of their legitimist traditions. Adopting these as his personal opinions, he found, about the year 1835, in 'L'Avenir National' of Limoges, a journal established by his brother, a vehicle for the exposition of his political principles. He thus attracted the attention of Lamartine, who, after the Revolution of 1848, offered him the position of préfet of the department of Corrèze, which he refused for the purpose of continuing an unofficial life in Paris. On the retirement of Lamartine from the Ministry of Foreign Affairs, La Guéronnière joined him in the direction of 'Le Bien Public,' a journal which had been established by the former at Mâcon in 1846, and had been transferred to Paris. 'Le Bien Public' was discontinued towards the end of 1848, and La Guéronnière associated himself for about fifteen months with M. de Girardin, as an almost daily contributor to the 'Presse,' from which he formally separated on the 9th of April, 1851, in order to become the editor of 'Le Pays,' a new journal of which Lamartine was the political director. To this paper La Guéronnière contributed a series of political portraits, one of which, devoted to the Prince President, gave such offence to Lamartine as to force him to disavow the sentiments which it embodied. The portrait of the Prince President gained, however, the admiration and the confidence of its subject; and after the coup d'état of December 2nd, 1851, which La Guéronnière defended as an unhappy necessity, he became one of the staunchest supporters of the new emperor, whose elevation he had predicted, and for whose person he professed an ardent affection. In 1852 he was elected to the Corps Législatif as deputy for the department of Cantal, and assumed the direction of both the 'Pays' and the 'Constitutionnel;' and was admitted, in August of the same year, to the Legion of Honour, in which he was promoted to be a commander on the 21st of July, 1858, and grand officer on the 14th of August, 1866. On the 18th of September, 1854, he was appointed Councillor of State, and subsequently president of the Council-General of Haute-Vienne; and in May, 1859, received the further appointment of superintendent of all matters connected with literature and the press. On the 5th of July, 1861, he was elevated to the Senate, and distinguished himself by his speeches on questions of home and of foreign policy. He assumed the direction of 'La France' in August, 1862, a journal which aimed at the reconciliation of imperial with Catholic interests; and in August, 1868, was sent as ambassador to Brussels, where it fell to him to conduct, on the side of France, the negotiations relative to the Belgian railways. Under the Ollivier ministry La Guéronnière was appointed ambassador to Constantinople, but was recalled after the disasters of the empire. Upon landing at Marseilles,

he was arrested, but presently released, and is now living in retirement.

The works of M. La Guéronnière include 'Portraits politiques contemporains,' second edition, 12mo, Paris, 1853, &c.; another edition, 'Études et Portraits,' &c., 8vo, Paris, 1856, English translation by Lieutenant-Colonel Gillies, 'Contemporary Political Portraits,' forming part of a series entitled, 'Contemporary French Literature,' 8vo, London, 1853, &c.; 'Souvenirs et Notes sur M. Bineau et les Finances de l'Empire,' 8vo, Paris, 1858; 'L'Abandon de Rome,' 8vo, Paris, 1862; and 'De la Politique intérieure et extérieure de la France,' 8vo, Paris, 1862. To these must be added four remarkable brochures which, although published without his name, are unanimously referred to La Guéronnière, who, from the faithfulness with which he represents the Napoleonic ideas, is believed to have enjoyed in their composition the confidence and assistance of the Emperor. These works are 'L'Empereur Napoléon III. et l'Angleterre,' 8vo, Paris, 1858, English translation, 'The Emperor Napoleon III. and England,' 8vo, London, 1858, Dutch translation, 'Napoleon III. en England. Naar het Fransch,' &c., 8vo, the Hague, 1858; 'L'Empereur Napoléon III. et l'Italie,' 8vo, Paris, 1859, &c., German translation by Baron Eduard von C***, 'Italien und die Karte von Europa,' 8vo, Leipzig, 1859; 'Le Pape et le Congrès,' 8vo, Paris, 1859, which called forth animadversions from B. Poujoulat, P. Redins, C. de Riancey, Count Solaro della Margherita, and the Bishops of Nîmes and Perpignan; and 'La France, Rome, et l'Italie,' 8vo, Paris, 1861, which was answered, amongst others, by B. Poujoulat, L. Veuillot, David Chéon, Bishop Pie of Poitiers, and Bishop Dupanloup of Orleans.

LALLY-TOLLENDAL, TROPHIME GÉRARD, MARQUIS DE, French politician, was born at Paris, March 5th, 1751. He was the son of Comte de Lally, Governor of Pondicherry, who was decapitated May 9, 1766. The young Lally spent the early years of his manhood in rescuing his father's name from taint, and in proving his own legitimacy of birth. In 1789 he was elected to the States General by the noblesse of Paris. He mediated for a time between the king and the parliament; but, failing in his advocacy of moderate constitutional measures, retired to Switzerland in 1791, where he published his 'Quintus Capitolinus,' in which he discussed the new constitution. Narrowly escaping the September massacres during a brief visit to Paris in 1792, he spent the rest of the revolutionary period mostly in England. He lived quietly in France during the Consulate and the Empire, though always more attached to the Bourbons than to the Bonapartists. He followed Louis XVIII. to Gand, where he acted as a member of his Privy Council, and, with Chateaubriand, contributed the royalist articles to the 'Moniteur de Gand.' In August, 1815, he was raised to the peerage, and took a leading part in opposing the extreme reactionary measures, and especially those for the censorship. In 1817 he opposed a motion by Boissy d'Anglas for the payment of members; and during the rest of his life, whilst supporting ministerial measures, aimed to mediate in favour of a more liberal policy. Early in life he wrote numerous pamphlets in vindication of his father's good name, and continued to address his countrymen on social and political subjects in subsequent years. He also wrote various works of a less fugitive kind, but none that are likely to be long remembered. It will be enough to mention 'Le Comte de Strafford,' a tragedy in five acts and in verse, 1795, and an essay on the life and character of Strafford, which was published separately; 'La Dame Black-nels,' a divertissement in three acts, 1827; a translation of Pope's 'Universal Prayer,' &c. The 'Mémoires concernant Marie-Antoinette,' 2 vols. 8vo, Paris, 1822, the authorship of which has been much disputed, appear to have been for the greater part compiled by Lally-Tollendal from materials supplied by the Duc de Choiseul and other friends of the unhappy queen. Lally-Tollendal was elected a member of the Académie in 1816, and was one of the founders of the Society for the Amelioration of Prisons. The Marquis (who in earlier days had been characterised by Madame de Staël as "the fattest of sensible men") did not live to witness the second downfall of the Bourbons. He died of apoplexy on the 11th of March, 1830, four months before the revolution which made Louis Philippe "Citizen King" of France.

LAMARTINE, ALPHONSE MARIE LOUIS DE [E. C., vol. iii. col. 777]. The later life of M. de Lamartine was almost exclusively literary. In 1856 he initiated the publication of the 'Cours familier de Littérature,' a monthly serial which he was enabled to bring out by the aid and subscriptions of his friends,

and his conduct of which gave rise to the publication, *inter alia*, of J. Duboul's 'M. de Lamartine et le Cours familial de Littérature, lu en Séance générale de l'Académie des Sciences, Belles-Lettres, et Arts de Bordeaux,' 8vo, Bordeaux, 1858; and M. Ferdinand Loise's 'Lamartine. Sa Situation; son Cours familial de Littérature; ses Œuvres complètes,' 8vo, Bruges, 1861. From the time of his tour in the East, his expenses had been beyond his resources; and in spite of the illusive wealth of large territorial grants made to him by the Sultan, and the farming of his works by a financial association, he found himself bound to unremitting literary labour, chiefly of an ephemeral character, and below the dignity of his previous achievements. In 1858 his friends opened a subscription in his favour, and, although the contributors to the fund for his relief were not limited by place or nationality, the amount raised fell short of what was hoped and expected. His personal intervention in the subscriptions opened on his behalf, his direct appeals to public charity, the repeated lotteries and other operations having in view the rehabilitation of his fortunes, darkened the lustre of his former life. At length, in virtue of a law voted April 15th, 1867, he became a pensioner of the State, and continued in the enjoyment of his allowance until his death on the 1st of March, 1869. An imperial decree ordained that his funeral should take place at the public expense; and, in accordance with his last wishes, it was celebrated with the greatest simplicity at Saint-Point, near Mâcon, his birth-place, where his wife, who pre-deceased him on the 21st of May, 1863, had already been interred.

The more important of his works which have still to be mentioned are his 'Vie d'Alexandre le Grand,' 2 vols. 8vo, Paris, 1859; 'Shakspeare et son Œuvre,' 8vo, Paris, 1864; 'Portraits et Biographies,' 8vo, Paris, 1864, English translation, 2 vols. 8vo, London and Bungay, 1866, comprehending studies of William Pitt, Lord Chatham, Madame Roland, and Charlotte Corday; 'Vie de César,' 8vo, Paris, 1865; 'Les Hommes de la Révolution: Mirabeau, Danton, Vergniaud,' 8vo, Paris, 1865; 'Civilisateurs et Conquêteurs,' 2 vols. 8vo, Paris, 1865; 'Les Grands Hommes de l'Orient: Mahomet, Tamerlan, le Sultan Zizim,' 8vo, Paris, 1865. Most of the above were published in connection with the 'Librairie Internationale;' and an augmented edition of his works was published with the title of 'Œuvres complètes, publiées et inédites: Édition unique,' 40 vols. 8vo, Paris, 1860—63; whilst an edition of his published speeches and writings was published by his staunch friend, Louis Ulbach, as 'La France Parlementaire (1834—1851): Œuvres oratoires et écrits politiques par Alphonse de Lamartine, précédés d'une Étude sur la Vie et les Œuvres de M. de Lamartine,' 6 vols. 8vo, Paris, 1864—65. M. de Lamartine also furnished to the 'Collection Michel Lévy' a series of minor essays in biography and criticism, including 'Homère et Socrate,' 18mo, Paris and Coulommiers, 1863; 'Guillaume Tell: Bernard Palissy,' 18mo, 1863; 'Madame de Sévigné,' 12mo, 1864; 'Fénélon,' 12mo, 1864; 'Cromwell,' 12mo, 1864; 'Bossuet,' 18mo, 1864; 'Nelson,' 18mo, 1864; 'Héloïse et Abélard,' 12mo, 1864; 'Jeanne d'Arc,' 18mo, 1863, English condensed translation, 'Joan of Arc, a Biography,' 16mo, Boston (U.S.), 1867, by S. M. Grinké; 'Antar,' 18mo, 1864; 'J.-J. Rousseau, son faux Contrat social et le vrai Contrat social,' 12mo, 1866; 'B. Cellini,' 12mo, and 'Balzac et ses Œuvres,' 12mo, 1866.

Of the numerous works which have been produced in illustration of the career, or parts of the career, of Lamartine, may be mentioned Professor Ferdinand Loise's 'Le Poète Philosophe: ou, Réflexions sur les Idées philosophiques et religieuses de De Lamartine,' &c., 8vo, Paris, 1857; Jules Forest's 'La Vérité sur De Lamartine,' 8vo, 1860; 'Lamartine devant l'Opinion,' 8vo, 1867; 'Lamartine chez Lui. Souvenirs intimes,' 8vo, 1869; 'Lamartine: Discours prononcé,' &c., 'par Victor de Laprade, de l'Académie Française,' 8vo, 1869; and A. Vémars's 'Biographie complète d'Alphonse de Lamartine,' 16mo, 1869.

LAMBERT, FRANÇOIS, who for some time passed under the name of JOHANNES SERRANUS, or JEAN DE SERRES, a French Protestant theologian of the sixteenth century, was born in 1487, at Avignon; and at the age of fifteen, having lost his father, who had been secretary of the Legation and of the Apostolic Palace, entered a convent of Franciscans, otherwise called Friars Minors and Cordeliers, of which society he became a professed member in his seventeenth year. Having been admitted to priests' orders, he commenced a successful career as a preacher. In the course of his investigations, he saw reason to renounce the doctrines of the Romish Church; and when, in 1522, the writings of Luther had been discovered in his cell, he was obliged to take a hasty leave of Avignon, with the convent of which he

had been connected for twenty years. He now repaired to Switzerland, where for some time, for the sake of security, he adopted the name of Johannes Serranus. He preached the doctrines of the Reformation successively at Geneva, at Lausanne (where he enjoyed the protection of the Prince-Bishop, Sébastien de Montfalcon), at Friburg, at Berne, and at Zurich. In the last-named city he was well received by Zwingli, who admitted him to preach in the church of Notre-Dame, and convinced him, in a public discussion, of the error he had advanced in one of his sermons, in which he had defended the invocation of the saints and the Virgin. The conference took place on the 12th of July, 1522, and on the following day Lambert set out to pay a visit to Erasmus at Basel, which he left in November, in order to proceed to Eisenach, in Thuringia. Here, on the 21st of December, he defended the Reformed doctrines upon Confession, Baptism, Contrition, Satisfaction, and the Marriage of Ecclesiastics, in a series of 139 theses, which were afterwards published, as 'Propositiones apud Isenacum expositæ,' in the fourth volume of Johann Georg Schelhorn's 'Amœnitates Litterariæ,' 14 vols. 8vo, Frankfurt and Leipzig, 1730—31, in which volume was republished 'Francisci Lamberti Avenionensis Theologi Rationes, propter quas Minoritarum Conversationem Habitumque rejecit,' first issued in 8vo, 1523. Leaving Eisenach in January, 1523, Lambert repaired to Wittenberg, where he was received by Luther with particular marks of regard and affection, and where he delivered lectures in the University, and published his 'Commentarius in Evangelium Lucae,' 8vo, Wittenberg, 1523; 8vo, Nürnberg, 1525; 8vo, Argentoratum (Strasbourg), 1525; and 8vo, Frankfurt, 1693.

Lambert married on the 20th of July, 1523, and for this step composed an apology, which was subsequently published with the title 'De sacro Conjugio Commentarius Franc. Lamberti, in Positiones LXIX. partitus,' &c., 8vo, Nürnberg, 1525. Having been invited, in 1524, to Metz, he went thither with the view of propagating his principles; but, finding the city hostile to his plan, he left it for Strasbourg, without having been able to preach a single sermon. In Strasbourg he lived a life of external quiet, although of great literary activity, until 1526, when, on the invitation of Philip, Landgrave of Hesse, who wished to bring about the reformation of his hereditary States, he proceeded to Homburg, where, having silenced his opponents in a three days' discussion upon the theses, or "paradoxes," which he had caused to be posted by way of challenge on the church-doors (October, 1526), he proceeded to elaborate and to put into working order an ecclesiastical constitution for the churches of the Landgraviate. In 1527, Lambert was appointed to be the first professor of divinity in the newly-instituted University of Marburg, and took part in the conference held in that city, in October, 1529, for the purpose of securing the unity of the Swiss Reformers and the followers of Luther, especially on the subject of the Eucharist. As one result of the arguments adduced, Lambert is said to have abandoned the Lutheran doctrine of the Lord's Supper, and to have adopted that of Zwingli. A few months subsequently to this conference Lambert died of the plague, on the 18th of April, 1530.

His works are numerous, and include, besides those already mentioned, 'In Cantica Canticorum Salomonis Commentarii Wittenbergæ prælecti,' 8vo, Argentoratum, 1524; 'Commentarii de Causis Excæcationis multorum Sæculorum ac Veritate, denu et novissime Dei Misericordia revelata,' 8vo, Argentoratum, 1524; 'De Fidelium Vocatione in Regnum Christi, id est, Ecclesiam: de Vocatione ad Ministeria ejus, maxime ad Episcopatum. Item de Vocatione Matthiæ per Sortem ac similibus, et ibi multa de Sortibus,' 8vo, (most probably) Argentoratum, 1525; 'Farrago omnium fere Rerum theologicarum,' 8vo, (most probably) Argentoratum, 1525; 'In Regulam Minoritarum et contra universas Perditionis sectas,' 8vo, Argentoratum, 1525; 'Commentarii in Oseam,' 8vo, Argentoratum, 1525; of which a partial illustration, in English, was published as 'His Mind and Judgement of the Wyll of Man, declarynge and provyng how and after what sorte it is captyve and bond, and not free; taken out of his Commentaries upon Osee the Prophete; newly translated by Nicholas Lesse,' 8vo, London, 1548; 'In Johelem Prophetam Commentarii,' 8vo, (probably) Argentoratum, 1525; 'In Amos, Abdiam, et Jonam Prophetas Commentarii: et Allegoriz in Jonam,' 8vo, Argentoratum, 1525; 'Commentarii in Micheam, Naum, et Abacuc,' 8vo, Argentoratum, 1525; 'Commentarii de Prophetia, Eruditione, et Linguis, deque Littera et Spiritu,' &c., 8vo, Argentoratum, 1526; 'Commentarii in Sophoniam, Aggeum, Zachariam, et Malachiam,' 8vo, Argentoratum, 1526; 'Commentarius in quatuor Libros Regum et in Acta Apostolorum,' Argenta-

tum, 1526, &c.; 'Theses theologicæ in Synodo Homburgensi disputatæ,' 4to, Erfurt, 1527; 'Exegeses in Apocalypsim Libri vii. in Academia Marburgensi prælecti,' 8vo, Marburg, 1528, &c.; 'Evangelici in Minoritarum Regulam Commentarii, quibus palam fit quid de Monachorum Regulis sentiendum sit: præfiguntur Mart. Lutheri et Anemundi Cocti Epistolæ,' 8vo; and a work of posthumous publication, edited by Gerardus Geldenhauer, entitled 'De Regno, Civitate et Domo Dei ac Domini Nostri Jesu Christi, Libri tres,' 8vo, Worms, 1538.

LAMBERT, GEORGE, landscape painter, and founder of the Beef-steak Club, was born in 1710, and learned painting of William Hassel. Walpole says that he was "a good master in the Italian style, and followed the manner of Gaspar [Poussin], but with more richness in his compositions. His trees were in a great taste, and grouped nobly." Several of his landscapes were engraved. But he was more famous as a scene-painter. For many years he was principal scene-painter at Covent Garden Theatre, and here, as Walpole remarks, "he had room to display his genius." In this line he was the precursor of Louthembourg, as Louthembourg was of Stanfield. It was in connection with his occupation at the theatre that the Beef-steak Club had its origin. During his busy seasons Lambert dined at the theatre, frequently on a steak broiled on the fire in his painting-room. His celebrity as a painter, and his social habits, caused him to be "often visited while at work at the theatre by persons of the first consideration both in rank and talents." Some of these so often joined in the meal, that the meal became much talked of; and at length, with the concurrence of Rich, the lessee and manager of the theatre, the Beef-steak Club was established, which, to our own day, has continued to consist of twenty-four "persons of the first consideration both in rank and talents," who met once a week, from November to July, to enjoy a dinner of beef-steaks off the gridiron. Lambert was elected first president of the Society of Incorporated Artists, but he did not live to enjoy the distinction long. The charter of incorporation, in which his name stands first as president, was granted January 26th, 1765, and Lambert died, according to Edwards, on the 30th of January, according to Walpole, on the 1st of February, 1765.

LAMBERT, LI TORS (*le Court*), a French poet of the twelfth century, who, from his calling himself 'un clers de Casteldun,' was long thought by literary historians to have been an ecclesiastic of Châteaudun, has been lately claimed as an ancestor by an ancient family of Dinan, a circumstance which, sufficiently authenticated, as this seems to be, by genealogies, manuscripts, and family traditions, makes it safer to regard him as having been a scholarly layman rather than a priest. His great work is his 'Roman d'Alexandre,' a poem founded upon the basis of a Latin translation, by Julius Valerius, of a history of Alexander the Great, which had been compiled from all the preceding authors who had treated his career from a marvellous or romantic point of view, by a Byzantine writer of the eighth century, who arrogated to himself the name of Callisthenes. With the details of this narrative, as rendered by Valerius, Lambert incorporated a thousand marvellous particulars which were suggested merely by his own imagination, supplied as this last was with the stories and adventures of returned Eastern travellers, who had performed their pilgrimage in the several or combined characters of warriors and devotees. The poem of Lambert, with whose name should be remembered that of his collaborateur or continuator, Alexandre de Bernay, thus became almost a pure romance, destitute of local colour and keeping, setting all the historical proprieties at defiance, and abounding in anachronisms, yet wonderfully fresh, powerful, picturesque, and popular. It traces, in its own peculiar way, the career of its hero from his birth, describes the taming of Bucephalus, and other events of comparatively small significance, before proceeding to set forth the wonders of those successful campaigns against Darius, Porus, and others, which left Alexander in the position of a world-conqueror. Lambert especially revels in his fanciful descriptions of the monstrous animals of India; and after conducting Alexander through regions of mystery and enchantment, brings him at length to the prophetic trees which announce to him his impending fate. To this fate the king succumbs at Babylon, leaving to each of his twelve peers—a number created, it is supposed, in imitation of Philippe Auguste, King of France—one of his conquests, and, as a joint legacy to all, the achievement of the subjugation of France and other western countries. "France," the dying Alexander declares, "is the queen of the world, and the valour of its people unparalleled. Win it, therefore, and, with it, Normandy, England, Scotland, and Ireland. Let these lands of the west become your own!"

These were the last words of Alexander, after which he closed his eyes, and was immediately afterwards transported by the saints to the paradise of eternal bliss. The 'Roman' is a poem of 20,000 verses of twelve syllables; and its peculiar measure is said to have given rise to the name of the verse (Alexandrine) in which it is written. Its circulation in manuscript was very great, and numerous copies were made of it; but it was not printed until about twenty-five years ago, when Heinrich Michelant edited, for the thirteenth volume of the 'Bibliothek des literarischen Vereins in Stuttgart,' 8vo., Stuttgart, 1843, &c., 'Li Romans d'Alexandre, par Lambert Li Tors et Alexandre de Bernay. Herausgegeben,' &c., 8vo, Stuttgart, 1846. Another edition, giving the original text and a German translation, was brought out by Dr. Heinrich Weismann, who adopted the then prevailing theory that Lambert was an ecclesiastic, with the title of 'Alexander. Gedicht des zwölften Jahrhunderts, vom Pfaffen Lamprecht, Urtext und Uebersetzung nebst geschichtlichen und sprachlichen Erläuterungen, so wie der vollständigen Uebersetzung des Pseudo-Kallisthenes, und umfassenden Auszügen aus den lateinischen, französischen, englischen, persischen, und türkischen Alexanderliedern,' 2 vols. 8vo, Frankfurt-am-Main, 1850. A still later edition, and the first published in France, is entitled, 'Alexandriade; ou, Chanson de Geste d'Alexandre le Grand. Epopée romane du XII^e. siècle, de Lambert le Court et Alexandre de Bernay. Publiée pour la première fois en France, avec Introduction, Notes, et Glossaire, par F. le Court de la Villette et Eugène Talbot,' 12mo, Dinan and Paris, 1861.

LAMBILLOTTE, LE PÈRE LOUIS, composer of church music and writer, was born at Charleroi, in Hainault, March 27th, 1797. Under the teaching of an Italian abbé, who was an excellent musician, and afterwards of the organist of a monastery, he made so rapid an advance that at the age of fifteen he became organist of the church in his native town. In 1823 he was appointed maître de chapelle at St. Acheul. Becoming a novice in 1825, he passed the rest of his life among the Jesuits, at St. Acheul, Fribourg, Aix-la-Chapelle, Brigg, Burgelette, and Paris. The musical compositions which he produced, mostly of a sacred character, are usually simple and graceful in their melodies, and well adapted for singing in religious houses, for which they were in great part intended. Among his works were canticles arranged for two voices; original canticles for all the Church festivals, arranged for three or four voices, with organ or pianoforte accompaniment; a collection of motetts; hymns to the Virgin; three solemn masses, with accompaniment for organ and orchestra; a gradual and vespers. But his chief labours were in re-introducing the old Gregorian system of chanting. He began his researches on this subject in 1843, visiting various parts of Europe to examine the old music in the ecclesiastical and monastic libraries. The results of his researches were—'Antiphonaire de St. Grégoire, facsimile du Manuscrit de St. Gall; copie authentique de l'Autographe, écrite vers l'an 760;' this was accompanied by a dissertation, 'De l'Unité dans les Chants liturgiques, ou Clef des Mélodies Grégoriennes,' Brussels and Paris, 1861; 'Quelques Mots sur la Restauration du Chant liturgique; état de la question; solution des difficultés,' Paris, 1855; 'Esthétique, théorie et pratique, du Chant Grégorien, restauré d'après la doctrine des anciens et les sources primitives,' Paris, 1856. The last two works were published posthumously. He assisted in preparing some notes which Nisard and Schubiger published as 'Notes pour servir à l'histoire de la question du Chant liturgique,' Paris, 1857. Some sharp controversy arose among foreign ecclesiastics as to Lambillotte's merits and demerits in regard to this revival. His most important work, apart from the liturgical question, is his 'Musées des Organistes, collection des meilleurs Fugues composées pour l'Orgue et choisies dans les diverses écoles,' 2 vols. (the first containing a succinct treatise on counterpoint and fugue), 1842—44. He died February 27th, 1855, at the Jesuit College of Vaugirard.

LAMÉ, GABRIEL, was born at Tours, July 22nd, 1795. He studied at the Lycée Louis-le-Grand, in Paris, and afterwards at the École Polytechnique and the École des Mines. In 1820 he went to St. Petersburg, where he passed twelve years, filling, with M. Clapeyron, the post of professor of engineering in the École des Voies de Communication. In 1830 he was commissioned by the Russian government to visit France and England for the purpose of examining new works of construction. On visiting Paris, he presented, in conjunction with M. Clapeyron, a paper to the Academy of Sciences on 'The Law of Cooling and Solidification of a Liquid Globe.'

After revisiting St. Petersburg, he returned to Paris, and was appointed in 1832 professor of physics at the École Polytechnique, where, in 1845, he also became examiner. In 1843 he was elected a member of the Academy of Sciences, and in 1848 to the chair of 'Calcul des Probabilités' to the Faculty of Sciences of Paris. His 'Traité de Physique,' first published in 1836, has gone through many editions: it is an elegant and useful work. He has also published 'Lessons on the Mathematical Theory of the Elasticity of Solids,' forming the substance of his lectures at the Faculty of Sciences. He received the decoration of the Legion of Honour in 1834, and became an officer in 1861. He died in May, 1870.

LA MONNOYE, BERNARD DE, a French poet and philologist, was born on the 15th of June, 1641, at Dijon, and was educated at the Jesuit College in that town, where he early manifested an inclination for Latin poetry, and especially for epigrams. At sixteen years of age he was an accomplished classical scholar; and was altogether a youth of such promise that his father, a pastrycook in comfortable circumstances, determined to send him to study law at Orleans. The youthful poet gave a filial assent, and, after completing his course, returned to Dijon, where he was admitted as an *avocat du parlement*, on the 16th of November, 1662. But although he accepted in 1672, the office of *conseiller-correcteur* in the *Chambre des Comptes*, and discharged its duties till 1696, his heart was with the Muses, and his leisure was spent in the literary and appreciative society of his friends and patrons. In 1671 he carried off the prize for poetry, the first instituted by the *Académie Française*, the subject of which was, 'La Fureur des Duels abolie par Louis XIV.,' a feat which he repeated in 1675, with a poem on 'La Gloire des Armes et des Lettres sous Louis XIV.,' in 1677, with another, on 'L'Éducation de Monseigneur le Dauphin,' and in 1683 and 1685, with poems of which the subjects were respectively, 'Les grandes Choses faites par le Roi en faveur de la Religion,' and 'La Gloire acquise par le Roi en se condamnant dans sa propre cause.' But his principal achievement, at once in poetry and philology, by which he seemed to raise the patois of Burgundy into the dignity of a language, was his production, under the name and character of Gui-Barôzai, a vine-dresser, of the *Noëls*, or Christmas Songs, which have issued in more than thirty editions, and of which the first edition, containing thirteen poems, was published in 12mo., Dijon, 1700. The second edition, augmented by many more poems, was published as 'Noël tô Noveâ, compôzai au lai Ruê de lai Raulote, ausanne le' Noël compôzai ci devan en lai Ruê du Tillô: le Tô du moime Auteur,' 12mo, Dijon, 1701; fourth edition, 'Noël Bourguignon de Gui-Barôzai,' [avec un Glossaire bourguignon-françois], 8vo, Dijon, 1720. The principal later editions, at once more critical and more comprehensive, are one by M. Louis Dubois, 'Noëls et autres Poésies bourguignonnes,' 12mo, Châtillon, 1817, and 1825; and another by M. F. Fertiault, 'Le Noël Bourguignon de Gui-Barôzai sengu de Noé Moconnai du Parrain Bliaise, &c. Les Noëls Bourguignons de Bernard de La Monnoye (Gui-Barôzai) de l'Académie Française: suivis des Noëls Maconnais du P. Lhuillier (le Parrain de Bliaise), publiés pour la première Fois avec une Traduction littérale en regard du Texte patois. Précédés de Notices sur la Monnoye et Lhuillier, suivis d'un Coup d'Œil sur les Noëls en Bourgogne, par F. Fertiault, Membre correspondant de l'Académie de Dijon, &c. Deuxième Edition, retouchée et augmentée de Documents nouveaux,' 8vo, Paris, 1858, of which the first smaller edition had been published in 18mo, Paris, 1842. A translation of the 'Noël,' of which only 11 copies were printed, was published by P. S. Caron, as 'Traduction des Noëls Bourguignons de M. de La Monnoye,' 8vo, Paris, 1735 (or rather 1829), new edition, of 104 copies, 8vo, Brussels, 1865. La Monnoye defended himself against the charges which were brought against him on account of the freedom of some of his expressions, in an Apology of which a re-issue appeared about 18 years ago, as 'Épôlogie de' Noël de lai Roullôte et du Tillô. Pièce de La Monnoye, en Patois Bourguignon, publiée avec une Traduction interlinéaire et une Lettre inédite de l'Auteur d'après un Manuscrit de la Bibliothèque Impériale,' 12mo, Paris, 1853. About 1707 La Monnoye acceded to the advice of friends, and went to settle at Paris; and on the 23rd of December, 1713, was unanimously elected a member of the *Académie Française*, in succession to the Abbé Regnier Desmarais. Soon after his election he signalled his learning and judgment by a new and successful edition of the 'Menagiana,' 4 vols., 1715. His fortunes were wrecked in the collapse of Law's Mississippi scheme, in 1720;

BIOG. DIV.—SUP.

but, old as he was, he bore his privations with cheerfulness until the kindness of friends secured the comfort of the remainder of his life. He died at Paris on the 15th of October, 1728. Various selections from his 'Poésies,' were published at the Hague and elsewhere, both before and after his death; the most comprehensive of which was one edited by M. Rigoley de Juvigny, entitled 'Œuvres choisies. Avec Mémoires historiques sur la Vie et les Ecrits de M. de La Monnoye,' &c., 3 vols., 8vo, Dijon, 1769—70, and 2 vols., 4to, and another edition, 3 vols., 8vo, The Hague, 1770.

LAMORICIERE, CHRISTOPHE LOUIS LÉON JUCHAULT DE, French general and politician, was born at Nantes, February 5th, 1806. He studied at the École Polytechnique from 1824 to 1826; went through a course of military instruction at the Army School of Metz; and obtained a commission in the Engineers. Joining the expedition to Algeria as a lieutenant, he was promoted to the rank of captain in 1830. In 1833, General Avizard made him director of the first Arab bureau. He was appointed major of Zouaves in that same year, lieutenant-colonel in 1835, and colonel in 1837 (after receiving a wound at the siege of Constantine). He paid a short visit to Paris in 1839, but returning again to Algeria, became camp-marshal in 1840, lieutenant-general in 1843, and interim governor of Algeria in 1845. During eighteen campaigns which he served in that country, he distinguished himself at Constantine, Mouzaia, Tagdempt, Mascara, and Italy. He organised the strategy which ensured the capture of Abd-el-Kader. General Lamoricière returned finally to Paris in 1848, entered the French Chambers, and sided with the government against the extreme liberals. When the troubled events of 1848 took place, he, as Captain of the National Guard, proclaimed on the 24th of February the abdication of Louis Philippe, and the Regency of the Duchess of Orleans; but was wounded by the insurgents while so doing. When the Republic was formed, he refused to join the extreme party; he, as Minister of War, aided Cavaignac to attack the barricades, and quell the insurgents in June. As one of those who opposed the growing power of Prince Louis Napoleon, he was arrested on the night of the coup d'état, December 2nd, 1851, and conveyed to Ham as a prisoner. Liberated after a time, but refusing to submit to the imperial government, he dwelt for many years in Germany, Belgium, and England, in succession. Permitted to return to France in 1857, he obtained the Emperor's consent to take command of the Papal troops at Rome; this he did in 1860, but was soon afterwards compelled to surrender at Ancona, with his army, to the Piedmontese Generals Fanti and Cialdini. He afterwards published a report on the circumstances which almost necessitated the failure of his plans. He died at his country-seat, Proussel, near Amiens, September 10th, 1865.

LA MOTHE-LE-VAYER, FRANÇOIS DE [MOTHE-LE-VAYER, F. DE LA, E. C., vol. iv. col. 370.]

LAMPI, GIOVANNI BATTISTA, a celebrated historical and portrait painter, a native of the Tyrol, was born in 1751, and studied under his father, Matt. Lampi, and in the academy of Verona. Whilst yet a boy he painted an altar-piece and several pictures at Salsburg. After a brief residence in Trent and Innsbruck he removed to Vienna. About 1786, he was invited by Stanislaus Augustus II. to Warsaw, where he executed several important commissions. Thence he went in 1791 to St. Petersburg, where he painted, among other things, a life-size portrait of the Empress Catherine II. In 1798 he returned to Vienna, and continued to reside there till his death in 1830. For the various churches of Vienna and the neighbourhood, he painted a great many altar-pieces; his portraits include those of the emperor and royal family of Austria, the king of Sweden, &c. His eldest son and scholar,

GIOVANNI BATTISTA LAMPI, was also a painter of considerable note. Born at Trent in 1775, he went to St. Petersburg in 1797, where he remained thirteen years. He was nominated member of the Imperial Academy of Vienna in 1813, and died in that city in 1837.

LANCE, GEORGE, [E. C. vol. iii. col. 786]. This admirable painter of fruit and still life died on the 18th of June, 1864.

LANCRET, NICOLAS, celebrated French painter, was born at Paris, January 22, 1690. He was a pupil of Dulin and of Gillot, but imitated Gillot's senior pupil, Watteau, both in class of subjects and manner of treatment, adding, however, more of smoothness and finish though with the loss of somewhat of Watteau's charming naïveté and freshness. The resemblance is sufficiently close for Lancret's pictures to be often attributed to Watteau. Lancret's garden pieces are always gay and agree-

able and elegantly treated. He was very popular in his own day, and so much employed that he had occasionally to get Lajoué to paint in his backgrounds. He was elected member of the Academy in 1719, under the title of 'Peintre de Fêtes Galantes,' and appointed painter to the king. Many of his pictures were engraved in his lifetime. He died at Paris, September 14th, 1743. His paintings are found in most public galleries. The National Gallery possesses a series of small pictures of 'the Four Ages of Man,' Nos. 101—104; the Louvre has a corresponding series of 'the Seasons,' Nos. 310—313, and one or two others.

LANDER, RICHARD, African traveller, was born about 1804, of Cornish parents. By occupation he was a printer, and the perusal of some books of travels roused in him a desire to see foreign countries. He offered his services to Captain Clapperton, whom he accompanied in his last journey into the interior of Africa in 1825-27. The party proceeded from Badagry to Saccatoo, where Clapperton died, leaving Lander the sole survivor of the expedition. He secured Clapperton's papers and endeavoured to work his way to the coast in a southerly direction. He had reached Dunroa, and if he had gone on would probably have struck the Tahadda and have descended by it to the Niger and so on to the mouth of that river: had he followed this course he would have anticipated his discovery of the lower Niger by a few years. At Dunroa he was opposed by the natives, and by them compelled to retrace his steps along his former route to Badagry. He returned to England in 1828, and published 'Records of Captain Clapperton's Last Expedition to Africa, with the subsequent adventures of the author,' 2 vols. 12mo, London, 1830. Just prior to the publication of this work, great interest was taken in the true course of the Niger, and Lander offered his services to the British government towards solving the question, which were accepted. His brother John accompanied him, but simply as a volunteer. He sailed from Portsmouth, on January 9, 1830, arriving at Cape Coast Castle, on February 22, and at Badagry, on March 22. The journey into the interior was commenced on March 31, and the route, as far as Boussa, was almost the same as Clapperton and Lander had previously followed. At Boussa he ascertained some particulars relative to Mungo Park's death, and heard of several of his books having been in the possession of the natives, but did not succeed in obtaining his journal. He then proceeded down the Niger, but had to contend against many difficulties, such as the severe indisposition of himself or his brother, the cupidity of the native chiefs, and the troubles incident to travelling in tropical Africa. He finally quitted the river on November 27, and again reached Portsmouth on January 20, 1831. The account of this voyage was given in a 'Journal of an expedition to explore the course and termination of the Niger, with a narrative of the voyage down that river to its termination,' 3 vols. 12mo, 1832. In 1832, the brothers Lander joined a new expedition up the Niger, the object of which was to open up a trade with the interior. In 1833, Richard was wounded in a conflict with the natives, in consequence of which he died at Fernando Po, January 27, 1834. His brother John returned to England, where he died November 13, 1839. The principal result of Lander's journey was the deciding the lower course of the Niger, and identifying it with the stream which Mungo Park had traced from Bammakoo past Timbuctoo to Boussa. Neither of the brothers had any special scientific qualifications as travellers, and the only instrument they had was a compass; but still they possessed those qualities of a traveller in a high degree which enable him to traverse unknown tracts of country, viz., patience, perseverance, steadiness of purpose, and tact in dealing with natives.

LANDI, CAVALIERE GASPERO, a distinguished Italian painter, was born in 1756 at Piacenza, and studied in the academy of that city; at Parma, where he carried off the prize of the Academy for a painting of Tobias; and at Rome under Battoni. Having settled at Rome, he was patronised by Pope Pio VI., and during the French occupation received several important commissions from that government. He was made professor, and in 1817 secretary and director of the Academy of St. Luke. His pictures are from ancient history and mythology, Dante, Tasso, and Ariosto, the Scriptures, and the legends of the Church. He also painted many portraits. His most admired paintings are a large altar-piece, 'Christ bearing his Cross,' painted in 1810 for the council of his native city, to be placed in the Church of the Dominicans, and an 'Assumption of the Virgin' for the cathedral. Landi had great facility and skill in composition, was a pleasing colourist, and was altogether one of

the best of the recent academic or eclectic painters of Italy. He died at Rome, February 24, 1830.

LANDON, CHARLES PAUL, French painter and writer on art, was born in 1760 at Nonant, in Normandy. He was a pupil of Regnault, and, having carried off the grand prize at the Academy, spent five years at Rome. On his return to Paris he exhibited several pictures at the Salon, and later he was appointed painter to the Duc de Berri. His pictures found admirers, and two of them—'Dædalus and Icarus' and 'Paul and Virginia'—were placed in the Luxembourg; but he gradually turned from painting pictures to describing them, a task for which his appointment to the keepership of the gallery of the Louvre provided unusual facilities. He wrote various papers in the art periodicals of the day; several memoirs of artists in the 'Biographie Universelle'; the descriptions to collections of views of the buildings, &c., of Paris, London, Greece, &c.; an Historical Portrait Gallery of Celebrated Men, in 13 volumes; and 'Nouvelles des Arts,' 3 vols. 8vo, with plates, 1802—1803. But he will be longest remembered by his illustrations of the chief works of ancient and modern art in a series of many hundred outlines which have been of incalculable value to the student. They are entitled 'Annales du Musée et de l'École Moderne des Beaux Arts,' in 33 vols. 8vo, 1801—1808; and 'Vies et Œuvres des Peintres les plus célèbres de toutes Écoles,' 25 vols. 8vo, 1803. The faulty arrangement of these works is, however, a great drawback from their usefulness, and Landon perceiving this, had commenced the reissue of the 'Annales du Musée' on a more systematic plan, but only lived to publish 10 volumes. The continuation is by M. F. Pillet. Another useful work is the 'Recueil des principaux Tableaux, Statues, et Bas-reliefs exposés au Louvre depuis 1808 par les Artistes vivants, et autres productions nouvelles et inédites de l'École française avec des notices descriptives, critiques et historiques,' 15 vols. 8vo, 1808—31. M. Landon died at Paris, March 6, 1826.

LANDOR, WALTER SAVAGE [E. C. vol. iii. col. 768]. The memoir in the E. C. spoke of Landor as then resident in Bath, "a wonderful literary veteran in his eighty-second year." But already the cloud that for a time obscured his fame, deprived him of the services of the troops of friends who would have rejoiced to wait on his old age, and drove him an exile from his native country, was settling heavily upon him. Some feminine squabbles in which a young friend had become involved had led to his being summoned to give evidence in the Bath County Court. Landor was never temperate of speech; now he fancied that he was called upon to redress a wrong, and he gave utterance to personalities, not only orally but in print, with a vehemence and bitterness that led to an action against him for libel. He was so plainly in the wrong that his legal advisers had to make the best terms they could; but hardly was this affair adjusted, when in a brochure entitled 'Dry Sticks,' and elsewhere, he repeated in effect the objectionable matter, and that in breach of an undertaking which his law advisers had given in his name. A new action was announced, and as legal defence was under the circumstances impossible, and his available means would have been insufficient to meet the costs of an adverse judgment, he was told that his only resource was to break up his house, sell his pictures, and retire to Italy. He had just been stricken down by a kind of fit, which left him insensible for four-and-twenty hours, and now seemed tottering on the brink of the grave; but he roused himself for the effort, and in July, 1858, left England for Italy. After a brief stay at Genoa he went on to his old home at Fiesole. He had made a legal transfer of everything he possessed to his eldest son, but in the libel case a verdict had been given against him for 1000*l.*, and an injunction was obtained in Chancery against receiving the rents: before his death "the entire damages and costs had been paid under order of the Court," but Landor was left destitute. After some months of wretchedness at Fiesole, his friends came to his rescue. A plain but comfortable lodging was found for him at Florence; his surviving brothers undertook to supply an annuity of 200*l.*, which Robert Browning generously saw duly employed as long as he remained in Florence. And thus one more gleam of sunshine seemed to settle on the "old man eloquent." Though deaf and ailing, he continued to find solace in his pen. He wrote and published occasional verses, and two or three more 'Imaginary Conversations,' in which the old fire burned not dimly; collected some earlier scraps, which appeared as 'Heroic Idylls'; and was still working, in his ninetieth year, at new Conversations, when, on the 17th of September, 1864, death ended his labours and sorrows. We might add something to the estimate of Landor's genius given in the original memoir, but it

would be difficult to do so to any purpose in a few words. Ample materials for a just appreciation of his personal character and his place as an author will be found in his friend, John Forster's 'Walter Savage Landor, a Biography,' 2 vols. 8vo, 1869.

* LANE, EDWARD WILLIAM, orientalist, was born at Hereford in 1801. The son of the Rev. Theophilus Lane, prebendary of Hereford, he was educated with a view to the Church, but his inclination tending strongly towards the language and literature of the East, he went to Egypt, 1825—28, and carefully studied the country and the people. A second visit made in 1833 resulted in the preparation of a valuable work on the 'Manners and Customs of the Modern Egyptians,' published by the Society for the Diffusion of Useful Knowledge. This was followed by the preparation of an entirely new translation of the 'Thousand and One Nights,' which formed the text of an elaborately illustrated edition published by Mr. C. Knight, royal 8vo, 1840—41, and to which Mr. Lane added a large body of notes. Shortly after completing this work Mr. Lane returned to Egypt, where he remained till 1849 engaged in collecting materials for a work of vast research and labour, an 'Arabic-English Lexicon' of the most copious character, comprising a very large collection of words and significations omitted in the *Kāmoos*, with ample grammatical and critical comments and numerous examples in prose and verse. To this work Mr. Lane has dedicated nearly 30 years, and it is still far from finished: the first part, 4to, was published in 1863, the second part in 1865, the third part in 1869, and five more parts are required for its completion. In recognition of the importance of this work, and to assist in its execution, Mr. Lane was, in 1863, granted a pension of 100*l.* from the Civil List.

* LANE, RICHARD JAMES, A.R.A., elder brother of E. W. Lane, was born in 1800 at Hereford. He was a pupil of Charles Heath, the line engraver, and for a while practised that art, but was attracted by the then comparatively new art of lithography. The delicacy of finish and refinement of Mr. Lane's lithographs contributed materially to the popularity of the art in this country. A large proportion of his drawings are portraits, including many of the Kemble family and other actors, and some capital portraits of scions of the Bedford family after Landseer; but among the most pleasing of his productions are his facsimiles of the sketches of Gainsborough (his mother's father) and other eminent painters; imitations of the drawings of Flaxman, &c. Of late years his pencil has been much employed in copying Court portraits. Among the best of these are the portraits of the Queen, the Prince Consort, and their children, executed for her Majesty, chiefly from the paintings of Winterhalter, or from photographs. Mr. Lane is lithographer to the Queen, and was elected associate engraver of the Royal Academy in 1827.

LANGER, JOHANN PETER VON, German historical painter, was born at Kalkum in 1756, and studied under Krahn at Düsseldorf. He was appointed professor in 1784, and in 1789 director of the Düsseldorf Academy, and keeper of the picture gallery. In 1806 he was made director of the Munich Academy, an office he retained till his death, October 6th, 1824. Peter von Langer painted a great number of religious pictures for the churches of Bavaria, one of the best being 'Christ Blessing Little Children,' in the church of the Carmelites, Munich; many mural and easel historical pictures, including 'Lady Jane Grey in the Tower,' and several *genre* subjects. He had avowedly formed his style on that of Raffaele, whom he always held up to his pupils as their great model; but his own pictures, though containing much that is admirable in character and expression, bear but a faint academic resemblance to those of the great Italian.

LANGER, ROBERT VON, son and scholar of the preceding, was born at Düsseldorf in 1783. When his father was appointed director of the Munich Academy, Robert Langer was made professor; and in 1820 he was nominated its perpetual secretary. In 1827 he was appointed keeper of the royal cabinet of drawings, and in 1841 director of the royal collection of paintings; and it is to his zeal in this latter post that the Pinacothek is indebted for much of its present excellence. Robert von Langer painted many altar-pieces for the churches of Munich, several frescoes, and numerous easel pictures from ancient and modern history and the poets. He died October 16th, 1846.

LANGUET, HUBERT, a publicist and politician of the 16th century, was born in 1518 at Vitteaux, in Burgundy, at that time a fortress of considerable strength and importance, of which his father, Germain Languet, was Governor. He received his earlier education at home, distinguishing himself by his precocious familiarity with the classical languages; and studied

law for three years, 1536 to 1539, at Poitiers. In 1547, after having long suffered disquiet of mind on theological and ecclesiastical matters, he was introduced to the 'Locī Communes Theologiæ' of Melanchthon, by the frequent reading of which, fortified by consultation of the divines of Leipzig, he was determined to adopt the doctrines of the Reformation. Accordingly he made profession of these; but in order to escape the prevalent commotions of Germany, which were distasteful to his quietness of disposition, he repaired to Italy, and in 1548 took the degree of LL.D. at the University of Padua. In 1549 he journeyed to Wittenberg, in Saxony, for the purpose of becoming acquainted with Melanchthon, for whom he entertained a singular respect and affection, and whom he wished to consult on the doctrine of the Eucharist, as variously stated by the Lutherans and the Swiss. The friendship thus formed was continued till the death of Melanchthon in 1560, and was so close that whilst Languet called Melanchthon by the name of "father," the latter addressed Languet as "son." In 1551 Languet adopted the resolution of travelling in the autumn of each year in some part of Europe; and in pursuance of this plan, he visited Rome in 1555, and in 1557 made the tour of Livonia and Lapland. In the course of this northern journey he became known to Gustavus Vasa, King of Sweden, by whom he was commissioned to invite to his dominions Frenchmen skilled in the various arts and sciences. But the result of this commission is unknown. In 1559 Languet accompanied Adolphus, Count of Nassau, and brother of William, Prince of Orange, to Italy, from which he repaired, in 1560, to Paris; and in April of that year, having heard of the death of Melanchthon, returned to Wittenberg. He was invited, in 1565, to the court of Augustus, Elector of Saxony, by whom he was accredited with a special and amicable mission to Charles IX. of France, of which he acquitted himself with success and general satisfaction. He was in attendance on the Elector at the siege of Gotha, and recorded the most important events of that expedition in a Latin narrative entitled '*Historica Descriptio susceptæ à Cæsarea Majestate Executionis Augusto Saxonie Septemviro Duce contra S. Romani Imperii Rebelles eorumque Receptatorem, et captæ Urbis Gothæ soloque æquati Castri Grimmenstenii XIII. Aprilis, 1567*,' 4to, 1568, &c., of which a German translation appeared in the same year. Languet was further employed by the Elector of Saxony in various negotiations of difficulty and importance; and especially was entrusted in September, 1570, with a secret mission to the court of Charles IX., upon which occasion he pronounced, December 23rd, in the name of the Protestant princes of Germany, an eloquent and bold discourse, which was afterwards printed in vol. i. of the *Memoirs of the Reign of Charles IX.*, 8vo, 1578, with the title of '*Harangue faite au Roy Charles IX. de la Part des Princes Protestans d'Allemagne*.' He was at Paris during the massacre of St. Bartholomew's Day, August 24th, 1572; and in spite of the sacred character of his person as ambassador, narrowly escaped death through the exertions he made to preserve the lives of his friends, especially of André Wechel, the famous printer, in whose house he lived, and of the celebrated Philippe Duplessis Mornay. In 1577 Languet passed from the service of the Elector of Saxony to that of John Casimir, Count Palatine, whom he accompanied to Ghent; and whom he left to attach himself to the Prince of Orange, in whose service he continued till his death. This event took place on the 30th of September, 1581, at Antwerp, where his funeral was celebrated with much pomp, being attended by the Prince of Orange and the principal members of the State. Languet left little besides his library, and a singular reputation for ability, prudence, modesty, and honesty, and for so great a love of truth that he never tolerated falsehood even in jest.

The works of Languet, besides those already mentioned, include '*Epistolæ Secretæ ad Principem suum Augustum Saxonie Ducem S. R. J. Septemvrum*.' Ex Archivio Saxonico descriptas edidit Joannes Petrus Ludovicus, 4to, Halle, 1699; '*Epistolæ XCVI. politicæ et historicæ ad Philippum Sydnæum, Equitem Anglum*,' 8vo, Frankfurt, 1633, &c.; another edition, brought out under the care of D. Dalrymple, 8vo, Edinburgh, 1776, English translation in the '*Correspondence of Sir Philip Sidney and Hubert Languet*': now first collected and translated from the Latin, with notes and a Memoir of Sidney. By S. A. Pears, 8vo, London, 1845; '*Epistolæ Scriptæ ad Joachimum Camerarium Patrem, et Joachimum Camerarium Filium*.' Editæ a Lud. Camerario, 8vo, Groningen, 1646, &c.; and '*Vindiciæ contra Tyrannos: sive de Principis in Populum*,'

Populique in Principem legitima Potestate,' published under the pseudonym of Junius Brutus, probably, in a first edition, at Basel, and in 12mo, Edinburgh, 1579, and often reprinted in Holland, French translation, by François Estienne, 'De la Puissance légitime du Prince sur le Peuple, et du Peuple sur le Prince,' 8vo, 1581, English translation, 'A Defence of Liberty against Tyrants: or, the lawful Power of the Prince over the People, and of the People over the Prince. Translated out of the Latin and French,' 4to, London, 1648, German translation, 'Ueber die gesetzliche Macht des Fürsten über das Volk, und des Volkes über den Fürsten. Nach der Ausgabe von 1580, mit einer geschichtlichen Einleitung über das Leben und die Zeit des Verfassers bearbeitet von R. Treitschke,' 8vo, Leipzig, 1846. A Life of Languet, written in Latin, by Philibert de la Marre, Conseiller au Parlement de Dijon, was published in 12mo, Halle, 1700.

LANINI, BERNARDINO, a distinguished Italian painter, was born at Vercelli about 1508, and was the scholar, and for a while the imitator of Gaudenzio Ferrari, but eventually adopted the richer manner of Da Vinci. He was an excellent painter, pure in design and fine in colour. He painted mostly in fresco, his chief works being the Eternal Father and the Sybils in the cathedral of Novara. He died about 1578. In the National Gallery is a 'Holy Family, with the Magdalen, Pope Gregory the Great, and St. Paul presenting an apple to the infant Saviour' (No. 700), the figures whole length and life size.

LANDSOWNE, HENRY PETTY FITZ-MAURICE, THIRD MARQUIS OF [E. C. vol. iii. col. 797], died on the 31st of January, 1863. He was succeeded by his son, Henry Charles Keith, fourth Marquis, born 1845.

LA PEROUSE, JEAN-FRANÇOIS-GALAUP DE [PEROUSE, J. F. G. DE LA, E. C. vol. iv. col. 745].

LAPPENBERG, JOHANN MARTIN [E. C. vol. iii. col. 805]. In addition to new editions of some former works, Lappenberg printed between 1857 and 1865 several historical papers, and had commenced the preparation of a collection of Klopstock's Letters, which was interrupted by his death, on the 28th of November, 1865.

LARDNER, REV. DIONYSIUS, LL.D. [E. C. vol. iii. col. 806]. Dr. Lardner died at Naples on the 29th of April, 1859.

LARGILLIÈRE, NICOLAS DE, French painter, was born at Paris in 1656, and studied at Antwerp under F. Goubau. He painted a few historical and religious pictures, but was more successful in portraiture, whence he was known as the French Vandyck. He was in England for a short time in the reign of Charles II., whose portrait he painted, as well as those of some of the nobility, and for whom he undertook the restoration of the pictures at Windsor Castle. On his return to Paris he painted Louis XIV., the painter C. Lebrun (engraved by Edelinck), and other distinguished persons. He again visited England in the reign of James II., and painted the king and queen, but left on the Revolution. He was elected, 1686, member, and successively rector, director, and chancellor of the Academy of Paris; wrote one or two plays, and lived till the 20th of March, 1747.

LA ROCHEFOUCAULD, FRANÇOIS, DUC DE [ROCHEFOUCAULD, F. DUC DE LA, E. C. vol. v. col. 125].

* LARTET, ÉDOUARD, an eminent palæontologist, was born at St. Guérand, in 1801. He has occupied the post of professor of palæontology at the Museum of Natural History, Paris, for many years. His writings consist almost entirely of papers contributed to scientific journals. The earliest of these were published in 1837, and related to the mammalian remains in the miocene deposits of the department of Gers. Amongst other things he obtained entire skeletons of *Mastodon angustidens*, and the jawbone of a quadrumanous animal belonging to a genus (*Pliopithecus*) nearly allied to the Gibbons. This was the first evidence obtained of the existence of fossil monkeys in Europe. Very soon after he found other quadrumanous remains. He has given a great deal of attention to fossil mammalia, and is one of the leading authorities on all subjects connected with them. He co-operated with Gaudry in developing the palæontological results of the excavations made in the miocene beds of Pitermi. The study of the old mammals has naturally led him to give his attention to the proofs of man's coexistence with certain extinct species of that class, and several of his papers relate to this subject. He largely assisted Christy in exploring the caves of Perigord, and with that antiquary, has written a work on the ancient men of Perigord, entitled 'Reliquiæ Aquitanicæ,' 4to, London, of which the first part appeared in 1867, and the tenth in 1870: the work will probably be completed in a few more parts.

LASINIO, CONTE CARLO, a distinguished Italian engraver, was born at Trevigi about 1757. He resided at Florence, and engraved several separate plates from the works of the great masters, but is best known by his engravings of an archaeological character, many of which are in outline, and all valuable for their correctness and spirit. Of these the most important are the illustrations in 'Etruria Pittrice'; 'Pittura del Campo Santo di Pisa'; 'Storia della Pittura Italiana,' 'Raccolta di Sarcophagi,' &c. He also engraved some portraits. He died at Florence in 1830. His son, GIOVANNI PAOLI LASINIO, died 1840, was also an engraver of considerable ability. He engraved several plates in the galleries of Florence, Naples, and Turin, and other important collections.

* LASSEN, CHRISTIAN, a continental philologist and orientalist, especially distinguished for his knowledge of the ancient literature of India, was born on the 22nd of October, 1800, at Bergen, in Norway, where he was educated by his father, a surveyor of customs, until fourteen years of age, when he entered on a four years' course at the Cathedral School of his native city. Afterwards he entered the University of Christiania; and in 1822, having spent six months at Altona, where he attained to a practical knowledge of the German language, repaired to the universities first of Heidelberg and afterwards of Bonn, at the latter of which his studies in Indian philology and antiquities were directed by August Wilhelm von Schlegel, by whom he was commissioned to visit London and Paris for the purpose of collating manuscripts for Schlegel's critical edition of the 'Rāmâyana,' 8vo, Bonn, 1829—38, and with whom he was associated in his critical edition of the original text, with Latin translation and notes, of 'Hitopadesas: id est Institutio salutaris,' &c., 2 vols. 4to, Bonn, 1829—31. Whilst at Paris, Lassen became known to Eugène Burnouf, the historian of Buddhism, in connection with whom he published an 'Essai sur le Pali, ou Langue sacrée de la Presqu'île au-delà du Gange. Avec six Planches lithographiées et la Notice des Manuscrits Palis de la Bibliothèque du Roi,' 8vo, Paris, 1826. Returning to Bonn after an absence of more than two years, he took his degree of Ph. D. in 1827, with a thesis on the Geography and History of the Punjab, 'Commentatio geographica atque historica de Pentapotamia Indica,' 4to, Bonn, 1827. Later in the same year he became a tutor (Privatdocent) in the university, in which he became respectively in 1830 and 1840 extraordinary and ordinary professor of the Indian languages and literature, and amongst other distinctions was elected a foreign member of the French Académie des Inscriptions et Belles-Lettres, of which society he had been for many years a correspondent.

The contributions of Professor Lassen to an intelligence of the philological, poetical, and general antiquities of India have been many and important. They comprise, in addition to those already mentioned, 'Gymnosophista: sive Indicæ Philosophiæ Documenta. Collegit, edidit, enarravit,' &c., 4to, Bonn, 1832, &c.; 'Ancient Persian cuneiform Inscriptions of Persepolis,' 'Die Altpersischen Keil-Inschriften von Persepolis,' &c., 8vo, Bonn, 1836; 'Institutiones Linguae Practicæ,' 8vo, Bonn, 1836—37; 'Anthologia Sanscrita Glossario instructa,' 8vo, Bonn, 1838; 'On the History of the Greek and Indo-Scythian Kings of Bactria, Kabul and India,' &c., 'Zur Geschichte der Griechischen und Indoskythischen Könige in Baktrien, Kabul, und Indien, durch Entzifferung der Altkabulischen Legenden auf ihren Münzen,' 8vo, Bonn, 1838, English translation, by T. H. E. Roper, edited by H. Torrens, 'Points in the History, &c., as illustrated by decyphering the ancient Legends on their Coins,' 8vo, Calcutta, 1840; 'De Trapobane Insula Veteribus cognita Dissertatio. Particula I.,' 4to, Bonn, 1842; 'Indian Archaeology,' 'Indische Alterthumskunde,' 4 vols. 8vo, published partially at Bonn, and completed at Leipzig, 1844—61, with an Appendix, 'Anhang,' 8vo, Leipzig, 1862; and, conjointly with N. L. Westergaard, a treatise on the Cuneiform Inscriptions of the first and second Order, 'Ueber die Keil-Inschriften der ersten und zweiten Gattung,' 8vo, Bonn, 1845. Amongst the critical and annotated editions, with Latin translations, of the Indian classics, for which we are indebted to Dr. Lassen, may be mentioned one of the 'Gita Govinda. Jayadevæ Poetæ Indici Drama lyricum,' 4to, Bonn, 1836; and a second edition, enlarged and amended, of Schlegel's 'Bhagavad Gita, id est Θεωριαι Μίαι; sive almi Crishnæ et Arjunæ Colloquium de Rebus divinis,' 8vo, Bonn, 1846.

LASTEYRIE-DUSAILLANT CHARLES PHILIBERT, COMTE DE, a French philanthropist and rural economist, was born at Brives-la-Gaillarde (Corrèze), November 4th, 1769. After studying at Limoges and then at Paris, he visited in suc-

cession Spain, Holland, England, Italy, Sicily, Switzerland, Denmark, Sweden, and Germany; making long sojourns in these countries, examining the systems of agriculture pursued, the agricultural implements and instruments employed, and the institutions which bore in any way on the general welfare of the mass of the people. In the intervals between his journeys he wrote largely on those subjects. In 1812, being much struck with the probable value of Senefelder's new art of lithography, he went to Munich to study it. The consequences of the war with Russia drove him back to France in 1813, but he returned to Munich in the following year, and made himself fully master of the new art, which he proceeded to introduce into his own country. At various times he either founded or assisted in supporting societies for the encouragement of national industry, for agriculture, for vaccination, for mutual instruction, for learning languages, for the succour of scientific and educated men in distress, and for other philanthropic purposes. The books, pamphlets, and articles which he published during the long period from 1792 to 1846 embraced a very wide range of subjects. The naturalisation and rearing of merino sheep; the fattening of cattle; the culture of cotton, indigo, and other plants; the natural and economic history of the dog, horse, ass, mule, cat, camel, dromedary, llama, vicuña, ox, and other animals; the processes and implements of agriculture—were subjects that grew directly out of the main purpose of his many journeys. But besides these he wrote and published on education—the methods of teaching languages, infant schools, the liberty of the press, economic typography, the rights and duties of man in society, &c. His most important work was 'Collection de machines, d'instruments, utensiles, constructions, appareils, &c., employés dans l'économie rurale, domestique, et industrielle, d'après les dessins faits dans diverses parties de l'Europe,' 2 vols. 4to, Paris, 1820–22: it was illustrated with 200 plates lithographed in his own establishment. Count de Lasteyrie continued his useful labours till his 80th year, and died November 3rd, 1849.

*LASTEYRIE, FERDINAND CHARLES LÉON, COMTE DE, son of Comte Philibert De Lasteyrie, born June 15th, 1810, was educated at the École des Mines; served during the revolution of 1830 on the staff of his relative Lafayette; was afterwards employed in various government offices, and being elected deputy in 1842, took an active and somewhat prominent part on the Liberal side in politics. After the revolution of 1848 he represented Paris in the Legislative Assembly, and was a member of the Provisional Council of State. The coup d'état consigned him to private life, though during the later years of the Empire he was a member of the Municipal Council of Paris, and for a time of the Assembly. During his enforced abstinence from public life he devoted himself to archaeological pursuits, in which he has acquired a high reputation. In 1860 he was elected a member of the Institute. His principal writings are—'Histoire de la Peinture sur Verre, d'après ses Monuments en France,' folio, Paris, 1837–56, a very beautiful and valuable work; 'La Cathédrale d'Aoste,' 8vo, 1854; 'Rapport sur les Manufactures de Sévres et des Gobelins,' 8vo, 1850; 'Causeries artistiques,' 12mo, 1862.

LAUDER, ROBERT SCOTT, R.S.A., was born in 1803 at Silver-Mills, near Edinburgh. Having as a boy shown a fondness for art, he was encouraged to persevere by David Roberts, then resident in Edinburgh, and through the influence of Sir Walter Scott was admitted a student in the Trustees' Academy. Here he continued for about five years, when he went to London, but returned to Edinburgh in 1826 to assist Sir William Allan, then at the head of the Trustees' Academy. In 1833 he went to Italy, where he remained till 1838, his study being primarily given to the great Venetian colourists. From 1838 to 1849 he resided in London, much employed by his countrymen as a portrait painter, and winning a highly respectable position, but hardly a foremost place, among the metropolitan artists, though his 'Christ Walking on the Waters,' and 'Christ teaching Humility,' sent to the Westminster Hall competition in 1847, excited considerable attention. But though he was ambitious of producing grand religious works, he was more successful in representing episodes of Scottish history and romance, such as 'Claverhouse ordering Morton to be Shot,' 'The trial of Effie Deans,' and 'Meg Merrilies and the dying Smuggler,' which, with others of a similar kind, attracted much notice at the annual exhibitions of the Royal Academy, to which he was a regular contributor till 1848, after which year his name appears no more in the catalogue. In 1849 he was induced, by the offer of the directorship of the Government School of Design,

and partly no doubt by his disgust with the Royal Academy, to return to Edinburgh, where his pictures were among the leading attractions of the annual exhibitions of the Scottish Academy, and where, after some years of bad health, he died on the 21st of April, 1860. Lauder's most ambitious picture, 'Christ teaching Humility,' was purchased by the Scottish Association for the Encouragement of Art, and presented to the Scottish National Gallery, Edinburgh. His brother, JAMES ECKFORD LAUDER, R.S.A., born 1813, studied at the Trustees' Academy and afterwards at Rome under the guidance of Robert Lauder, and followed much in his manner, but displayed a still greater tendency to religious art. A few pictures of homely subjects, such as 'Pal-Al, or Scotch-Hop,' showed that he might have gained more popularity in a lower walk if he could have been content to follow it. His 'Unjust Steward,' and 'Ten Virgins,' exhibited at Westminster Hall in 1847, gained a premium of 200*l*. Like his brother, he ceased to send pictures to the Royal Academy after 1848, and though he continued to contribute excellent pictures to the exhibitions of the Scottish Academy as long as his health permitted him to paint, he came to be, like most painters who do not send to the great London exhibition, almost forgotten even in metropolitan art-circles. He died on the 29th of March, 1869, about three weeks before his brother.

*LAUGIER, AUGUSTE ERNEST PAUL, French astronomer, was born at Paris, December 22nd, 1812. His father, a professor of chemistry, placed him at the École Polytechnique, which he quitted in 1834 to become an astronomical pupil at the Paris Observatory. As an active assistant at that establishment, he became well versed in practical astronomy, and obtained the Lalande medal in 1842 for the discovery of a comet, sometimes known by his name. In 1843 he succeeded Savary as a member of the Académie des Sciences; in 1844 was made chevalier of the Legion of Honour; in 1862, member of the Bureau des Longitudes; and 1864 officer of the Legion of Honour. M. Laugier's scientific papers, for the most part published originally in the 'Comptes Rendus' and the 'Connaissance des Temps,' take a wide range, embracing many departments of astronomy. They relate to the spots on the sun, pendulum oscillations, the proper motions of the stars, the compensation of astronomical clocks, catalogues of some of the nebulae, the declinations of certain stars, Faye's formula for atmospheric refractions, the sensibility of the eye to the light of minute or faint stars, terrestrial magnetism, magnetic declination, the polar distances and proper motions of 140 stars, &c. But his chief labours have borne reference to comets; he having published numerous calculations respecting the comets of Halley, Gambart, and those noticed in early times. In conjunction with Arago he has written memoirs on atmospheric phenomena; with Mauvais on comets; and with Plantamour on the same class of subjects.

LAURENT, AUGUSTE, French chemist, was born near Langres 14th Nov. 1807, and died at Paris in 1853. He was educated at the School of Mines, and in 1838 was appointed professor of chemistry to the Faculty of Sciences, Bordeaux. In 1848 he was made assayer to the Mint at Paris, and adviser to the Minister of War on scientific questions. He published numerous papers on scientific subjects, and his name will always be held in respect as a great chemical reformer, associated with CHARLES FREDERIC GERHARDT [E. C. S. col. 585]. Laurent, in common with most scientific men, died poor; but his widow and children were very properly provided for by the Government. His chief work, 'Méthode de Chimie,' prepared in conjunction with Gerhardt, was published posthumously, with a preface by Biot, 1854.

LAWRENCE, SIR HENRY MONTGOMERY, an able soldier and administrator in the service of the East India Company, was born in 1806, at Mattara, Ceylon; where his father, Lieutenant-Colonel Alexander William Lawrence, who had served with distinction at Mysore and Seringapatam, occupied an official post. Colonel Lawrence prepared his two sons, Henry and John, for the Company's service; Henry studying at Addiscombe for military duties; and John (the present Lord Lawrence), at Haileybury, for those of a civil character. Henry went out to India in 1821, as a cadet in the Bengal Artillery, and rose steadily in rank. He was engaged in active service under Sir George Pollock in 1843, during the Cabul campaign, his gallantry winning for him the rank of major, and the post of British resident at Nepal. His services in the campaign of the Sutlej were rewarded by promotion to the rank of lieutenant-colonel, and the decoration of companion of the Bath. His next appointment, in 1848, was as British resident at Lahore, and agent or representative of the

Governor-General on the north-west frontier. For his skill in these offices he was made knight of the Bath in 1848; and in 1849, when the Punjab had been annexed to the British dominions in India, the Earl of Dalhousie selected him as the president of the Board of Commissioners formed for the Government of that province. So ably did Sir Henry organise his plans, that he succeeded in conciliating most of the chieftains, and in laying the foundation for great moral, social, and industrial improvements in the Punjab; his brother John completed what he had begun, and the useful results were sensibly felt during the war of the Mutiny. Sir Henry next became superintendent of the Rajpoot states, where he made British influence more acceptable to the natives than it had ever been before. In 1854 he was raised to the rank of colonel, and was also appointed aide-de-camp to the Queen. The most difficult position he ever filled was that of chief commissioner or governor of Oude, after the annexation of that kingdom in 1856. The court was treacherous and demoralised; the talookdars or landowners were ambitious and grasping; and the people, many of whom were sepoys in the Company's army, were affected with the taint of insubordination. Six days before the native regiments at Meerut revolted and marched to Delhi (May 1857), the 7th Oude Infantry mutinied at Lucknow, the capital of Oude. Sir Henry, by skill and judgment, kept the other troops quiet for three weeks, but on the last day of the month four other regiments revolted, and marched out to join the mutineers. Sir Henry, having now few native troops whom he could trust, caused all the Europeans at Lucknow, and such natives as he could rely upon, to move into the Residency, a large enclosure, which he put into a state of defence. This Residency was so completely invested by the mutineers, that Lawrence could exchange scarcely any communications with Cawnpore, Allahabad, or Benares. On the last day of June he made a trial of the small force at his command, in an attack on a large body of rebels who were approaching Lucknow; but his Oude artillerymen proved treacherous; the day ended disastrously, and Lawrence retreated into the Residency. On the 2nd of July a shell from one of the enemy's guns entered a room in which he was sitting, exploded, and severely wounded him; he died in great agony on the 4th. Sir Henry, who was universally respected, founded an asylum for the orphan children of European soldiers in India, in a salubrious situation between Simla and Umballa; it still flourishes under the name of the 'Lawrence Asylum.' The Queen conferred a baronetcy on his eldest son, in recognition of the father's services. Sir Henry was the author of 'Adventures of an officer in the service of Runjeet Singh.'

* LAWRENCE, JOHN LAIRD MAIR, BARON, one of the most distinguished of British Indian statesmen, was born March 4th, 1811, at Richmond, Yorkshire. His father, Lieutenant-Colonel Alexander William Lawrence, had him educated at Foyle College, Londonderry, and then sent him in 1827 to the East India Company's College at Haileybury. Established in India in early life, young Lawrence filled various posts in the civil service. He returned to England for two years, 1840 to 1842, and then went back to India, where his abilities drew the attention of the governor-general Sir Henry Hardinge. After the first Sikh war, he was made commissioner of the Punjab, which province he greatly improved by his able administration. Still more marked was his success after the second Sikh war in 1849, when he became lieutenant-governor of the Punjab. His reform in the political, military, civil, judiciary, and administrative departments made the Punjab one of the best governed regions of India. At the breaking out of the mutiny in 1857, the value of his services was made evident; for his complete hold over the north-west extremity of India enabled him to plan the measures by which the first effectual check to the mutineers was given. Two days after the commencement of the mutiny at Meerut, Lawrence adopted the bold course of disarming four regiments of Bengal native troops at Meean Meer, near Lahore, not placing such reliance on those as on the Sikhs and Punjabees. Nine days afterwards he disarmed four more regiments at Peshawur. Keeping the Punjab quiet by these means, he gradually collected two siege columns, which he marched off across many hundred miles of doubtful country to Delhi. Throughout all the subsequent operations in India, whatever Canning, Neill, Havelock, Outram, and Clyde were enabled to achieve with Calcutta as a basis, they all relied on the co-operation of Lawrence in the Punjab; and this reliance never failed them, for he and his able subordinates kept the Sikhs and Punjabees uniformly loyal. When the East India Company's rule was extin-

guished by Act of Parliament in 1858, the last special court of directors was held to thank their gallant officers for their conduct in India, and to confer a pension of 2000*l.* per annum on Sir John Lawrence—he had been made a knight in 1856, a grand cross of the Bath in 1857, and a baronet in 1858. When the new Council of India was formed in London, Sir John was elected one of the 15 members. In 1861, when the Order of the Star of India was founded, he was in the first list of knights. In December, 1863, he succeeded the Earl of Elgin as governor-general of India. During his viceroyalty he ruled India with a firm hand; but there were two points in regard to which he was occasionally in collision with the English civilians at Calcutta: he wished to favour the admission of natives into office, and he discouraged any further annexation in or near the Afghan frontier. In 1868 the Earl of Mayo succeeded him as governor-general of India; and in the following year Sir John Lawrence was raised to the peerage, with the title of Baron Lawrence. In 1870 he was elected chairman of the London School Board. Besides numerous military and civil honours, Lord Lawrence has received the degree of D.C.L. from the universities of Oxford and Cambridge.

LAWRENCE, SIR WILLIAM, BART. [E. C. vol. iii. col. 823] died 5th July, 1867, having nearly completed his 84th year. The son of a surgeon, he was born on the 16th July, 1783, at Cirencester. He went to a private school, and in his 17th year was apprenticed to Abernethy, in whose house he resided five years. At the age of 20 he was appointed demonstrator of anatomy at St. Bartholomew's, and after filling various offices, he retired in 1865 with the complimentary title of consulting surgeon.

His principal works have been already enumerated. His treatise on Ruptures is a standard work, while that on the Diseases of the Eye may be said to have marked an epoch in ophthalmic surgery. As professor of anatomy and surgery to the College of Surgeons he delivered in 1816 and the two following years those lectures on Comparative Anatomy, Physiology, and the Natural History of Man, which aroused so much animosity that had their author been a man of less capability he would have been ruined. The two introductory lectures were published in 1816, and in 1819 he published 'Lectures on Physiology, Zoology, and the Natural History of Man,' which raised such a storm that the author attempted to suppress the work; but in 1823, the bookseller Carlile, in spite of the author, reprinted both works. Other editions, variously modified, afterwards appeared, the last, called the ninth, being published in 1848. Although elected in 1813 into the Royal Society, of which he afterwards became a vice-president, he does not appear to have contributed any paper to the society; but he contributed largely to the 'Transactions of the Medical and Chirurgical Society,' and to various medical Journals. He also wrote many of the articles on natural science in 'Rees's Cyclopædia.' A large number of anonymous articles on various points connected with medical reform are now known to have been written by him. His lectures on surgery, described by his professional biographer as "a charming book," "the work not only of a surgeon but a scholar," was published in 1863, when the author was in his 80th year.

On two occasions Lawrence delivered the Hunterian Oration at the College of Surgeons, of which he was twice president. On the second occasion most of those whom he addressed were hostile to his views; and the loud expressions of dissent, and even of denunciation, never caused him to waver for an instant, but, "standing alone, calm and unshaken by the storm which raged around him, he proceeded in a strain of unfaltering eloquence to the end."

Lawrence owed much to his great natural endowments. He was tall, well made, handsome, of noble presence, and enjoyed excellent health. Consequent on these advantages was a cheerful serenity, which communicated itself to those around him. His presence acted as a healing influence on his patients, and we have known him announce himself by whistling a merry tune while going upstairs. Few men worked harder or were more orderly or punctual, or less self-indulgent. Up to the last he maintained his habits of singular regularity and uniform temperance in all things. He was a diligent student, not only in his own profession but in history, both ancient and modern. He was a good classic, and spoke fluently French, German, and Italian. He read much, and had the happy faculty of remembering the valuable parts only of what he read. He wrote in excellent style, and was a good speaker. He was always lucid and to the point, and was free from egotism and affectation. He

was greater as a speaker than as a writer, and in his best days was probably without a rival as a lecturer; but, according to Sir Benjamin Brodie, he was even greater in ordinary conversation than in public speaking.

In his profession, Lawrence was distinguished "rather by his clear and vigorous perception of principles than by any special or peculiar skill in the details of practice. . . . His great ability was never more conspicuous than in prognosis. At times with marvellous dexterity he would predict the issue of a case which baffled or misled everyone around him. Thus his most daring achievements as an operator were often crowned with success, which to others appeared in the distance as the remotest chance." Under the greatest difficulties he maintained perfect self-possession.

Lawrence was a foreign associate of the Institute of France, and a member of a host of other societies. He also became surgeon extraordinary, and afterwards sergeant-surgeon, to the Queen, by whom he was made a baronet.

Lawrence's celebrity depended upon what Sir Benjamin Brodie speaks of with reference to professional success, as "that vast amount of personal skill and observation which, being unwritten, and indeed not capable of being written, can be amassed again only by the combination of similar talent, opportunity, and industry in another individual." Lawrence's fame, as his biographer in the 'Proceedings of the Royal Society' remarks, "will not rest upon any single brilliant discovery," but rather upon that "harmonious combination of various powers which made his character so complete."

LAZZARINI, The CANON GIOVANNI ANDREA, Italian painter and writer on art, was born at Pesaro in 1710, learned painting of F. Mancini, and executed numerous frescoes and oil-paintings in the cathedrals of Osimo and Foligno, the churches of Pesaro, and elsewhere; also many Madonnas and other religious subjects, and some landscapes for private persons. He lectured gratuitously on painting in the Academy of Pesaro, and published the substance of his discourses in the form of a Treatise on Painting, Pesaro, 1806. He likewise wrote some descriptions of paintings, and some poems. His writings were republished in 2 vols. 8vo, Pesaro, 1806. Lanzi is lavish of praise both of his paintings and writings. He died in 1801 at the ripe age of ninety-one.

LAZZARINI, GREGORIO, Venetian painter, was born at Venice about 1655, and studied under F. Rosa. He lived at a time when the Venetian school had sunk into mannerism; but, aiming at a more natural style, he secured the admiration of his contemporaries to such an extent that Carlo Maratti declined in his favour the commission to paint a grand picture of the triumphs of the Doge Francesco Morosini for the hall of the Scrutinio, in the ducal palace. His altar-piece of San Lorenzo Giustiniani, in San Pietro in Castello, is said by Zanetti to be the finest Venetian oil-painting of the century. He died in 1730.

* LEA, ISAAC, conchologist, was born at Wilmington, Delaware, March 4, 1792. In 1807 he entered his brother's office at Philadelphia, but his taste for natural history pursuits was shown by his devoting his leisure hours to assisting Professor Vanuxem in investigating the geology of Pennsylvania. In 1815 he was elected a member of the Academy of Natural Sciences at Philadelphia, and two years after he read his first paper to that society on the minerals found near Philadelphia. For the next few years he wrote scarcely anything, but occupied his spare time in collecting fossils, rocks, minerals, and recent freshwater shells. In 1821 he joined the publishing business of his father-in-law, Mr. Carey, and followed it with such success that he retired in 1851 with an ample fortune. From 1822 to 1827 he wrote some short papers on miscellaneous subjects, such as earthquakes, hybernation, and parhelia. In 1827 he commenced writing on the *Unionida*, and up to the present time has given almost his whole attention to this and allied groups. The great bulk of his papers, about 130 in number, relate to this group. Most of these papers are published in the 'Proceedings of the American Philosophical Society,' and in the 'Proceedings of the Academy of Natural Sciences at Philadelphia.' These papers have been reprinted in a collected form under the title of 'Observations on the genus *Unio*, &c.,' 4to, Philadelphia. This work now consists of twelve volumes, of which the last appeared in 1869. We may consider as portion of this work his 'Synopsis of the family of Naiades,' 8vo, Philadelphia and London, 1836; 4th edition, 4to, 1870. He discovered the tracks of *Sauropus primævus* near the base of the carboniferous rocks of America. This species is the oldest amphibian known in America, and a

full account of the tracks was given by him in 'Fossil Footmarks in the Red Sandstone of Pottsville, Pa.' fol. Philadelphia, 1855. In 1832 and in 1852 he visited Europe. In 1858 he was elected president of the Academy of Natural Sciences at Philadelphia.

LEAKE, LIEUT.-COL. WILLIAM MARTIN [E. C. vol. iii. col. 826], was born in London in January, 1777. His father, John Martin Leake, was a commissioner for auditing the public accounts. He was educated at the Royal Military Academy, Woolwich, and in 1794 obtained a commission in the Artillery, and entered on the active duties of his profession in the West Indies. Five years later he was sent to Constantinople, in order to instruct the Turks in the use of artillery; and in 1800 he was one of the English officers appointed to advise and assist the Grand Vizier in his defence of the southern provinces of the Turkish empire against the French. This led him through Asia Minor, and after some delay he joined the Turkish army in Syria. In 1801 he crossed the Desert with the army into Egypt, and after the surrender of Alexandria was appointed, with Mr. Wm. Hamilton, to make a general survey of Upper Egypt. The results of this exploration were a map of the course of the Nile from the cataracts to the sea; a determination of most of the ancient sites; a description of the monuments of antiquity; and numerous observations on the agriculture and commerce of the country. These were published by Hamilton in 1809. Leake returned to Syria in 1802, and continued his travelling researches until his departure for England on board the vessel in which the Elgin marbles were placed. He narrowly escaped with his life from shipwreck off the island of Cerigo. In 1804 he was appointed to survey the coasts and interior of European Turkey, the fortresses and means of defence. This led him to spend two years travelling in Northern Greece and the Morea, where "his peculiar tastes and talents for research received full development in a country where every day's journey produced an historical problem which taxed his erudition and critical acumen to solve."

When war broke out in 1807 between England and the Porte, Captain Leake was made prisoner by the authorities at Salonica; but he managed to escape to the frigate 'Thetis,' and returned to England in 1808. From October of that year until 1810 he was again travelling in the Levant, for the purpose of opening communications with Ali Pasha and other authorities of the Ottoman Government, with a view to induce them to assume offensive operations against the French, by offers of naval assistance and presents of ordnance and ammunition. During all these years of travel Leake acquired that varied knowledge which proved so useful in his literary labours, which he resumed on retiring from the army in 1823, and continued up to the time of his death, which took place on the 6th January, 1860, at the age of 83. In 1838 Colonel Leake married Mrs. Marsden, widow of the historian of Sumatra, and daughter of the Oriental scholar, Sir Charles Wilkins. Leake became a fellow of the Royal Society in 1815; he was also a member of various other learned societies, English and foreign. His works, which are enumerated in the original notice, have been described as "models of painstaking observation, available erudition, and perspicuous simplicity."

LE BAS, JACQUES PHILIPPE, a celebrated French engraver, was born at Paris in 1708, and was a pupil of N. H. Fardieu. Le Bas was an excellent engraver in his particular line; correct in drawing, neat, spirited, and full of expression; employing freely etching, the dry point, or the graver, as either seemed best adapted to produce the effect desired. But in his later plates he depended too much on the assistance of his pupils. He was happiest in his prints after David, Teniers, of which he executed above a hundred; among the most successful are the 'Acts of Mercy,' the 'Prodigal Son,' a large 'Flemish Festival,' and the portrait of the painter and his family. He also engraved several of the works of Ruysdael, Wouvermans, Berghem, and other Flemish painters, some of the landscapes of Claude Lorraine, and a great many of Vernet's. Le Bas was engraver to the king. He died April 14th, 1783.

LE BAS, LOUIS HIPPOPLYTE, a distinguished French architect, was born at Paris in 1782; studied under Percier and Fontaine, and in the École des Beaux-arts, where he carried off numerous medals, and in 1806 the second grand prize. He executed several buildings in the provinces; was appointed surveyor of the Paris Bourse and some other public edifices; designed the monument of Mallesherbe at the Palais de Justice, Paris; and in 1825 erected the Model Prison for juvenile offenders in the Rue de la Roquette. But his most important building is the church of Notre Dame de Lorette,

commenced in 1825 and completed in 1836. Modelled on the basilica of Sta. Maria Maggiore at Rome, its chief external feature is a tetrastyle Corinthian portico, but the interior is very splendid. As architect of the Institute, he constructed the great hall for the sittings of the Academy, and restored or reconstructed various portions of the buildings. M. Le Bas was elected a member of the Institute in 1825, and later, professor of the history of architecture, and for a long series of years he kept an atelier which always had numerous pupils. Until 1854 he was a member of the Council of Public Buildings. He was made officer of the Legion of Honour in 1847.

LE CLERC, JEAN [CLERC, JEAN LE, E. C. vol. ii. col. 288].

LE CLERC, SEBASTIAN [CLERC, SEBASTIAN LE, E. C. vol. ii. col. 289].

* LECONTE, JOHN L., naturalist, was born at New York, May 13, 1825. He graduated in medicine at the New York College in 1846. Before taking his degree he had made several scientific explorations. Thus in 1844 he went to Lake Superior, in 1845 to the Rocky Mountains, and in the years 1846 and 1848 he revisited Lake Superior for the second and third time. On the last occasion he formed one of a party consisting of Agassiz and other eminent naturalists. The results of the expedition were published in a volume to which Leconte contributed the portion relating to the beetles, or *Coleoptera*. From 1849 to 1851 he was mostly occupied in making observations in California, and in exploring the Colorado river. He has written a large number of papers. The few that are not entomological are varied in subject, and relate to ethnology, the fossil mammalia of America, the habits of *Amphiuma*, etc. The entomological papers are almost exclusively devoted to the *Coleoptera* of America, and are for the most part descriptive and classificatory. The most noteworthy are the monograph of the North American Histeroides, the descriptive catalogue of the geodephagous *Coleoptera* found in the United States, and the classification of the *Coleoptera* of the United States. His papers occur in the publications of the Natural History Society of Boston, the Academy of Natural Sciences at Philadelphia, the American Association for the Advancement of Science, the Lyceum of Natural History of New York, the American Philosophical Society, and the Smithsonian Institution. He has discovered and described a large number of new species and genera, so that his writings form an important portion of the literature which the student of the coleopterous fauna of North America finds it necessary to consult. There are several other American naturalists having a similar, or somewhat similar name to that of the subject of this article. MAJOR JOHN LECONTE was born February 22, 1784, and wrote upon the plants, amphibia, reptiles, insects, and mammalia of North America. JOHN LECONTE, a medical practitioner who has given some attention to zoology, was born 1818, and his brother JOSEPH LECONTE, born 1823, has written on the Gulf Stream, carboniferous plants and various other subjects.

LEDEBOUR, CARL FRIEDRICH VON, botanist, was born at Stralsund, July 8, 1785. In his twentieth year he became director of the botanical gardens, and professor of botany at Greifswald. He occupied a similar professorship in succession at Dorpat (1811—1836), Heidelberg and Munich. He is best known for his great work on the Russian flora, '*Flora Rossica*,' 4 vols. 8vo, Stuttgart, 1842—1853. He also wrote a '*Flora Altaica*,' 4 vols. 8vo, 1829—1833; '*Icones Plantarum novarum, Floram Rossicam, imprimis Altaicum illustrantes*,' fol., 1829—1834, comprising 500 coloured plates; and '*Reise durch des Altaigebirge und die Soongarische Kirgisen Steppe*,' 2 parts, 8vo (with folio atlas), Berlin, 1829—1830. He died July, 4, 1851.

LEE, JOHN, elder son of John Fiott, descended from an old Burgundian family, was born 28th April, 1783. He entered St. John's College, Cambridge, and in 1806, came out fifth wrangler. In 1816 he took his degree of LL.D., and afterwards became fellow of his college, when, as travelling bachelor, he visited the Continent and the East, and gathered materials for the collection of antiquities which was afterwards arranged at Hartwell. In 1815 he adopted his mother's name of Lee, in compliance with his uncle's will. In 1827 he succeeded to the family property and became lord of the manors of Hartwell, Stone, and Bishoptone, and patron of the livings of the first two, the presentation to which he conferred on the Royal Astronomical Society, of which he was treasurer from 1831 to 1840, and president in 1861—2. He built an observatory in the grounds of Hartwell, where during many years observations were carried on which are of recognised value in astronomy and meteorology.

Admiral Smyth here continued his '*Cycle*,' which was afterwards published as '*Speculum Hartwellianum*.' Dr. Lee defrayed the cost of this and of three other works, '*Descriptive Catalogue of a Cabinet of Roman Imperial, large Brass Medals*,' '*Ædes Hartwellianæ*,' containing an account of the scientific observations there made by different observers, and of the mansion and its valuable contents, and '*Addenda*,' to the same. His patronage of antiquities led to his being chosen chairman of the Congress of the Archaeological Association, and of two local societies which met on Bosworth Field in 1862. Dr. Lee was a member of Doctors' Commons, in which he served the offices of treasurer and librarian. He was appointed queen's counsel in 1864. He founded the Lee Fund of the Royal Astronomical Society for the relief of widows and children of deceased Fellows, and he presented to the Society the "*Lee Circle*," a valuable astronomical instrument. He became a fellow of the Royal Society in 1831, and at the time of his death, 25th February, 1866, he was a fellow of the Society of Antiquaries, of the Linnean, Geological, and other learned bodies. In common with a large number of men who bear the honoured title of F.R.S., he contributed nothing to the Transactions. With the exception of a few archaeological notes, his contributions to science did not pass beyond the pleasant boundaries of patronage.

LEE, ROBERT, D.D., a scholar and divine, celebrated as the leader of the liberal party in the Church of Scotland, and for the persistence with which he laboured for the reformation of its worship, government, and doctrine, especially for the introduction of Common Prayer into that communion, was born at Tweedmouth, in North Durham, on the 11th of November, 1804. After receiving his earlier education at the grammar school of Berwick-on-Tweed, he entered the University of St. Andrews in 1824, where he went through the usual eight years' curriculum required of candidates for holy orders, and at the conclusion of his course was the most distinguished student at the university. In 1832 he received licence to preach the Gospel; and in the beginning of the following year was elected to be minister of St. Vigean's Chapel-of-ease at Arbroath, which he left in 1836 for the parish of Campsie, in the county of Stirling and presbytery of Glasgow, to which he was inducted on the 8th of May, on the presentation of the Crown. He published, while at Campsie, a few discourses in the '*Scottish Christian Herald*,' a religious periodical begun in 1836, and brought to a close in 1841; and a '*Catechism*,' intended to assist young persons in becoming acquainted with the truths of Christianity. In 1840 he unsuccessfully contested the chair of theology in the University of Glasgow; and on the 29th of August, 1843, the year of the Disruption, was appointed by the Town Council of Edinburgh, in whose hands the patronage of the city churches was vested, to the church and parish of Old Grey Friars, vacant by the secession of the Rev. John Sym. In November he took up his residence and work in Edinburgh; and in the following year published a translation, with preface, &c., of '*The Theses of Erastus touching Excommunication*,' 8vo, Edinburgh, 1844, in which he exposed the fallacy of the epithet "*Erastian*" which the leaders of the non-intrusion party attempted to fix upon the adherents of the Scottish Church Establishment. He received in the same year (1844) the degree of D.D. from his own University of St. Andrews. In 1846 he was appointed to the newly-instituted Regius Professorship of Biblical Criticism and Antiquities in the University of Edinburgh, with which were conjoined a deanery of the Chapel Royal of Holyrood, and one of the six Royal chaplaincies for Scotland. In his inaugural lecture he defined the duties of his chair as embracing criticism, hermeneutics, and biblical antiquities, and proceeded to enforce especially the importance of accurate textual criticism as the basis of all sound theology. Soon afterwards began his connection with the '*Scotsman*,' to which he was a frequent and valued contributor. In November and December, 1853, he preached a series of four sermons on the '*Laws of Nature*,' which appear to have been suggested by Lord Palmerston's well-known letter to the Presbytery of Edinburgh, when the latter recommended a fast-day as a means of averting or modifying the attack of cholera from which the country suffered in the autumn of that year; and these sermons, although unpublished, as well as a series on '*Toleration*,' March and April, 1854, produced a very strong impression on the public. On the 26th of April, 1854, which was observed as a national fast on account of the war with Russia, he preached a remarkable sermon '*On War* (Matt. v., 38—42). Containing a Review of the Doctrine respecting War maintained by the Peace Society,' 8vo, Edinburgh, 1854, which was reprinted in '*British Eloquence of the*

Nineteenth Century. Sacred Oratory. Second Series, 8vo, London and Glasgow, 1858. On the 4th of May, 1853, he completed "the most laborious labour he had ever undertaken," a Reference Bible, which has been frequently published in different sizes and editions as 'The Holy Bible, with about 60,000 marginal References and various Readings, revised and improved,' &c., 8vo, 12mo, and 16mo, Edinburgh, London, and Glasgow, 1854, &c., &c.; a work which gave rise to an attack by the 'Witness' newspaper, on the ground of its inculcating universal redemption, and of otherwise attempting to propagate heresy. He defended himself in a series of vigorous replies in the 'Scotsman.' Dr. Lee declined the principalship of St. Mary's College, St. Andrew's, which was offered him on the 6th of April, 1854; and on the 8th of April, 1856, delivered the closing address of the season 1855-56, before the Philosophical Institution of Edinburgh, his subject being national education. His discourse, which had a considerable influence on public opinion, gave prominence to the necessity of a right understanding of the wants and treatment of the body, and was reprinted in a volume entitled 'The Family and its Duties: with other Essays and Discourses for Sunday Reading,' 8vo, London and Edinburgh, 1863; in which was also reproduced a sermon on a kindred subject, which, having been preached before the Queen, on the 11th of October, 1857, in the parish church of Crathie, was published by her Majesty's command, with the title 'What Christianity teaches respecting the Body,' 8vo, Edinburgh, Glasgow, and London, 1857. In 1858 he was one of a deputation sent to London to represent the interests of the University of Edinburgh, whilst the Bill for University Reform was before Parliament. Of five amendments which he suggested, four were adopted, and no other amendments than his were incorporated with the measure. In the previous year he had published his 'Prayers for Public Worship: with Extracts from the Psalter and other Parts of Scripture,' 8vo, Edinburgh, 1857; second edition, much enlarged, 1858, third edition, which was published as a sort of manifesto against the attacks that had been made upon the author in the General Assembly, for introducing "innovations" into public worship, 8vo, Edinburgh, 1863, &c. On the 23rd of February, 1859, Dr. Lee was charged in the Presbytery of Edinburgh with having "introduced into public worship, as conducted in Old Grey Friars, an order of Divine service, together with the use of a Liturgy, or formula of public devotion, and certain forms or postures in devotional exercises, unknown to the Church of Scotland, and inconsistent with the rules and practice thereof." He replied to the charge with great ingenuity and historical accuracy; and was so successful in his defence in the following General Assembly, May, 1859, that he brought a majority of 140 to 110 to vote substantially in his favour, virtually sanctioning all that Dr. Lee had introduced, or revived, except the reading of prayers from the book then in use. His speech on this occasion is said to have been "one of the finest pieces of historical and argumentative eloquence ever heard at the bar of the Assembly." Nevertheless, this controversy was the great controversy of Dr. Lee's life, and the movement he initiated is still upon its trial; although, with the infusion of younger men into the ministry, many of whom are of his own forming, the result in the long run is hardly doubtful. For several years he sought by every means in his power to bring the Church of Scotland into greater harmony with the age, and encouraged or initiated measures for the increase of her popularity and efficiency. In furtherance of this design he published 'The Reform of the Church of Scotland in Worship, Government, and Doctrine. Part I. Worship,' 8vo, Edinburgh, 1864, &c., new edition, 1866, &c., in which he examines, *inter alia*, the subjects of liturgical and extemporary prayer, postures in worship, the use of instrumental music, and the propriety of observing certain festivals and fasts, as Christmas Day, Good Friday, and Easter, instead of the Scottish innovation of local "fast-days." Shortly after the publication of this work, the committee which had been appointed by the General Assembly of 1863 to consider the subject of "Innovations," brought up its report before the General Assembly of 1864, which report was, on the whole, felt to be just and moderate. It was well received, and the decision upon it was virtually a sanction of Dr. Lee's proceedings, and a charter for orderly change and progress. On the 29th of May, 1864, he again preached before the Queen at Balmoral and Crathie; and on the 22nd of April, 1865, an organ was opened in his church of Grey Friars—a simple event, but one which was felt to mark an era in the life of the Church of Scotland. Since that time many congregations have followed the example, and the principle of instrumental worship has been

BIOG. DIV.—SUP.

widely affirmed. Dr. Lee stood nearly alone in the character of the evidence he gave before the commission which sat in Edinburgh in the winter of 1864-65, which was in favour of the separation of religious and secular education, and against the denominational grants. One palpable result of his labours in the cause of Church Reform was the formation, in the spring of 1865, of the "Church Service Society," which now numbers about 150 ministers in Scotland and the colonies, for the purpose of promoting the study of the ancient and modern liturgies of the Church, with a view, to quote the words of its founders, "to the preparation and ultimate publication of certain forms of prayer for public worship, and services for the administration of the sacraments, the celebration of marriage, the burial of the dead," &c. Dr. Lee contributed to the 'Transactions' of this Society a paper on the 'Order of Public Worship'; and also furnished to 'Euchologion: Book of Prayers' issued by the Church Service Society, 8vo, Edinburgh, 1867, second edition, 1869, the first baptismal service in the volume, a reprint, with slight alterations, from that in the last edition of his own Prayer Book. In the General Assembly of 1866, Dr. Lee was attacked by Dr. Pirie, of Aberdeen, the ex-Moderator, in a debate on the subject of innovations, which lasted for two days, and at the end of which the Assembly gave a vote against innovations by a majority of 33, thus contradicting and overturning the decisions of former years, and especially of 1864. At length, in the early part of 1867, Dr. Lee determined to appeal to the civil courts, if the General Assembly of that year should decide against his being allowed to read his prayers; and published a 'Letter to the Members of the ensuing General Assembly, in Reference to a "Finding" of the Assembly respecting certain Innovations imputed to the Writer,' 8vo, Edinburgh, 1867. The Assembly, before whom his case was to be brought, was to meet on the 23rd of May; but its hearing was postponed in consequence of an attack of paralysis which seized Dr. Lee on horseback, on the 22nd. From this he rallied so far as to be able to visit the west coast of Scotland for change of air in July, from which he returned to Edinburgh in October, and at the end of that month repaired to Torquay to spend the winter. Here, in the night of Thursday, 12th of March, 1868, he was seized with a second attack, which was almost immediately fatal. He was removed for interment to Edinburgh, where he was buried in the Grange Cemetery on the 20th March, in the presence of a vast assembly of the people.

Dr. Lee was an earnest and persistent advocate of all liberal measures. He laboured for the abolition of tests in the non-theological chairs of the Scottish Universities; for the liberation of the lay elders from the necessity of subscribing the Confession of Faith; and for the non-Judaic observance of the Lord's Day. His works, hitherto unmentioned, include, besides contributions to 'Good Words,' &c., and various works, completed or unfinished, in manuscript, 'A Handbook of Devotion,' 8vo, Edinburgh, 1845; sermons on 'The Incarnation,' and on 'Papal Infallibility, and the Causes of the late Conversions to Romanism'; 'Prayers for Family Worship, with Occasional Prayers,' 8vo, London and Edinburgh, 1861; and an address on 'The Clerical Profession: some of its Difficulties and Hindrances,' 8vo, Edinburgh, 1866. In 1870 was published the 'Life and Remains of Robert Lee, D.D., F.R.S.E., by the Rev. Robert Herbert Story, Minister of Rosneath, with an Introductory Chapter by Mrs. Oliphant,' &c., 2 vols. 8vo, London and Edinburgh.

LEE, ROBERT EDMUND, a distinguished American general, descended from a wealthy Virginia family, was born in 1808. He was placed, in 1825, by his father, General Henry Lee, at West Point Military Academy, which he quitted in 1829 with the rank of second lieutenant of Engineers. After making a tour in Europe, he took part, in 1835, in a survey of the boundary between the States of Michigan and Mississippi; and received the rank of first lieutenant in 1836, and that of captain in 1838. A year's experience as member of the Board of Engineers, in 1845, prepared him to act as engineer-in-chief during the Mexican war, his participation in which, chiefly with the army of General Wood, brought him much into notice. His services at Cerro Gordo, Contreras, Churubusco, and Chapultepec, won for him the successive grades of major in 1846, lieutenant-colonel in 1847, and colonel later in the same year. At the battle of Chapultepec he was wounded. The war being ended, he resumed his place at the board of engineers. From 1852 to 1855 he was superintendent of military studies at West Point; then lieutenant-general of cavalry; and then accompanied General McClellan to witness the operations at Sebastopol. At the outbreak of the Civil War in America, he was very unwilling to

participate in the operations, being on terms of friendly intimacy with the leading officers on both sides. South Carolina formally seceded from the United States on December 20th, 1860, Mississippi on January 9th, 1861, Florida on January 10th, Alabama on January 11th, Georgia on January 19th, Louisiana on January 26th, and Texas on February 1st, yet Lee still remained faithful to the Washington Government, accepting the rank of colonel of cavalry so late as March 16th. But when his own native State of Virginia seceded, April 17th, he resigned his position in the United States army, and threw himself heart and soul into the Confederate cause. Governor Letcher entrusted him with a command in the army of Virginia, and the military government of Richmond. He was with Generals Johnson and Magruder when they had to evacuate York Town, and was present at the battle of Fair Oaks; but was not able to effect much, owing to the defective organisation of his forces, and spent the winter of 1861-2 mostly in and near Richmond. In June, 1862, he defeated the Federals under his old military companion General M'Clellan; then at the battle of Gaines' Mill, on the 26th; and soon afterwards he succeeded in driving them out of Virginia, across the Potomac: in which achievements he was gallantly aided by Stonewall Jackson. Between the 20th and 30th of August he thoroughly defeated the Federals under General Pope, in the sanguinary engagements at Manassas Junction and elsewhere. Thus far triumphant against M'Clellan and Pope, Lee and Jackson resolved to cross the Potomac into Maryland, and threaten Washington itself. The crossing was effected on September 5th, but was not attended with the expected success: Lee's proclamation to the Marylanders, inviting them to throw in their lot with the South, did not meet with a favourable response; and this cast a damp over his proceedings. M'Clellan, at the head of a new army, hastened to the menaced points, and attacked Lee with 80,000 men against 40,000, at Hagarstown, on the 14th of September; Lee retreated; but being joined by Jackson, he fought again at Sharpsburg and Antietam on the 16th and 17th. Although the victory was not decisive on either side, the battles were very sanguinary; Lee himself was wounded, and he deemed it prudent to recross the Rappahannock. In November, General Burnside, who had superseded M'Clellan in command of the army of the Potomac, planned an attack upon Lee; but Lee attacked him instead on December 13th, defeated him at Fredericksburg, and drove him back across the Rappahannock. Thus ended the year 1862. In January, 1863, Hooker superseded Burnside in command of the army of the Potomac; he crossed the Rappahannock in April, and took up a position near Chancellorsville. Here Lee gave him a severe defeat on May 2 and 3, and compelled him to recross into Maryland, paying a high price for his victory, however, in the untoward death of Stonewall Jackson. Hooker was now superseded by Meade in June; and Lee, worsted by him at the sanguinary battle of Gettysburg, July 1 to 3, was forced to retreat across the Potomac into Virginia on the 13th; but collecting his forces, he crossed the Rapidan on the 9th of October, resumed the offensive, and defeated Meade on the 7th of November. During the ensuing winter few engagements took place near the Potomac; but early in May, 1864, Lee joined Longstreet and advanced towards Fredericksburg, while Grant entered Virginia at the head of a large army. In the sanguinary battles near Spottsylvania, May 5th to 10th, Grant defeated Lee; whereas on June 3rd Lee defeated Grant at Chickahominy. The Confederates being gradually hemmed in by the Federals around Richmond, Lee, who had been made generalissimo of all the armies of the South, was obliged to abandon Petersburg and Richmond in April, 1865. The surrender of himself and his army, on the 9th, virtually terminated the Civil War. General Lee retired into private life, and became President of Washington College, Lexington, Virginia, where he died on the 12th of October, 1870. In early life he had married the adopted granddaughter of George Washington; no less than five of his sons were engaged with him in the war. Like his companion in arms, Stonewall Jackson, Robert Lee was respected almost equally by North and South, for his self-command, skill, humanity, and courage; and his military ability has gained the admiration of all professional critics who have studied his career.

LEECH, JOHN [E. C. vol. iii. col. 831]. The memoir just cited was restricted almost entirely to a review of Mr. Leech's designs, and of his character as an artist. Little, however, remains to be added of his personal history. He was born in London in 1817, and was educated at the Charterhouse school, where, during part of the time, Thackeray was his contemporary. On leaving

school he was articled to a surgeon, and qualified for the medical profession, but early turned aside to follow his inclination for art, and soon found in 'Punch' a medium exactly suited for his peculiar genius. As an artist, Leech had no academic training. He received the usual school-boy instruction in drawing, but beyond that he was entirely indebted to his own strong will, and fine eye for form and expression. In most self-taught artists the want of systematic education is plainly perceptible; but Leech knew exactly what he wanted to effect, and he succeeded thoroughly. He had used the pencil for his own gratification from childhood, and he acquired wonderful facility in its use. A keen and close observer, he adopted the practice of constantly jotting down pictorial memoranda of everything that caught his attention, or that he wished to remember, and hence his sketch-books were stored with almost inexhaustible materials, and his memory with forms and fancies, whilst his hand attained remarkable readiness and precision. And having adopted the artistic calling, he addressed himself to it in the true spirit of an artist. Never careless even in what seemed the merest trifles, he steadily grew in artistic power. A keen sportsman, he was able to hit off, with unequalled truth and vivacity, the ludicrous side of sporting life, and the misadventures of unskilful pretenders, and yet, with such gentle and good-natured satire, that the spectator half-sympathised with the unlucky wights. His illustrations to the late Mr. E. Surtees' 'Handley Cross,' 'Sponge's Sporting Tour,' 'Ask Mamma,' 'Plain or Ringlets,' and 'Facey Romford's Hounds,' might be cited in proof, but his long series of fishing and hunting scenes in 'Punch' were even fuller of life and humour. And it is noteworthy how admirably they are drawn—the horses always accurate and full of character, the rod always rightly plied when wielded by an adept, and precisely as a bungler would wield it when in the hands of a novice; and the bits of riverside and cover scenery touched in with the rarest truth, and always so as to make the sketch artistically effective. But his home-life, whether the scene was a drawing-room or a cabin, was just as true, and never before were young ladies so prettily quizzed, or young gents so shrewdly handled. In truth whilst Leech was professedly a caricaturist, and his sketches were overflowing with humour, his refinement and kindness of manner were equally characteristic. Even in his strongest political cartoons, he never overstepped the bounds of gentlemanly feeling. Everything he did bore the impress of himself. His manner was unmistakable, yet he was no mannerist. He was original without effort, and graceful even when grotesque. His designs for 'Punch,' the great work of his life, have nearly all been published separately, as 'Pictures of Life and Character,' 5 vols. oblong folio; and as 'Pencilings from Punch,' comprising his larger cartoons, chiefly political. He also produced 'Young Troublesome, or, Master Jacky's Holidays,' and illustrated 'A Little Tour in Ireland.' In 1863, a series of upwards of 100 of his sketches were enlarged on canvas, and worked upon by him so as to have the character of sketchy oil-paintings—he having been assisted in overcoming the difficulties in the manipulation of the (to him) novel material, by his friend J. E. Millais, R.A. After being exhibited with great success at the Egyptian Hall, and afterwards in the City and some of the larger provincial towns, a select number were reproduced by the chromo-lithographic process, and published under the titles of 'Sports and Pastimes,' and 'Hunting.' Mr. Leech, who had for some time been in delicate health, died at his residence, Kensington, on the 29th of October, 1864.

LEEDS, WILLIAM HENRY, writer on architecture, was born in 1786. In early life he was engaged in commercial pursuits, but withdrew to devote himself to the study of philology and architecture, the last becoming eventually his absorbing occupation. For over 30 years Mr. Leeds laboured unweariedly as an architectural critic, rendering the public and the profession excellent service, but obtaining little recognition from either. He was a man of extensive reading and of independent judgment; his personal tastes were chiefly with the Italian as a living style, but he was a reverent student and admirer of the ancient Greek architecture; Gothic he admired as a genuine expression of mediæval genius, but he had little sympathy with its practical revival. Mr. Leeds wrote much in the 'Civil Engineers' and Architects' Journal,' in the 'Foreign Quarterly Review,' and other periodicals, and published separately 'Studies and Examples of the Modern English School of Architecture: The Travellers' Club House,' a supplementary volume to Britton and Pugin's 'Public Buildings of London,' a translation of the first part of Möller's 'Memorials of Gothic Architecture;'

and 'Rudimentary Architecture: the Orders and their Aesthetic Principles.' Many of the articles on architecture, and biographies of architects, in the 'Penny Cyclopaedia' were written by him, and have been in good part embodied in the 'English Cyclopaedia.' He died on the 1st of May, 1866.

* LEFUEL, HECTOR MARTIN, French architect, was born at Versailles, November 14th, 1810. The son of an architect, he studied under his father, and subsequently under M. Huyot. At the École des Beaux-Arts he carried off the second prize in 1833, and the grand prize of Rome in 1839. He remained some years in Rome, diligently occupied in the study of the architectural remains of the ancient and renaissance periods. On his return to Paris he opened an atelier, where he had many pupils, and executed numerous commissions. He received successively the appointments of architect of the château of Meudon, of the palace of Fontainebleau, and, on the death of Visconti, 1853, of the Louvre. This last is his chief work, he having laid aside the comparatively modest designs of his predecessor, and continued the building in a style of extreme splendour. It was completed by the junction of the Louvre with the Tuileries, and inaugurated with great solemnity by the Emperor, in August, 1857, when M. Lefuel was nominated architect to the Emperor and knight of the Legion of Honour, of which he was later created grand officer. Among other buildings erected by M. Lefuel may be mentioned the grand hôtel of M. Fould in the faubourg St. Honoré, and the palace for the Exposition Universelle of 1857. He was elected member of the Académie des Beaux-Arts in 1855.

* LEHMANN, CHARLES ERNEST RODOLPHE HENRI, historical painter, was born April 14th, 1814, at Kiel, in the duchy of Holstein, and acquired the elements of art from his father, a miniature painter of ability; but went early to Paris, and entered the atelier of Ingres, of whom he became, after Flandrin, the most distinguished scholar. He made his début at the Salon in 1835, with a picture of the 'Departure of Tobias,' and the next year sent one of 'Jephthah's Daughter,' which excited some attention, and was purchased by the Duc d'Orléans. Lehmann was not, however, destined to acquire rapid popularity, but the neglect which he experienced only stimulated him to more earnest efforts. Ingres had been appointed to the direction of the French Academy at Rome, and thither Lehmann repaired in 1837, taking with him his younger brother, Rodolphe, who had also adopted painting as his profession. From Rome he proceeded to Munich, where Cornelius was then in the height of his fame. Working and studying there, Lehmann fell under the influence of the German master, but, on returning to France, he gradually emancipated himself from his manner, recurring in the main to that of Ingres. From the first he restricted himself to subjects of an elevated type. His early pictures were almost exclusively Biblical, but he extended his range to the legends of the Church, general history, and the great poets, Æschylus, Dante, Shakspeare, Goethe, &c. Some of his most important and celebrated works have been mural paintings of a symbolical character. In 1852 he was commissioned by the Emperor Napoleon III. to decorate the Galerie des Fêtes of the Hôtel de Ville with a series of 56 pictures illustrative of the History of Human Progress. These, though works of a thoughtful character and severe in style, were executed in about a year. They have been very popular, and have been reproduced in photography. A finer work was a series representing the History of the French Monarchy from the epoch of the Merovingian to the Bourbon dynasty, painted in the Salle du Trône at the Palace of the Luxembourg. Still more important was his latest work in this style, a series of five large and elaborate compositions on the walls of the Grande Salle des Assises, in the new Palais de Justice. The subjects—'Meditation,' 'Integrity,' 'Law Protecting Innocence,' 'Pursuing the Guilty,' and 'Punishing Crime'—are treated in a broad, grave, and impressive manner, with great purity of drawing and feeling for colour. His chief mural paintings in churches are those in the chapels of St. Merry and in the transepts of St. Clotilde. His easel pictures are numerous and masterly, and he has painted many excellent portraits. M. Lehmann, who has long been naturalised in France, has received three medals of the first class, the decoration of the Legion of Honour in 1846, and been promoted officer in 1853; and elected member of the Academy in 1864. His brother, RODOLPHE LEHMANN, born at Ottensen, near Hamburg, August 19th, 1819, studied painting under the guidance of his elder brother, and has adopted much of his manner. He has painted many poetical and genre pieces, but is most successful in portraiture. He has resided successively in Paris, Rome, and London, and has been for some years a

pretty regular contributor to the Annual Exhibitions of the Royal Academy.

LEICHHARDT, FRIEDRICH WILHELM LUDWIG, traveller in Australia, was born October 23, 1813, at Trebatsch, near Beakow, Prussia. He went through his course of studies at Göttingen and Berlin, and occupied his leisure time in making excursions into the Alps. In 1841 he went to Australia, and travelled about the colonised portions with a view to studying the rocks and plants. He sent numerous fossils from Darling Down to Professor Owen. The results of his labours appeared partly in 'Beiträge zur Geologie von Australien,' and in Professor Owen's reports to the British Association for the Advancement of Science. About this time the colonial government proposed an overland expedition from the east coast of Australia to Port Essington, on the north coast. The governor, Sir Thomas Mitchell, recommended Leichhardt, as the leader, who readily fell in with the arrangement, as he had already been planning how to effect a scheme of this kind on his own account. He left Sydney August 14, 1844, and reached Port Essington December 17, 1845. The journey was calculated to last eight months, but as it took twice that time, the latter portion was effected amidst much hardship, owing to scarcity of food. A large extent of fertile country was discovered. This journey of about 3,000 miles obtained for him the patron's medal of the Royal Geographical Society in 1847. He published an account of it under the title, 'Journal of an Overland Expedition in Australia, from Moreton Bay to Port Essington. . . . during the Years 1844-5,' 8vo, London, 1847. In 1846 he started on a more hazardous expedition, intending to go from the east to the western coast of Australia, and as nearly across the central portion of this vast island as the nature of the country would permit. He found a rich and fertile country far in the interior, and returned to Mr. Macpherson's station in order to report his discovery. In April, 1848, he resumed his journey, but nothing further was received from him; so that in all probability he and all his party perished in Central Australia.

* LEIDY, JOSEPH, biologist, was born at Philadelphia, September 9, 1823. He was educated at the university of his native city, from which he received his degree of M.D. in 1844, and in which he was elected professor of anatomy in 1853. His writings are numerous, but scattered in scientific journals, and in the books of other persons. Thus he has contributed to Maury's 'Indigenous Races of the Earth,' 1857; to Owen's 'Report on Wisconsin,' 1852; and to works by Hayden and Haldemann. His papers (mostly very short) are considerably over a hundred in number, and deal with a wide range of subjects. The most important group relates to the extinct vertebrates of North America, and amongst these the most noticeable are those descriptive of the extinct mammalia of Nebraska and Dakota, and the 'Mémorial of the Extinct Sloth Tribe of North America,' in the Smithsonian Contributions for 1855. Another group of papers comprises valuable additions to our knowledge of the *Entozoa*, of which the best known is 'A Flora and Fauna within Living Animals,' in Smithsonian Contributions for 1853. Other papers are descriptive of various species of *Mollusca*, *Molluscoida*, and annelids, and others again are of an anatomical nature. His papers will be found in the publications of the Academy of Natural Science, the Boston Society of Natural History, the American Philosophical Society, and the Smithsonian Institution.

* LEIGHTON, FREDERICK, R.A., was born at Scarborough, December 3rd, 1830. Much of his early life was spent in Italy and Germany, his general education being completed at Frankfurt; where, under Steinle, in Brussels and in Paris, his artistic education was also prosecuted. On quitting Steinle's atelier in 1851 he went to Rome, where he completed his large painting of 'Cimabue's Picture of the Madonna carried in Procession through the Streets of Florence,' which, when exhibited at the Royal Academy, 1856, excited general admiration by its evidence of unwonted boldness and power, and was purchased by the Queen. 'The Triumph of Music,' 1856, hardly sustained the reputation of the previous year, but Mr. Leighton was again on the Continent, and hard at work, and this time counteracting or compensating the influence of the Düsseldorf school by intimacy with Ingres and Scheffer, and other representatives of the serious side of French art. This French influence was marked in such works as 'Count Paris and Juliet,' 1858, while 'La Nanna' and other heads, painted at Rome in the following year, were as decidedly Italian. Mr. Leighton had completed the cycle of his art studies: and his 'Paolo and Francesca,' 1861; 'Odalisque' and 'The Star of Bethlehem,' 1862; and especially his noble

picture of 'Dante in Exile,' 1864, showed that he was working out a style of his own, which, while free from any affectation, contained at most only occasional reminiscences of the schools in which he had studied. The 'Dante in Exile' secured his election as associate of the Royal Academy; he became full member towards the close of 1868. From his election into the Academy Mr. Leighton has been a pretty regular contributor to the annual exhibitions. His chief works have been 'Helen of Troy,' 1865; 'Syracusan Bride leading Wild Beasts in Procession to the Temple of Diana,' 1866; 'Venus disrobing for the Bath,' a very remarkable work, 1867; 'The Death of Ariadne,' 1868; 'St. Jerome,' 'Electra at the Tomb of Agamemnon,' 'Helios and Rhodus,' 1869, and 'Hercules wrestling with Death for the body of Alceste,' 1871. In 1868-69 Mr. Leighton made a visit to Egypt, where he was enabled to study the country and people with more freedom than, perhaps, any previous artist. The bearer of an autograph letter from the Prince of Wales to the Khedive of Egypt, he was received with the greatest respect, a steamer and an escort were provided for the voyage of the Nile, and every facility was afforded him for the prosecution of his studies. He made a splendid collection of highly-finished sketches, and these, with others made in previous travels, he has signified his intention to bequeath to the Royal Academy.

* LELAND, CHARLES GODFREY, an accomplished American scholar and man of letters, was born at Philadelphia on the 15th of August, 1824. He was educated at Princeton College, New Jersey, where he graduated in 1846; after which he visited Europe, and pursued his studies at the Universities of Heidelberg, Munich, and Paris, where he devoted himself especially to the modern languages, the fine arts, history, and philosophy. Being resident in Paris at the time of the Revolution of February, 1848, he was a member of the American deputation charged with the expression of congratulations to the Provisional Government on the inauguration of a republic in France. Later in the same year he returned to Philadelphia, and after a course of legal study, was admitted to the bar. He sacrificed his prospects of professional success, however, to the superior attractions of literature, to which he had been devoted from his undergraduate days, having while at Princeton commenced to contribute to the 'Knickerbocker' or New York Monthly Magazine, in which he originally published the greater part of a series of papers afterwards issued in a collective form as the 'Sketch-Book of Meister Karl,' 8vo, Philadelphia, 1855. This work, which was made up of incidents of foreign travel, description, moralizing, original poetry, odd extracts, and curious learning, was commended by Washington Irving for "its raciness, its quaint erudition, its graphic delineations, its vein of genuine poetry, and its true Rabelais humour." In the same year Mr. Leland published a small work of 271 pages, but of considerable research, in which he placed both ancient and modern authors under contribution, entitled 'The Poetry and Mystery of Dreams,' 12mo, Philadelphia, 1855; and commenced the publication, in numbers, of his 'Pictures of Travel,' Philadelphia and London, 1855-56, being a translation of Heinrich Heine's 'Reisebilder,' a difficult task, by the generally competent execution of which he acquired considerable credit. Another translated work, from the German of Baron J. von Eichendorff, was published with the title of 'Memoirs of a Good-for-Nothing,' 8vo, New York and Philadelphia, 1866. Mr. Leland has been connected, either editorially or as a contributor, with a great number of periodical works, as, for instance, with 'Sartain's Union Magazine of Literature and Art,' 8vo, Philadelphia, 1849, &c.; 'The International Magazine of Literature, Art, and Science,' 8vo, New York, 1850, &c. He has also been connected with the editorial department of the 'Philadelphia Evening Bulletin;' and has edited 'Graham's Illustrated Magazine,' and 'The Continental Monthly.' Devoted to Literature and National Policy,' 8vo, Boston (U. S.), 1862, &c. His views on "national policy" at a critical time were expressed in a work entitled 'Centralization, or "States Rights,"' 4to, New York, 1863. But his chief popularity depends upon his creation of a new kind of humorous poetry, in which he exhibits great command alike of wit and pathos, of felicitous phrases and curious combinations of English words with German forms and idioms. The exemplars of this power are the 'Breitmann Ballads,' of which the first was printed in a newspaper as a bit of local comedy during the war of secession, and was so quickly copied and largely quoted as to induce the author to follow up his success with many other poems. The hero of these is Hans Breitmann, a Suabian, who finds himself in America, and serves for pay and plunder in the cavalry of the Federal army, and whose speech is a grotesque patois of Anglo-

German. The character and adventures of Hans Breitmann are said to have had a basis of fact in those of a real person whose actual name was Jost, who served in the 15th Pennsylvania Horse. The first fugitive ballad became the eponymous of a volume entitled 'Hans Breitmann's Party. With other Ballads,' 8vo, Philadelphia, 1868, which was followed by 'Hans Breitmann's Ballads,' 8vo, Philadelphia, 1869. Four "Series" of the 'Ballads,' having the prestige of Mr. Leland's authority, have been issued in this country, to which the author recently paid a visit:—'Hans Breitmann's Party. With other Ballads,' seventh edition, 16mo, London and Edinburgh, 1869; 'Hans Breitmann's Christmas. With other Ballads,' 16mo, London and Edinburgh, 1869; 'Hans Breitmann as a Politician, 16mo, London and Edinburgh, 1869; and 'Hans Breitmann in Church. With other Ballads,' 16mo, London and Edinburgh, 1870. A brother of Mr. Leland's, HENRY P. LELAND, is favourably known as a contributor to the New York 'Knickerbocker,' and other American periodicals, and as the author of a collection of fugitive pieces published collectively with the title of the 'Grey Bay Mare, and other humorous Sketches of American Life. With Illustrations,' 12mo, Philadelphia, 1856; and 'Americans in Rome,' 8vo, New York, 1863.

LELEWEL, JOACHIM [E. C. vol. iii. col. 843], died at Brussels on the 29th of May, 1861.

LELONG, JACQUES, a bibliographer and priest of the Oratory, was born at Paris on the 19th of April, 1665, and received his early education from a relative who was a priest and the director of the *religieuses* attached to the collegiate church of Sainte Marie at Étampes. At about ten years of age he was sent by his father to Malta, with a view to his admission among the clerks of the order of St. John of Jerusalem. The plague, and the closeness of the confinement to which he was subjected on suspicion of having become infected, combined with the tediousness of his life at Malta, drove him speedily back to France, whither, as he had not yet taken the vows, the superiors of the order permitted him to return. After completing the usual course in classics, philosophy, and theology, at Paris, he became, in 1686, a novice in the congregation of the priests of the Oratory. Here he passed his year of probation; and was sent to teach mathematics at the College of Juilly, which he left for the seminary of Notre Dame des Vertus, at the village of Autrevilliers, near Paris, where he devoted the leisure he enjoyed from his religious duties and the management of the library to varied and unremitting study, especially in mathematics and philosophy, his devotion to the latter of which formed the basis of his close intimacy with Père Malebranche. He returned to Paris in order to undertake the charge of the library of the Oratorians, which, in the course of the twenty-two years of his administration, trebled the number of its volumes, of which he made several catalogues. Lelong was a scholar of profound and versatile attainments, being acquainted with Latin, Greek, Hebrew, and Chaldee; with Italian, Spanish, Portuguese, and English; and having a singular knowledge of literary history, libraries, printing, and bibliography. He wore out a naturally fragile constitution by his ceaseless and almost sleepless ardour in the discharge of his duties as librarian, and in the pursuit of his studies as bibliographer; and died at Paris of a pulmonary disease on the 13th of August, 1721. He was a man of much judgment, modesty, truthfulness, and precision, estimating lightly the products of the imagination, and delighting in labours of exactness and research, to secure the correctness of which he thought no amount of pains to be ill-bestowed.

His principal works are 'Bibliotheca Sacra: sive Syllabus omnium ferme Sacrarum Scripturarum Editionum ac Versionum,' 2 vols. 8vo, Paris, 1709, another edition, "cum additamentis et Notis C. F. Boernerii," 2 vols. 8vo, Leipzig, 1709, a work which assumed completeness in the posthumous publication brought out under the care of Père Nic. Desmolets, the official successor of Lelong, with the title of 'Bibliotheca Sacra, in binos Syllabos distincta, &c. Huic subjunguntur Grammaticæ et Lexica Linguarum, præsertim orientalium,' 2 vols. folio, Paris, 1723, with a Life of the Author, and the Preface and additions of C. F. Boerner; another edition, of which only the first part was finished, 'Bibliotheca sacra, post Jac. Lelong et C. F. Boernerii, iteratas Curas Ordine disposita, emendata, suppleta, continuata, ab A. G. Maach,' 5 vols. 4to, Halle, 1778-90; 'Discours historique sur les principales Éditions des Bibles polyglottes,' 8vo, Paris, 1713, Dutch translation, by G. Outhuijs, 'Geschiedkundig Verslag der voornaamste Uitgaaven van de Biblia polyglotta. Gedeeltelijk uit het Fransch vertaald, en met Bijvoegselen en Aanteekeningen vermeerderd,' &c. 8vo, Franeker, 1822;

and 'Bibliothèque historique de la France : contenant le Catalogue de tous les Ouvrages tant imprimés que manuscrits, qui traitent de l'Histoire de ce Royaume, ou qui y ont Rapport. Avec des Notes critiques et historiques,' folio, Paris, 1719, "nouvelle édition, revue, corrigée, et considérablement augmentée par Fevret de Fontette, Barbeau de la Bruyère," &c. 5 vols. folio, Paris, 1768—78.

* LEMAIRE, PHILIPPE HENRI, a distinguished French sculptor, was born at Valenciennes in 1798, studied under Cartellier and won the second prize for sculpture at the École des Beaux-Arts in 1819, and the grand prize of Rome in 1821. On his return from Rome, 1827, he exhibited a marble statue of a 'Girl with a butterfly,' which was purchased by the Duchesse de Berry, and secured for the sculptor a high position among the artists of Paris. He continued to represent classic subjects, but is most known by his public commissions. Of these the most striking is the relief in the pediment of the Madeleine, representing 'Christ pardoning the Magdalen,' an immense composition in which allegory is very freely combined with reality. Another well-known work is his bronze relief of Henry IV. on the façade of the Hôtel de Ville, Paris; and that in the pediment of the Palais de Justice at Lille. Among his many statues are those in marble of Louis XIV. and of Kleber for the Museum, Versailles; and the colossal bronze statue of Hoche for the place named after him; Chevert, at Verdun; Napoleon I. for the Bourse at Lille, and Froissart for Valenciennes. He has also executed two vast bronze reliefs of the Resurrection, and the Emperor Valens for the pediments of the church of St. Isaac at St. Petersburg. M. Lemaire was elected to the Corps Legislatif by his native place (Valenciennes) in 1852, and again in 1857. He received the decoration of the Legion of Honour in 1834 and was promoted to be officer in 1843.

LÉMERY, NICOLAS, was born at Rouen, November 17th, 1645, his father, Julian, being procureur of the Parliament of Normandy, and a Protestant. Nicolas, at an early age, showed a decided taste for chemistry, and connected himself with a relative, an apothecary, in his native town; but, learning little from him, he went to Paris in 1666, and boarded with M. Glazer, demonstrator of chemistry at the Jardin du Roi. Glazer was a man full of obscure notions, and not willing to communicate what little knowledge he had; so that after two months Lémery left him in disgust, and proceeded to travel through France in search of chemical information. He settled at Montpellier, in the house of M. Vershant, an apothecary, in whose laboratory he worked, and taught chemistry to a number of young students. His reputation gradually increased, so that the professors of the Faculty of Medicine of Montpellier and other persons fond of natural science often went to see his experiments. During his three years' residence in the place he practised medicine with success.

He returned to Paris in 1672, visited the different scientific meetings, and was soon distinguished for his scientific knowledge. He set up a laboratory of his own, and gave public lectures on chemistry, which were attended by large numbers of students, many of whom were foreigners, Scotland on one occasion contributing as many as forty. As an apothecary, he prepared a number of medicines, which, becoming fashionable, were also profitable. The magistery of bismuth, or pearl white, which he prepared as a cosmetic, sufficed to maintain the whole expense of his house. In 1675 he published his 'Cours de Chimie,' which has the great merit of first completely stripping chemistry of its mysticism. It went through a vast number of editions in a short time, and was translated into Latin, German, Spanish, and English.

In 1681 Lémery began to experience persecution in consequence of his religious opinions, so that in 1683 he found it expedient to pass over into England. He was well received by Charles II., but as the country was in an unsettled state, Lémery thought it best to return to France. He took a doctor's degree at Caen, in Normandy, and returning to Paris, set up as general practitioner in medicine and surgery, and also as apothecary and lecturer on chemistry. The revocation of the Edict of Nantes, however, in 1685, compelled him to give up practice, and to conceal himself; but finding he could not avoid persecution, he declared himself, in 1686, a Roman Catholic. He was now as much protected by the court and the clergy as before he had been persecuted by them. He was appointed associated chemist in 1699, when the Academy of Sciences was newly modelled, and he also became a pensioner. He died on the 19th of June, 1715, in his 70th year.

In addition to his system of chemistry, he published some

works on pharmacy, and contributed between 1700 and 1709 five papers to the memoirs of the French Academy. He left a son, who was also a member of the French Academy, and author of various papers, in which he attempts a mechanical explanation of chemical phenomena.

LEMON, MARK [E. C. vol. iii. col. 845.] In the last years of his life Mr. Lemon's literary activity, apart from his labours as editor of 'Punch,' was mainly directed to the production of a series of novels—'Wait for the End'; 'Loved at Last'; 'Golden Fetters'; 'Leighton Hall'; 'Faulkner Lyle'; and 'The Blue Petticoat,' the last being a posthumous publication; but he also contributed many papers to 'Once a Week' and other serials, and edited a 'Book of Jest.' In 1862 he delivered at the Gallery of Illustration a course of lectures on London antiquities under the title of 'About London,' a somewhat dramatic effect being imparted by scenic representations painted by Mr. Thompson and Mr. Danby of the streets and scenes described by the lecturer. The lectures were afterwards published with the title of 'The Streets of London.' But a few years later (1868—69) Mr. Lemon gave public readings of a more essentially dramatic character. Of a portly size and jovial humour it occurred to him that he might impersonate Falstaff,—of whose subtler idiosyncrasies as well as broad mirthful nature he had a hearty appreciation—in character and costume without the usual padding and stage make-up. With some assistance, and with suitable scenery, he accordingly appeared at the Gallery of Illustration as Sir John Falstaff in 'Scenes from Henry IV.' Mark Lemon was not a novice on the boards, but his impersonation was not exactly acting, and its novelty, geniality, and humour rendered it so attractive that he was invited to repeat the performance in a provincial tour which proved as popular as the representations in London. This ended, he returned to his literary pursuits, and went on in the quiet performance of his editorial and other duties till his death, which occurred at his residence, Crawley, Sussex, on the 23rd of May, 1870, in his 61st year. He was interred in the neighbouring churchyard of Ifield, in the presence of a large assemblage, not merely of his personal and literary friends, but of his neighbours, by whom he was held in great esteem. Mark Lemon was a man of original power, of considerable attainments, of a rare sense of humour, and of a thoroughly good-natured genial temperament, for all of which he found ample exercise as editor of 'Punch'—the character in which he will be longest remembered. His friends were many, and by them his memory is warmly cherished.

LE MONNIER, PIERRE CHARLES, French astronomer, was born at Paris, November 23rd, 1715. His father, Pierre Le Monnier, also an astronomer, instructed him in this science, and qualified him to be an observer and writer before he had completed his twentieth year. Pierre Charles sent to the Académie des Sciences in 1735 a map of the moon's surface, which gained for him admission into that body in 1736. He next accompanied Maupertuis in a scientific expedition to the polar circle. In 1738 he drew attention to Flamsteed's method of observing the positions of the sun and stars; and then pursued this method himself, first in the Pascal tower at the College of Harcourt, and then in the house of the Capuchins in the Rue St. Honoré. In 1740 he produced a new chart and catalogue of zodiacal stars; only 565 stars were printed, but others were calculated and tabulated in MS. He made researches and published papers on the variations of refraction in summer and winter; on the determination of the polar distance of Paris; on errors in certain old catalogues of stars; on the tracing of a meridian line at St. Sulpice; on the perturbations of the planet Saturn by Jupiter; on the movements of comets; on the influence of the moon on the atmosphere; on the magnetism of the compass, &c. In 1741 he introduced into France a transit instrument by Graham, the first of the kind used in that country. In 1748 he came to England to view the annular eclipse of the sun; during which he made accurate measurements of the moon's apparent diameter, as seen in front of the sun. As professor at the College of France, he taught skilfully the analytical theory of attraction. It was his custom, for a long series of years, to rise at any hour of the night, if favourable for observing the meridian passage of the moon. He was chosen one of the first members of the Institute. Le Monnier wrote many treatises and papers on astronomy, the chief of which were—'Institutions Astronomiques,' 1746, 4to; 'Observations de la Lune, du Soleil, et des Étoiles fixes,' in four parts, 1751, 1754, 1759, 1775, this was his greatest work; 'Description et usage des principaux Instruments d'Astronomie,' fol. 1774. He died at Héric, near Bayeux, May 31st, 1799.

LENNEP, JACOB VAN [E. C. vol. iii. col. 847]. Van Lennep completed his splendid edition of Vondel in 12 vols. in 1866. In 1865 he published 'Geschiedenis van Noord-Nederland' (History of North Holland). He died at Oosterbeek, near Arnhem, on the 26th of August, 1868, at the age of 66.

LENOIR, MARIE-ALEXANDRE, French archæologist, was born at Paris, December 26th, 1761, and after passing through the Collège des Quatre Nations, became a pupil of the painter Doyen. He seems, however, to have pursued painting somewhat languidly, and soon abandoned it. He mixed much in society, wrote a successful drawing-room play, and published criticisms on the pictures exhibited at the Louvre. He had thus come to be known to the men who were active in the early revolutionary movements, and when the sale of the public domains was decreed, 1790, Lenoir determined to make an effort to save the monuments and collect them into a national museum. He explained his idea to Bailly, who approved, and promised to support it; and then, with his old master, Doyen, laid it before the National Assembly. The proposition was adopted with enthusiasm; Lenoir was charged with the selection of objects of art worthy of preservation, and the convent of the Petits-Augustins was appropriated for their reception. Lenoir found much difficulty in carrying out his plans, and especially in obtaining objects of value; but he seized whatever he could, and thus saved from destruction many priceless monuments of art and antiquity. He now further proposed that all the pictures and statues which he had secured should be added to those already in the Louvre, where a central museum of art should be formed, whilst the collection at the Petits-Augustins should form a distinct museum of national monuments. He arranged the collections in strict chronological order, and so as to illustrate as distinctly as possible the several epochs of the French monarchy. Under the Consulate and Empire the museum was preserved and augmented, and Lenoir was employed to direct the embellishments of Malmaison, and to restore the tombs of the kings at Saint Denis and some other monumental works. On the Restoration the museum of the Petits-Augustins was dismantled and the contents dispersed, some being restored to the places from which they had been taken, but many were misappropriated or lost. Lenoir filled one or two small posts, but his chief employment henceforth was in writing on art and archæology. He died at Paris on the 26th of December, 1839. His works include, besides catalogues of the monuments collected in the 'Dépôt National, rue des Petits-Augustins,' 1793, and of the sculpture 1798, and various reports, among which is a 'Histoire de la Peinture sur Verre, et description des vitraux anciens et modernes pour servir à l'Histoire de l'Art relativement à la France,' 8vo, 1804; 'Musée des Monuments Français, ou description historique et chronologique des statues et tombeaux des hommes et femmes célèbres,' 8 vols. large 8vo, 1800—22; 'Nouvelle explication des Hiéroglyphes des Égyptiens,' 3 vols. large 8vo, 1809—10; 'Histoire des Arts en France, prouvée par les monuments, suivie d'une description des statues, etc., réunies au Musée des Monuments Français,' 4to, with folio atlas of 164 plates, 1810; 'La Franchemaçonnerie rendue à sa véritable origine,' 5 vols. 8vo, 1814; 'Atlas des monuments des arts libéraux, mécaniques et industriels de la France, depuis les Gaulois jusqu'au règne de François I.,' large folio, 1820—28; reprinted in 1840; also essays on Hieroglyphics, on the Venus de Medici, the Apollo Belvedere, and other statues then in the Louvre, and numerous articles in Prudhomme's 'Dictionnaire Historique,' the 'Encyclopédie Moderne,' 'Dictionnaire de la Conversation,' &c. His son, ALEXANDRE ALBERT LENOIR, born at Paris, October 21st, 1801, was educated under Debret as an architect, but is better known, like his father, by his writings on archæological subjects. Of these the chief are some descriptions in Gailhabaut's *Monuments*; 'Architecture et Archéologie,' 8vo, 1839; 'Statistique Monumentale de Paris depuis les Romains,' folio, 1835, &c.; and 'Architecture Monastique,' 2 vols. 4to, 1852—56. He was director of the monumental statistics of France, and architect to the Musée de Cluny; received the decoration of the Legion of Honour in 1845, and was elected secretary to the École des Beaux-Arts in 1862.

LENORMANT, CHARLES, French archæologist, was born at Paris, June 1st, 1802. He studied with a view to the law, but, following his inclinations for antiquarian inquiries, spent some time in investigating the monumental remains in Italy, and in 1828 accompanied Champollion to Egypt. He had been appointed inspecteur des beaux-arts in 1825, and after the Revolution of 1830 he was made librarian of the Arsenal; in 1832 assistant, and in 1841 principal, keeper of the Cabinet of Antiquities. He was elected member of the Académie des Inscriptions

in 1839. From 1835 to 1846 he lectured at the Sorbonne, and in 1848 was nominated professor of Egyptian archæology at the Collège de France. He died at Athens on the 24th of November, 1859. His writings, besides several minor works, comprise 'Musée des Antiquités Égyptiennes; recueil des Monuments Égyptiens, Architecture, Statuaire, Glyptique et Peinture,' folio, Paris, 1836—40; 'Trésor de Numismatique et de Glyptique,' written in conjunction with Paul Delaroche and d'Henriquel-Dupont, 5 vols. folio, 1836—50; 'Élite des Monuments Céramographiques; matériaux pour l'intelligence des religions et des mœurs de l'antiquité,' a valuable work on Greek and Etruscan vases, written in conjunction with J. de Witte, 4 vols. 4to, 1837—61; 'Introduction à l'Histoire Orientale,' 8vo, 1838; 'Questions Historiques,' 2 vols. 1845. He also contributed largely to the archæological journals and occasionally to the 'Revue des Deux-Mondes' and other serials, and was for some years one of the editors of the ultramontane journal, 'Le Correspondant.' His son FRANÇOIS LENORMANT, born at Paris in 1835, has also acquired celebrity as an archæologist.

LE NÔTRE, ANDRÉ, a famous French landscape gardener, was born at Paris in 1613, and succeeded his father as director of the gardens of the Tuileries. His ability was early recognised, but according to his biographer he was indebted to the minister Fouquet for the opportunity of making known his unrivalled talents as a designer of gardens. Fouquet commissioned him to decorate the gardens of his château of Vaux-le-Vicomte, and Le Nôtre rendered it, says one of his admirers, "a garden of enchantment. Porticoes, bowers, grottoes, trellises, labyrinths, &c., were for the first time introduced to embellish and vary the aspects of a large garden." So delighted with the novelty was the king, Louis XIV., that he gave Le Nôtre the control of all his parks, and nominated him designer of his gardens and superintendent of his palaces. All Le Nôtre's inventive powers were called into requisition for Versailles, which the king wished to excel all other gardens, and which Le Nôtre succeeded in completing to his entire satisfaction. The terrace at Saint-Germain was another of his famous inventions. The gardens of Trianon, Clagny, Chantilly, Saint-Cloud, Meudon, Seaux, and Fontainebleau with its celebrated canal, were all remodelled by him. The fame of Le Nôtre as the gardener of the Grand Monarque was unbounded. Not only did the princes and nobles of his own country vie in securing his assistance, but his advice was eagerly sought by foreign monarchs. Charles II. felt happy when he had succeeded in tempting him to London. He has the credit of having designed both St. James's and Greenwich Parks, though in the former at least the carrying out of the design was entrusted to native hands. He visited Rome, and was consulted by the Pope, Innocent XI., who received him with great affability, but the story of Le Nôtre having clapped his Holiness on the shoulder and embraced him is denied by Voltaire on the authority of Le Nôtre's pupil, Collineau. In 1675 Louis XIV. granted Le Nôtre letters of nobility and the cross of the order of St. Michel. He continued in great favour, and was treated with every mark of honour, till his death, which occurred in September, 1700, in his 87th year. His system was too elaborate and artificial, but Le Nôtre was in his line a man of original genius, and the landscape gardener will find a careful study of his gardens and system singularly suggestive.

* LENSTRÖM, KARL JULIUS, a Swedish divine, historian, and philologist, was born at Gefle, on the 7th of May, 1811. In 1830 he repaired, for the study of theology, to the University of Upsal, where he was appointed a tutor in literary history in 1836, and subsequently professor of æsthetics. Afterwards, having made the tour of Denmark and Germany, in 1840, he received ordination, and in 1843 became reader in philosophy in the college of his native town. In 1845 he assumed the duties of dean and pastor of Wester-Löfsta, in Westmanland. He is one of the most prolific of Swedish writers, and commenced his literary career, in 1835, with a series of literary and critical articles in the Journal of the Swedish Society of Literature, which attracted attention for the trenchant liveliness of their style. He likewise made his influence felt by his attacks upon the corruptions of the university system in his publication of 'Eos,' Upsal, 1839—40, which had, however, the effect of impeding his own academical advancement. His works include his Contribution towards a Manual of Æsthetics, &c., 'Försök till Lärobok i Æsthetiken, med bifogad kort Öfversigt af Konsternas, svenska och allmänna Poesiens Historia,' 12mo, Stockholm, 1836; an epic poem in twenty-four cantos, entitled 'Sigurd och Brynhilda,' 8vo, Upsal, 1836; Lyrical Firstfruits, 'Lyriiska Förstlingar,' 8vo, Gefle, 1837;

a dramatic poem, entitled 'Nero,' 12mo, Gefle, 1838; Handbook of Roman Literary History, 'Handbok i Romerska Litteraturs Historia,' 8vo, Orebro, 1838; an Historico-literary Enquiry, &c., 'Lars Fornelius, Sveriges förste ästhetiker. En litterär-historisk Undersökning,' 8vo, Upsal, 1838; Literary Portrait Gallery of Swedish Poets, &c., 'Litterärt Porträttgalleri af svenska Skalders. No. I, Stjernhjelm,' 8vo, Upsal, 1838; History of Art Theories, 'Konst-Theoriernas Historia,' 2 parts, 8vo, Upsal, 1839; History of Swedish Poetry, 'Svenska Poesiens Historia,' 2 vols. 8vo, Orebro, 1839—40; Manual of the History of Poetry, 'Handbok i Poesiens Historia,' 2 vols. 8vo, Orebro, 1840—41; Contribution towards a History of Swedish Aesthetics, 'Bidrag till den svenska Aesthetikens Historia,' &c., 2 parts, 8vo, Upsal, 1840; an Historico-literary Treatise on the Influence of the Vikings on the Poetry of the Middle Ages, 'Om Vikingatågens Inflytande på Medeltidens Poesi. Litterär-historisk Afhandling,' 8vo, Copenhagen, 1841; Ancient and Modern Swedish Anthology, 'Svensk Anthologi eller vald Samling af svenska Skaldestycken från äldre till nyare Tider i tre Delar med Porträtter,' 3 vols. 12mo, Orebro, 1840—41; History of Literature and Art in Sweden, 'Sveriges Litteratur-och Konst-Historia,' 8vo, Upsal, 1841; Handbook of Universal and of Swedish Church History, 'Lärobok i Allmänna och Svenska Kyrkohistorien,' 8vo, Gefle, 1843; Introduction to Theology, 'Lärobok i de theologiska Präntionerna: Inledning till Theologien,' 8vo, Upsal, 1843; Manual of the History of Dogma, 'Lärobok i Dogm-historien för Prest-och Pastoral-Examina,' &c., 8vo, Orebro, 1843; 'De Principiis Philosophiæ practicæ Spinozæ,' 8vo, Gefle, 1843; Swedish Literary History, &c., 'Svensk Litteraturhistoria i Sammandrag,' &c., 8vo, Stockholm, 1857; and an historical poem on Saint Augustin, 'Den helige Augustinus. Historisk Dikt,' &c., 12mo, Upsal, 1860. Professor Lenström has also published various works in illustration of national and local philology.

* LEO, HEINRICH, a German historian, was born on the 19th of March, 1790, at Rudolstadt, and after receiving his earlier education at the Gymnasium of that place, repaired in 1816 to the University of Breslau in order to study medicine, which, in compliance with the representations of Ludwig Jahn, he abandoned for a literary and academical career. He prosecuted his studies at the universities of Jena and Göttingen, and devoted himself especially to the history of the Middle Ages. In 1820, having been admitted to the doctorate at Jena, he went to Erlangen, where he produced his treatise on the Constitution of the Lombard Cities, &c., 'Ueber die Verfassung der freien Lombardischen Städte im Mittelalter,' 8vo, Rudolstadt, 1820, a special department of his Italian researches, which he pursued in his Development of the Constitution, &c., 'Entwicklung der Verfassung der Lombardischen Städte, bis zur Ankunft Kaiser Friedrich I. in Italien,' 8vo, Hamburg, 1824, Italian translation, by the Conte C. Balbo, 'Vicende delle Costituzioni delle Città Lombarde, fino alla Discesa di Federico I., Imperatore in Italia,' 8vo, Turin, 1836. In 1822 he repaired to Berlin, where he attached himself ardently to the political doctrines of Hegel, which, after an advocacy of some duration, he gradually exchanged for the opposite pole of conservatism. In 1823 he was enabled, through the munificence of the dowager Princess of Schwarzburg-Rudolstadt, to make a tour in Italy; and in 1826 became an assistant-keeper of the Royal Library at Berlin, which he left in order to follow his vocation as a tutor at the University of Jena. In 1828 he received the appointment of extraordinary professor, and in 1830 that of ordinary professor, of history at the University of Halle.

Of his numerous works, which illustrate the phases of his political opinions, may be mentioned—Lectures upon the History of the Jewish States, 'Vorlesungen über die Geschichte des Jüdischen Staates. Gehalten an der Universität zu Berlin,' 8vo, Berlin, 1828, another edition, 8vo, Reutlingen, 1829; History of the Italian States, 'Geschichte der Italienischen Staaten,' 5 vols. 8vo, Hamburg, 1829—32, forming part of Heeren and Ukert's 'Geschichte der Europäischen Staaten'; Manual of the History of the Middle Ages, 'Lehrbuch der Geschichte des Mittelalters,' 2 parts, 8vo, Halle, 1830; History of the Low Countries, 'Zwölf Bücher niederländischer Geschichten,' 2 parts, 8vo, Halle, 1832—35; Studies and Sketches, &c., 'Studien und Skizzen zu einer Naturlehre des Staates,' 8vo, Halle, 1833, of which only the first part was published; a controversial treatise entitled 'Herr Dr. Diesterweg und die deutschen Universitäten. Eine Streitschrift,' 8vo, Leipzig, 1836; the Hegeliana, 'Die Hegelingen,' 8vo, Halle, 1838, second edition, enlarged, 8vo, Halle, 1839; the Old Saxon and Anglo-Saxon Dialects, 'Alt-

sächsische und Angelsächsische Sprachproben. Herausgegeben, und mit einem erklärenden Verzeichniss,' &c., 8vo, Halle, 1838; Handbook of Universal History, &c., 'Lehrbuch der Universalgeschichte zum Gebrauche in höheren Unterrichtsanstalten,' second edition, 6 vols. 8vo, Halle, 1839—44; 'Rectitudines singularum Personarum,' &c., 8vo, Halle, 1842; On the Prussian Constitution Question, &c., 'Zur Preussischen Verfassungsfrage. Besonderer Abdruck einer Rescension über drei diese Angelegenheit betreffenden Schriften,' 8vo, Berlin, 1845; Miscellaneous Treatises on the History of the German and Celtic Languages, 'Ferienschriften. Vermischte Abhandlungen zur Geschichte der deutschen und keltischen Sprache,' 8vo, Halle, 1847—52; Lectures on the History of the German People and Empire, 'Vorlesungen über die Geschichte des deutschen Volkes und Reiches,' 8vo, Halle, 1854, &c.; a Discourse, &c., 'Thomas Münzer. Ein Vortrag gehalten im Auftrage des evangelischen Vereins in Berlin,' 8vo, Berlin, 1856; and a Discourse entitled 'Was ist Conservativ? Vortrag,' &c., second edition, 8vo, Berlin, 1864.

LEONARD, called LIMOSIN [LIMOSIN, LEONARD, E. C. S.].

* LEONHARD, GUSTAV VON, geologist and mineralogist, was born at Munich, November 22, 1816. He is the son of the eminent geologist noticed below, and is best known for his numerous works on the rocks and minerals of Baden. His writings include 'Handwörterbuch der topographischen Mineralogie,' 8vo, Heidelberg, 1843; 'Beiträge zur Geologie der Gegend am Heidelberg,' 8vo, Heidelberg, 1844; 'Ueber die älteren oder Paläozoischen Gebilde im Norden von Deutschland und Belgien,' &c., 8vo, Stuttgart, 1844; and 'Die Mineralien Badens nach ihrem Vorkommen,' 8vo, Stuttgart, 1852. There are also several papers by him in Leonhard and Bronn's 'Neues Jahrbuch für Mineralogie,' etc., on zeolites, pseudomorphs, and the rocks and minerals in the neighbourhood of Heidelberg.

LEONHARD, KARL CÆSAR VON, geologist, was born at Rumpenheim, near Hanau, September 12, 1779. He studied at the universities of Marburg and Göttingen. His education completed, he entered the civil service, and remained in it for several years, but in 1814 he retired, in order to devote himself exclusively to the studying and teaching of geology. In 1816 he was appointed to a professorship at Munich, but in 1818 he exchanged it for the chair of mineralogy and geology at Heidelberg, at which place he died January 23, 1862. His works are numerous. The earliest was a useful manual entitled 'Handbuch einer allgemeinen topographischen Mineralogie,' 3 vols. 8vo, Frankfurt-am-Main, 1805—1809. His occupation as a teacher led to his drawing up a series of clear expositions of various branches of geological science, which have had a wide circulation in Germany, and a considerable influence on the studies of the rising geologists of the time. Amongst these are 'Charakteristik der Felsarten,' 8vo, Heidelberg, 1822—24; 'Die Basalt-gebilde in ihren Beziehungen zu normalen und abnormen Felsmassen,' 2 parts, 8vo, Stuttgart, 1832, with 4to atlas; 'Lehrbuch der Geognosie und Geologie,' 8vo, 1835; 'Handbuch der Oryktognosie,' 8vo, 1821; and various works of a more popular kind on lithology, mineralogy, &c. Some of these have passed through numerous editions, and been translated into several languages. From 1807 to 1862 he edited, either alone or in conjunction with Bronn, the well-known 'Jahrbuch für Mineralogie und Geologie.' Many of his separate papers appeared in it. Honorary titles were conferred on him by numerous societies, and orders by not a few sovereigns, in recognition of his talents as a teacher.

LEOPOLD GEORGE CHRISTIAN FREDERICK, KING OF THE BELGIANS, &c. [E. C. vol. iii. col. 858]. The latter years of Leopold I. were devoted to the quiet development of the industrial and commercial prosperity of his kingdom; whilst the good understanding between himself and his subjects suffered only a momentary intermission in 1857, when he found himself separated from the dominant majority in the Chambers on the question of the laws of charitable institutions. This arose from the desperate struggles of the Ultramontane party to acquire supreme power in the State; but his prudence and energy enabled him to maintain his ground against their reactionary agitation. He was so revered and trusted abroad, and so much in the confidence of the leading powers of Europe, as to win the position of an international arbitrator; and he was one of the first to give his adhesion to the plan of a European Congress proposed in 1863 by the Emperor Napoleon III. He concluded various treaties of commerce with foreign countries—with France, May 1st, 1861; with Switzerland, December 11th, 1861; with China, August 8th, 1862; with the Low Countries, May 12th,

1863; and with Sweden and Norway, June 26th, 1863. And he interested himself especially in the laws affecting international copyright, whether literary or artistic.

Three or four years before his death he was afflicted with a painful disease which threatened to be fatal; but from which he was relieved by the skill of an English surgeon, Mr. Henry Thompson, who successfully performed upon him the operation of lithotritry. After this, and to the last year of his life, he delighted in field sports and strong physical exertion, frequently exposing himself to weather and fatigue to a degree which, considering his advancing age, it would have been more prudent to avoid. In the early part of 1865 he suffered from a slight paralytic seizure; in spite of which, and of a chronic bronchial weakness, he came over to England on a visit to his niece, the Queen. At length, after various fluctuations in his health, he died at the Palace of Laeken, just before noon of the 9th of December, 1865, leaving an enviable reputation, not only for the good fortune which had marked his life, but for his integrity and moderation of character, his judicial calmness of intellect, his closeness and accuracy of reasoning, and his diplomatic tact. His funeral, which took place at Brussels, was celebrated with all the indications of national sorrow, and was regarded with every manifestation of international respect and sympathy. He was succeeded by his son, Leopold Louis Philippe Marie Victor, Duke of Brabant, who was called to the throne as

*LEOPOLD II., and whose mother was Louise d'Orleans, daughter of King Louis Philippe of France. He was born at Brussels on the 9th of April, 1835; and married, August 22nd, 1853, the Archduchess Maria of Austria. He has travelled much at different times in various countries of Europe; and in 1855, in company with the Duchess of Brabant, made a tour to Egypt and Asia Minor, and in the same year paid a visit of nearly three weeks' duration to Paris, on the occasion of the holding of the Exposition Universelle. He held the rank of major-general in the Belgian army, and the honorary command of the regiment of grenadiers; whilst, as a member of the Senate, he took a prominent part in its most important discussions, especially interesting himself, in 1855, for the establishment of a maritime service between Antwerp and the Levant. In his home administration, since his accession, in December 1865, he has carried out the liberal policy which his father initiated and consolidated; a policy which in the midst of European strife and agitation, secured for Belgium a peace of thirty-five years' duration. He has likewise devoted himself, in the same spirit, to the development of the industrial arts, and of commercial prosperity, and to the preservation of harmony with foreign nations; and when, towards the end of 1868, the amity between France and Belgium seemed threatened by the difficulties of a convention relative to the railways of the two countries, he assisted by his moderation to bring about an adjustment based on mutual concessions. But the chief international characteristic of his reign, or at least the one most interesting to the people of this country, is the jealousy with which he has guarded and strengthened his close alliance with England, which, on its part, was prompt to guarantee the independence of Belgium when that seemed to be imperilled by the outbreak of the war of 1870—71 between France and Germany.

In October, 1866, Leopold II. and the Belgian people entertained with enthusiastic hospitality and kindness a large number of English volunteers, who had been invited to Brussels on the occasion of the Tir National; a kindness which was repeated with less attempt at official organisation in the autumn of the following year,—as it has been, indeed, in every subsequent year—after the visit to England, where the hospitality of their fellow-countrymen was returned amongst extraordinary acclamations, of more than two thousand Belgian volunteers in the summer of 1867. For a period of five years, therefore, has been added to the diplomatic and other interchange of political sympathy, the actual direct expression of good-will between the two peoples by an important fraction of their numbers. When the King of the Belgians visited the Queen, at Windsor, in November, 1869, it was felt that his generous and repeated welcomes to English subjects visiting his dominions, demanded an emphatic acknowledgment. Accordingly, on Thursday, November 25th, two distinct deputations waited upon him in the State Ball Room of Buckingham Palace, which had been set apart for the reception, charged with expressions of thanks and congratulations. The first deputation was a municipal one, and was headed by the Lord Mayor of London, who presented an address signed by "the Lord Mayors and Lord Provosts, Lord Lieutenants and High Sheriffs of Counties, the Mayors and other

magistrates of municipalities in the United Kingdom of Great Britain and Ireland." The address bore upwards of three hundred signatures, the only mayor who did not sign it being, as was stated, absent from England for the purpose of attending the opening of the Suez Canal. The second deputation consisted of a body of seven or eight hundred representatives of volunteers, who, through Lord Elcho as spokesman, presented an address "signed by Commanding Officers of Volunteers throughout the Kingdom." In the evening of the same day the King of the Belgians dined with the Lord Mayor at the Mansion House.

*LE POITTEVIN, EDMONDE-EUGÈNE-MODEST, French landscape and marine painter, was born at Paris July 31st, 1806. He studied under Hursent, and in the École des Beaux-Arts, where he carried off the first prize for landscape. M. Le Poittevin has travelled and sketched much in the north of France and along the coasts of Normandy, in Holland, Flanders, Italy, and England, and in 1838 went to Russia by special invitation of the Emperor Nicolas. His landscapes often partake of the character of genre pieces, fishermen being represented returning to or leaving their families, or engaged in some sea-side occupation; artists employed in their out-of-door studies (as Paul Potter painting, Vandevelde sketching a battle, &c.); the painter at the tavern; or some incident or matter of common interest being introduced. For the gallery at Versailles he painted some sea-fights. His pictures are usually of small size, and carefully finished. Many of them have been engraved or lithographed. M. Le Poittevin was made a Knight of the Legion of Honour in 1843. He is a member of the Academies of Antwerp and Berlin.

LEROUX, PIERRE, a French philosopher and publicist, was born in Paris, or its immediate neighbourhood, in the year 1798, and received his earlier education at the Lycée Charlemagne. He continued his studies at the Lycée of Rennes, where he was supported by a bursary granted to him by the city of Paris, and was subsequently admitted to the École Polytechnique, from the advantages of which he was summoned by the death of his father, who was an artisan, to undertake the support of his mother and her younger children. After working a short time as a mason, he became successively a compositor, proof-corrector (1816), and one of the founders, in 1824, of 'Le Globe,' a journal which—its conductors being dispersed by official promotions consequent upon the revolution of July, 1830—became in January, 1831, the organ of Saint Simonism, the doctrines of which M. Leroux had actively espoused. He broke at length with the community of the Rue Monsigny, as represented by M. Enfantin, on the question of the emancipation of women; and, in association with L. H. Carnot, edited, from August, 1831, the 'Revue Encyclopédique,' which came to an end in 1835. He continued the exposition of his principles in the 'Encyclopédie Nouvelle,' which he conducted jointly with Jean Reynaud, to whom he left its entire management, upon the occasion of some dissimilarity of opinion. About this time Leroux was a contributor to the 'Revue des deux Mondes,' from which, in consequence of its abandonment of democratic principles, he separated himself, and founded, November, 1841, jointly with M. Louis Viardot and Madame George Sand, the 'Revue Indépendante,' which lived for only a few years. In 1845, in order to afford a practical exposition of his principles, Leroux obtained permission to establish a printing-press, to be conducted on his peculiar theories, at Boussac, in Creuse, where he produced, beside a crowd of socialistic pamphlets, which were industriously circulated throughout the department, two journals entitled respectively the 'Eclaireur,' and the 'Revue Sociale.' Misled by some popular demonstrations, especially at Limoges, in his favour, Leroux made his appearance in Paris, in the costume of a peasant of Creuse; but his visit to the capital ended in a fiasco, and he quitted Paris at the first outbreak of the revolution, returning in time to proclaim the Republic at Boussac, of which commune he was at once elected mayor, February 25th, 1848. On the 4th of June following, M. Leroux was triumphantly returned as a member of the Assemblée Constituante, where he made several impractical speeches, the conscientious and benevolent intention of which could not suffice to preserve their author from ridicule and distrust. He advocated the colonisation of Algeria, the emancipation of women, and the incorporation of his principle of the universal "Triad" in the preamble of the Constitution. After the Coup d'État of the 2nd of December, 1851, M. Leroux left Paris for London, and afterwards took permanent refuge in Jersey. The amnesty of 1860 permitted his return to France; but he confined himself strictly to his

literary and social studies till his death, which occurred at Paris in April, 1871, at the time when, curiously enough, Paris was under a Socialistic government, but not the Socialism of Pierre Leroux. The Commune, at the sitting of the 13th of April, passed a resolution that two of its members should attend the funeral of Pierre Leroux on the following day, as an act of "homage not to the partisan of the mystical idea of which we now feel the evil, but to the politician who, after the days of June, courageously undertook the defence of the vanquished."

The principal work of M. Leroux is his treatise 'De l'Humanité, de son Principe et de son Avenir, où se trouve exposée la vraie Définition de la Religion, et où l'on explique le Sens, la Suite, et l'Enchaînement du Mosaïsme et du Christianisme,' 2 vols. 8vo, Paris, 1840, second edition, 1845, in which the author opposes to psychology and eclecticism the study of the human mind as it is exhibited in history, and recognises the constant progress of the human race and of nature towards perfection. His other works include, 'Réfutation de l'Électicisme, où se trouve exposée la vraie Définition de la Philosophie, et où l'on explique le Sens, la Suite, et l'Enchaînement des divers Philosophes depuis Descartes,' 18mo, Paris, 1839; 'Discours sur la Situation actuelle de la Société et de l'Esprit humain,' 18mo, Paris, 1841, new edition, 2 vols. 16mo, 1847; 'De la Mutilation d'un Écrit posthume de Théodore Jouffroy, avec une Lettre à l'Académie des Sciences Morales et un Appendice pour faire Suite à la Réfutation de l'Électicisme,' 8vo, Paris, 1843, a work which appeared first in the 'Revue Indépendante'; 'D'une Religion nationale, ou du Culte,' 18mo, Boussac, 1846; 'Discours prononcé à l'Assemblée nationale dans la Séance du 30 Août, 1848, sur la Fixation des Heures de Travail,' 4to, Paris, 1848, extracted from the 'Moniteur Universel'; 'Projet d'une Constitution démocratique et sociale, fondée sur la Loi même de la Vie, et donnant, par une Organisation véritable de l'État, la Possibilité de détruire à jamais la Monarchie, l'Aristocratie, l'Anarchie, et le Moyen infailible d'organiser le Travail national sans blesser la Liberté,' 8vo, Paris, 1848; 'Du Christianisme et de ses Origines démocratiques,' 16mo, Boussac and Paris, 1848; 'Le Carrosse de M. Aguado: Fragment,' 8vo, Boussac and Paris, 1848; 'De la Plutocratie; ou, du Gouvernement des Riches,' 16mo, Boussac and Paris, 1848, which had first appeared in 1843, in the 'Revue Indépendante'; 'De l'Égalité,' new edition, 8vo, Boussac and Paris, 1848; 'Malthus et les Économistes; ou, Y aura-t-il toujours les Pauvres?' 16mo, Boussac and Paris, 1848, a reprint of articles which appeared in the 'Revue Sociale,' in 1846, with the title of 'De la Recherche des Biens matériels; ou, de l'Individualisme et du Socialisme'; 'Assemblée nationale législative,' 4to, Paris, 1849; 'Quelques Pages de Vérités,' 32mo, Paris, 1859; and a philosophical poem in eight books, of which only three have been published, with the title of 'La Grève de Samarez: Poème philosophique,' 8vo, Paris, 1864. M. Leroux has likewise gained considerable credit for his translation, executed in conjunction with an anonymous collaborateur, of Goethe's 'Werther,' which has gone through several editions.

LEROY, the name of two celebrated French horologists.

JULIEN LEROY, born at Tours in 1686, came to Paris at an early age, and learned watch and clock making. Setting before himself as an honourable task to produce watches equal to those made in England, at that time the finest in Europe, he introduced the plan of oiling the pivots and rubbing-surfaces; reduced the size of watches, without lessening the strength or the delicacy, by increasing the power of the spring; and made numerous improvements in the details of construction. In 1720 he presented to the Académie des Sciences a pendulum clock and dial, showing correct time, the hour of sunrise, and the sun's declination. His watches gradually became so famous in France and Italy as to supersede the necessity for importing those of English make. Nevertheless, Leroy and Graham held each other in respect, as the two leading men in an occupation which they both loved. The latter, when growing in years, examining one of Leroy's watches, expressed a wish that he could be young again, that he might work out new ideas with that as his model. In 1739 Leroy was appointed watchmaker to the king, who assigned him apartments at the Louvre. He wrote memoirs on the construction of large clocks; on public clocks to mark and sound correct time; on a compass-sundial for tracing meridians; and on rules for calculating the equation of time. He died at Paris in 1759.

PIERRE LEROY, his eldest son, was born at Paris in 1717, and was brought up to his father's trade. In 1763 he presented to the Académie des Sciences a marine watch which had worked with great accuracy at sea; he determined the isochronism of spiral springs, invented a new detent escapement, and made

many improvements in clocks and watches. Among several memoirs written by him was 'Étrennes chronométriques pour l'année 1760,' comprising an account of instruments and methods for measuring time and calculating calendars; this was re-edited with additions by Janvier, in 1811. Another was 'Exposé succinct des Travaux de Harrison et de Leroy dans la recherche des Longitudes en Mer, et des épreuves faites de leurs ouvrages,' 4to, 1767. This work raised a controversy between him and Fleurieu. Pierre Leroy died at Vitry, near Paris, in 1785.

LEROY, CHARLES, son and brother of the preceding, was born in Paris in 1726. After graduating in medicine he went to Italy, and observed the phenomena of asphyxia, due to the escape of carbonic acid gas in the Grotto del Cane, near Naples; and also the phenomena of the phosphorescence of the waters of the Mediterranean. He became one of the medical professors at Montpellier, where he made some important experiments "on the elevation and suspension of water in the air, and on dew." He first drew the conclusion that the quantity of moisture in the air is dependent on the temperature, and he was also the first to show the method of determining "the dew-point," a method adopted by Dalton in 1801 and usually assigned to him. A full account of his experiments, which were published in the 'Mémoires de l'Académie Royale des Sciences' for 1752, is given by Mr. Tomlinson in his 'History of the Modern Theory of Dew' ('Experimental Essays,' published in Weale's Series). Leroy returned to Paris in 1777, and acquired a high position as a physician. He also wrote 'On Mineral Waters,' on 'The Organ of Hearing,' and on various subjects connected with his profession. He collected his principal essays in a small volume entitled 'Mélanges de Physique, de Chimie, et de Médecine,' 1781. He died at Paris, December 12, 1779.

LESCHENAULT DE LA TOUR, JEAN BAPTISTE LOUIS CLAUDE THÉODORE, traveller and naturalist, was born at Châlon-sur-Saône, November 13th, 1773. In early life he was employed by the military transport department; but, in 1800, he entered upon an entirely new career. All his leisure moments had been given to the study of natural history, and in the year mentioned he was in Paris, arranging the affairs of his family, when he became acquainted with the leading scientific men of that city. At this period a government expedition was being prepared, under the direction of Capt. Baudin; and Leschenault was offered the post of chief botanist. The expedition left Havre in October, 1800. At Timor, which was reached in 1803, he fell ill, and was left behind. After staying there a few months, he went to Java; but, owing to his being unable to obtain a passage home, he was compelled to reside in the island for three years. This time was spent in carefully exploring the island, and forming collections of its natural products. As the island had never been examined before by a naturalist, he succeeded in bringing together a great number of new species, both of animals and plants, as also in collecting the materials for a Malay dictionary, which was written, but only published in part. From 1807 to 1816 he resided in France, and was engaged partly in publishing the results of his observations in Java and elsewhere, partly in fulfilling the office of inspector of merino sheep. In May, 1816, he was nominated naturalist of the French possessions in India. He examined Pondicherry, the Ghauts, Tranquebar, Ceylon, and other parts of India, with a view to ascertaining the climate and resources of each district, and introducing useful plants and animals from one region to another. The same objects also occupied his attention during his visit to South America and the Isle of Bourbon, in 1821 and 1822. In 1824 he returned to France, to seek the repose which the bad state of his health demanded, and on March 14th, 1826, he died in the midst of his family, at Paris. He introduced a large number of useful species of plants into the French colonies: thus, Bourbon received more than a hundred, amongst which may be mentioned the cinnamon-plant, *Panicum alisissimum*, two species of sugar-cane, six species of cotton-plant, and the sandal-wood tree. He also introduced the Indian sheep and other animals into the same island. A large number of the animals exhibited at the Jardin des Plantes were procured and sent home by him. He wrote a few papers, mostly relating to the useful plants of the countries visited by him, and to the mode of cultivating them. One is an account of the species of *Strychnos* and *Antiaris*, from which the natives of Java obtain the poison with which they tip their arrows.

LESLIE, CHARLES ROBERT, R.A. [E. C. vol. iii. col. 863]. Mr. Leslie was in declining health when the memoir just referred to was published, but he continued to use his pencil almost to the last. The Royal Academy Exhibition of 1858 contained

'Christ rebuking His Disciples,' by him; and that of 1859, 'Jeannie Deans and Queen Caroline' and 'Hotspur and Lady Percy,' works which displayed but too evident marks of failing powers. But already the hand of death was upon him, and, the day after the opening of the Exhibition, he expired in the midst of his family, and surrounded by his pictures, May 5, 1859, in the 65th year of his age. The 'Autobiographical Recollections of the late Charles Robert Leslie, R.A.,' with selections from his correspondence and a prefatory essay by the editor, was published in 2 vols. 8vo, 1860, under the care of Mr. Tom Taylor; who has since completed and published the 'Life of Sir Joshua Reynolds,' with which Leslie had made some progress: but the book, as might be expected from its origin, is of a somewhat hybrid character, and of little substantial value. The nation possesses no fewer than twenty-seven paintings by Leslie—three in the National Gallery and twenty-four in the South Kensington Museum; but three of them are replicas of 'Uncle Toby and the Widow Wadman,'—he having yielded too much to the bad habit of repeating popular productions. Mr. Leslie's son—

*GEORGE DUNLOP LESLIE, A.R.A., born July 2, 1835, has also attained distinction as a painter. His manner, however, owes more to the pre-Raphaelite influence than to that of his father. His pictures are very varied in subject and to some extent in treatment, carefully studied, and show, year by year, increase of knowledge and power. Among his later works may be named, 'Home News,' 1868; 'Celia's Arbour,' 1869; 'Fortune,' 1870; and 'Nausicaa and her Maids,' 1871. Mr. G. D. Leslie was elected associate of the Royal Academy in January, 1868.

*LESLIE, HENRY DAVID, musical composer, was born in London, June 18th, 1822. He completed his musical studies under Mr. Lucas, afterwards principal of the Royal Academy of Music. In 1847 Mr. Leslie became honorary secretary of the Amateur Musical Society of London, of which he was conductor from 1855 till its close in 1861. In 1856 he founded the Choral Society popularly known as 'Leslie's Choir,' a body which has been the means of establishing a system of choral singing more exact, discriminating, and delicate than had before been heard in England. In 1864 he was appointed principal of a new establishment, called the College of Music, something on the plan of the Conservatoire de Musique at Paris. Mr. Leslie's compositions are numerous, comprising a large number of songs and vocal pieces, stringed quartettes and trios, and pianoforte compositions, besides single works of larger character, of which the following may be enumerated:—A Te Deum, and a Jubilate in D, in 1841; an Orchestral Symphony in F, in 1847; a Festival Cantata, 'Let God Arise,' for solos, chorus, and orchestra, in 1847; 'The Templar,' a dramatic overture, in 1852; 'Immanuel,' an oratorio, in 1853; 'Romance, or Bold Dick Turpin,' an operetta, in 1857; 'Judith,' an oratorio, in the same year; 'I will extol Thee,' a motet, 1859; 'Holyrood,' a cantata, in 1860; 'The Daughter of the Isles,' a wedding cantata, in 1861; 'The Olive Branch,' a Collection of original tunes adapted to Psalms and Hymns for congregational use, in 1866. In the following year Mr. Leslie edited Cassell's 'Choral Music,' including some original compositions by himself.

*LESSEPS, FERDINAND, VICOMTE DE, designer of the Suez Canal, was born at Versailles, November 19th, 1805. The early part of his career was associated closely with diplomacy. In 1825 he was attaché to the French consulate at Lisbon; in 1827 he filled for a few months a post in the Foreign Office at Paris; in 1828 he was assistant consul at Tunis; and in the following year, when Algiers was captured, he negotiated the surrender of the province of Constantine to General Clausel. He was French vice-consul in Egypt in 1831 and 1832; consul of the second class at Cairo in 1833, in which post he assisted in maintaining peace between Mehemet Ali and the Sultan, at the time of the Syrian expedition; and consul in later years at Rotterdam, Malaga, and Barcelona, from 1838 to 1842. During the Carlist insurrection at Barcelona in the last-named year, he rendered much service to the young Queen's government, and to several foreign governments represented at her court. During the revolution of 1848 he was recalled to Paris; but represented France again as consul at Madrid in the same year, and at Rome in 1849. At length commenced the course of events which has given him his European celebrity. In 1854 Saïd Pasha, Viceroy of Egypt, invited M. de Lesseps to Cairo. The latter gradually developed and explained to the pasha a great scheme for constructing a ship canal across the Isthmus of Suez, embodying his views in a pamphlet, 'Perçement de l'Isthme de Suez, exposé et documents officiels.' Various schemes had been brought forward by French engineers, having this end in

view, since the expedition of the first Napoleon to Egypt; but the plan had come much more in favour in 1847 than ever before, owing to the ascertainment of the fact that the Mediterranean and Red Seas have almost exactly the same water level, which was determined by actual levelling by four engineers, Mr. Robert Stephenson, M. Talabot, M. Negretti, and Linant Bey. M. Talabot proposed a scheme to the pasha, but that of M. de Lesseps obtained the preference. Great difficulties had, however, to be surmounted, arising in part from the openly declared distrust of the plan on engineering grounds by Mr. Stephenson, and the opposition of Lord Palmerston on political grounds. M. de Lesseps succeeded at length in forming a company, with a subscribed capital of 200 million francs; and the canal was commenced in 1859. In 1863 the death of Saïd Pasha gave a temporary check to the work; and a difficulty also arose from the fact that the fellahs, who had laboured as canal-diggers for very small wages, were tempted away by the new Viceroy, Ismail Pasha, to work at his cotton-plantations, at a time when the American civil war had rendered cotton crops exceedingly profitable. Disputes arose between the pasha and the company, but these were settled in 1864 by the Emperor Napoleon as arbitrator. The works were continued: a narrow freshwater channel was carried across the isthmus by 1865; a small vessel steamed from sea to sea by 1867; while in 1869 M. de Lesseps had the satisfaction of bringing nearly to a completion a ship canal 100 miles long, 327 feet wide at the surface of the water, 72 feet wide at the bottom, and 26 feet deep. The inauguration of the canal, on the 20th of November, 1869, was made an affair of great ceremonial by the pasha. Five days afterwards, M. de Lesseps married Mademoiselle Autard de Bragard, at Ismailia, his newly-created city on the banks of the canal. He has published numerous documents, notes, reports, &c., and has taken part in various discussions and meetings concerning the canal. On the day of the inauguration he received the grand cross of the Legion of Honour, and was soon afterwards ennobled. He has also received honours from the sultan and the pasha, and the grand cross of the Star of India; and on July 14, 1870, the corporation of the City of London resolved "That the freedom of this city, in a gold box, be presented to M. de Lesseps for his skill in designing, and indomitable energy and perseverance in carrying to a successful completion, the Suez Canal."

LESSON, RENÉ PRIMEVÈRE, French naturalist, was born near Rochefort, March 20, 1794. He was educated at the naval medical school of Rochefort, and on leaving it entered the French navy. In 1816 he was attached to the expedition round the world under Duperrey, of which he became the chief medical officer and naturalist. He sent a large number of new species of animals of all classes to the Museum of Natural History at Paris, and made drawings and paintings of the fishes and mollusca in order to preserve details respecting the evanescent characters of these beings. He also made some valuable observations on the geology of Peru, Chili, the Blue Mountains of Australia, and of many of the islands in the Pacific. On his return to France he was busily occupied in assisting in preparing the report on the voyage, in completing his education, and in contributing to various scientific periodicals. At a later period he returned to Rochefort, as professor of chemistry at the School of Medicine in that town, where he died, April 28, 1849. He wrote a large number of books and papers; but those on which his reputation is mainly based are the volumes illustrating the zoology in the account of the scientific expedition of Duperrey in the 'La Coquille,' and the illustrated works on the humming-birds, birds of paradise, &c. He drew up numerous manuals of various branches of zoology, some of which, as the 'Histoire naturelle des Zoophytes Acalèphes,' 8vo, Paris, 1843, form a continuation to Buffon's great work on natural history, while others form part of the Roret encyclopædic series of works. He also published a flora of the Rochefort district, and contributed largely to the 'Dictionnaire des Sciences Naturelles' and to the 'Dictionnaire classique d'Histoire Naturelle.'

LESUEUR, CHARLES ALEXANDRE, zoologist, was born at Havre, January 1, 1778. About the commencement of the present century, the French government resolved to organize a voyage of discovery which should eclipse all that had previously been done by other nations. Lesueur offered his services, which were accepted. In October, 1800, the expedition, comprising the 'Géographe' and 'Naturaliste,' under the command of Capt. Baudin, left Havre. Amongst the scientific staff was François Péron, with whom Lesueur formed a close friend-

ship, and with whom he agreed to work in concert. Lesueur was at first in a very subordinate capacity, and in no way connected with the scientific staff. He had acquired great skill in drawing, and the sketches which he made of the mollusca and zoophytes caused Capt. Baudin to remove him from the crew and assign him a special post as zoological artist. Owing to the behaviour of Baudin, and to disease, the scientific members were soon greatly reduced in numbers. Péron was the only one of five zoologists left; but Lesueur proved a useful coadjutor to him. The two sent home upwards of 100,000 zoological specimens, amongst which were more than 2500 new species. Péron described many of the forms, while Lesueur supplied the drawings, which are amongst the finest of their kind for accuracy. The government ordered Péron to publish a narrative of the voyage. Péron's death caused a temporary interruption in the work, which was resumed by Freycinet. It is entitled 'Voyage de Découvertes aux Terres Australes,' 5 vols. 4to, 1807-16. Most of the figures in it were contributed by Lesueur. In 1815 Lesueur accompanied Mr. William Maclure as travelling companion to the West Indies and the United States. He resided at Philadelphia for nine years, and obtained a considerable income by teaching natural-history painting. During this residence, he projected and made preparations for a work on the fishes of the United States. In 1837 he returned to France. In 1845 he became the curator of the Museum of Natural History at Havre; but he occupied the post a short time only, owing to his death on December 12, 1846. He wrote numerous papers, either alone or in conjunction with Péron, chiefly consisting of descriptions of molluscs and fishes. The friends had projected a work, of which a programme was issued, under the title of 'Histoire générale et particulière de tous les Animaux qui composent la famille des Méduses,' 4to, 1809, which would probably have been their best production; but it was never published. Lesueur left a large collection of drawings of various objects, chiefly zoological, some published, but many not published.

LE SUEUR, EUSTACHE [SUEUR, EUSTACHE, LE, E. C. vol. v. col. 811].

LETHIÈRE, GUILLAUME-GUILLON, French historical painter, was born at Ste. Anne, Guadeloupe, January 10, 1760. In 1774 he was sent to France, and in 1777 entered the École des Beaux-Arts, Paris, where, in 1786, he carried off the first prize, and with it admission as a student to the Academy at Rome. An ardent admirer and follower of David, he painted and sent to Paris a large picture of 'Brutus condemning his Son,' which was greatly applauded, and ordered to be placed in the Luxembourg. In 1792 he returned to Paris, and painted the 'Death of Cæsar,' and other classical subjects of a republican bearing, he having by this time become a strong politician. A friend of Lucien Bonaparte, and one of the most popular painters of the day, he was created knight of the Legion of Honour by Napoleon I., and made director of the Academy at Rome. On the Restoration he was disgraced. He came to London in 1816, and exhibited with great applause his pictures of 'Junius Brutus,' 'Homer reciting his Poetry,' and some smaller works. In 1818 he was elected a member of the Institute, and in 1819 appointed professor of painting. He died in Paris, April 21st, 1832. Lethière painted a large number of classical works much in the manner of David, some scriptural pieces, and some from French history. The Louvre contains two of his large classical pictures—'Brutus condemning his Son to Death' and the 'Death of Virginia.'

LETRONNE, JEAN ANTOINE, a French critic, archaeologist, and Hellenist, was born on the 25th January, 1787, at Paris, where his father, an engraver, who had designed him for an art career, had him educated at the École Polytechnique. The death of his father, in 1801, devolved upon him the support of his mother and younger brother, who were left entirely unprovided for. Letronne now worked arduously in various avocations, giving lessons in Latin, geography, and mathematics, and at the same time assisting M. Mentelle in various geographical compilations. He had soon realised enough to devote himself afresh, without distraction, to his studies, especially in Greek, which he cultivated with much success. His health having become impaired by his extreme application, he was glad, in October, 1810, to take advantage of an opportunity of making the tour of Southern France, Italy, and Switzerland. Returning to Paris in June, 1812, he made various suggestions for the correction of the texts of Thucydides, Plutarch, Pausanias, Eunapius, and others; and especially published, as his first work, an 'Essai critique sur la Typographie de Syracuse au Commencement du V^e Siècle, pour servir à l'Intelligence de quelques Auteurs

anciens, et faire suite aux Éditions et Traductions de Thucydide avec un Plan,' 8vo, Paris, 1813. To this, in the following year, succeeded his 'Recherches géographiques et critiques sur le Livre "De Mensurâ Orbis Terræ," composé en Irlande au commencement du IX^e Siècle, par Dieulieu, suivies du Texte restitué,' 8vo, Paris, 1814, the erudition of which, and of a critical article in the 'Mercure de France,' on Clavier's translation of Pausanias, procured Letronne's employment by the government, in 1815, to complete the translation of Strabo, commenced by Laporte-Dutheil, and his nomination, by royal ordinance, March 22nd, 1816, to the membership of the Académie des Inscriptions et Belles-Lettres. Other places of honour or responsibility succeeded this appointment: in 1817, he was made director of the École des Chartes; in 1819, inspector-general of the University; in 1832, keeper of antiquities in the Bibliothèque Royale, of which he subsequently became the principal director. In 1831 he became professor of history in the Collège de France, of which, in 1838 he was appointed administrator; and vacated his chair of history in order to accept that of archaeology, to which was added the keepership general of the archives of the kingdom. These offices and distinctions, increased as they were by the membership of several foreign academies and the decorations of various orders, caused no decline in the enthusiasm with which Letronne devoted himself to study and to literary production. He died at Paris, on the 14th of December, 1848, having illustrated many departments of learning by the versatility of his genius and attainment, the extent and accuracy of his information, the soundness of his judgment, and the clearness and conclusiveness of his reasoning.

The works of Letronne comprise, 'Cours élémentaire de Géographie ancienne et moderne, rédigé sur un nouveau Plan et accompagné d'une Planche de Cosmographie,' 27th edition, 'corrigée et considérablement augmentée, par M. Alexandre Bonneau,' 12mo, Paris, 1856; Spanish translation, from the 8th French edition, 'Curso elemental de Geografía antigua y moderna,' &c., 8vo, Paris, 1826; 'Fragments des Poèmes géographiques de Scymnus, de Chio, et du faux Dicéarque, restitués principalement d'après un Manuscrit de la Bibliothèque Royale, précédés d'Observations littéraires et critiques sur ces Fragments, sur Scylax, Marcien d'Héraclée, Isidore de Charax, le Stadiasme de la Méditerranée, pour servir de Suite et de Supplément à toutes les Éditions des petits Géographes grecs,' 8vo, Paris, 1840; 'Inscription grecque de Rosette. Texte et Traduction littérale, accompagnée d'un Commentaire critique, historique, et archéologique,' 8vo, Paris, 1840; 'Recueil des Inscriptions grecques et latines de l'Égypte, étudiées dans leur Rapport avec l'Histoire politique, l'Administration intérieure, les Institutions civiles et religieuses de ce Pays, depuis la Conquête d'Alexandre jusqu'à celle des Arabes,' 2 vols. 4to, Paris, 1842-48; 'Recherches critiques, historiques, et géographiques sur les Fragments d'Héron d'Alexandrie, ou du Système métrique Égyptien, considéré dans ses Bases, dans ses Rapports avec les Mesures itinéraires des Grecs et des Romains et dans les Modifications qu'il a subies depuis le Règne des Pharaons jusqu'à l'Invasion des Arabes,' 4to, Paris, 1851, a work of posthumous publication, produced so long before as 1818, when it had obtained the prize of the Académie des Inscriptions et Belles-Lettres. In addition to the foregoing, it may be mentioned that M. Letronne is the author of numerous contributions in critical philology and archæology to the leading French journals of literary and scientific societies, and other periodicals.

*LEUCKART, KARL GEORG FRIEDRICH RUDOLF, anatomist and physiologist, was born at Helmstedt, October 7th, 1823. From the gymnasium of his native town he went to the University of Göttingen, where he had for one of his masters the eminent physiologist, Rudolf Wagner, then at the head of the recently founded Physiological Institute. Leuckart's progress must have been remarkably rapid; for, in the year in which he left the university, he commenced publishing, in conjunction with Frey, a 'Lehrbuch der Anatomie der wirbellosen Thiere,' 8vo, Leipzig, 1843-1847. In 1845 he was appointed to a chair in the Physiological Institute. Some years after, he removed to Giessen, where he became, first, extraordinary professor of zoology (1850), and subsequently (1853) the professor of zoology and comparative anatomy. His attention has been mainly given to the lower classes of animals, whose life-history and development have been largely elucidated by him. He established the class *Celenterata*, pointed out the relation of the polymorphic forms amongst the *Siphonophora*, and the division of physiological labour prevalent in this group; and he has made important researches on the micropyle of the insect egg, the parthenogenesis of several species

of insects, viviparous development amongst cecidomyiæ larvæ, and on the parasitic class *Scolecida* or *Entozoa*. These researches are given in books and papers having the undermentioned titles, which comprise the more important of his literary productions:—‘Ueber den Polymorphismus der Individuen,’ 4to, Giessen, 1851; ‘Bau und Entwicklungsgeschichte der Pentastomen,’ 4to, Heidelberg, 1860; ‘Untersuchung über *Trichina spiralis*,’ 4to, Heidelberg, 1860; ‘Die Menschlichen Parasiten und die von ihnen herrührenden Krankheiten,’ 8vo, Heidelberg, vol. i. 1862; vol. ii. part i. 1867; part ii. 1868; ‘Zur Morphologie und Anatomie der Geschlechts-organe,’ in ‘Göttinger Studien’ for 1847, pp. 155–212; ‘Parasitismus und Parasiten,’ in Roser und Wunderlich’s ‘Archiv für physiologische Heilkunde,’ xi. pp. 199–259, 379–437 (1852); ‘Zur nähern Kenntniss der Siphonophoren von Nizza,’ in Wiegmann’s ‘Archiv für Naturgeschichte,’ xx. pp. 249–377 (1854); ‘Ueber die Micropyle und den feinern Bau der Schalenhaut bei den Insecteneiern,’ in Müller’s ‘Archiv für Anatomie, etc.’ for 1855, pp. 90–264; ‘Zur Kenntniss des Generations-wechsels und der Parthenogenesis bei den Insecten,’ in Moleschott’s ‘Untersuchungen zur Naturlehre des Menschen und der Thiere,’ iv. pp. 327–438 (1858); and the ‘Berichte über die wissenschaftliche Leistungen in der Naturgeschichte der niederen Thiere,’ for every year from 1848 to 1867. These last reports originally appeared in Wiegmann’s ‘Archiv,’ but have also been published separately. Each report averages upwards of one hundred pages. His work on human parasites is the most exhaustive account published of these organisms, but is at present unfinished.

LEWIS, SIR GEORGE CORNEWALL, BART. [E. C. vol. iii. col. 873]. Sir George Lewis resigned office, with the other members of Lord Palmerston’s ministry, in February 1858, and remained in opposition till the defeat of the administration of Lord Derby in April 1859. During his enforced leisure he seems, from his letters to his friends and contributions to ‘Notes and Queries,’ to have returned to literature with renewed interest. His separate publications were the essay on ‘The Characteristics of Federal, National, Provincial, and Municipal Government,’ 8vo, 1859; and a pamphlet ‘On Foreign Jurisdiction and the Extradition of Criminals.’ On Lord Palmerston’s return to power Lewis again became Chancellor of the Exchequer, but almost immediately after exchanged that post for the Home Office in order to make room for Mr. Gladstone, who stipulated for the Exchequer as the condition of his joining the ministry. Sir George Lewis remained Secretary of State for Home Affairs, without particularly distinguishing himself in the office, till the state of Mr. Sidney Herbert’s health rendered his resignation of the War Office imperative, when Sir George Lewis was induced to accept that office, in lieu of the Home Secretaryship. He continued Secretary for War from July, 1861, till his death, which occurred somewhat unexpectedly on the 13th of April, 1863, at his seat, Harpton, Radnorshire, where he had gone to spend the Easter holidays. Sir George Lewis was, at his decease, within a few days of completing his 57th year, he having been born on the 21st of April, 1806. Besides the works already mentioned, Sir George Lewis published ‘The Fables of Bæbius’ in two parts, 1860, &c.; an ‘Historical Survey of the Astronomy of the Ancients,’ 8vo, 1862, in which he assailed the conclusions of recent writers on Egyptian and Assyrian chronology; and ‘A Dialogue on the Best Form of Government,’ 1863. His papers in the ‘Edinburgh Review,’ on the chief ministerial combinations from 1783 to 1830, have been collected and published by Sir Edmund Head under the title, ‘Essays on the Administrations of Great Britain;’ and his correspondence has been published by his brother, the Rev. Sir Gilbert Frankland Lewis, as ‘Letters of the Right Hon. Sir George Cornewall Lewis, Bart., to various Friends,’ 1 vol. 8vo, 1870.

LADY THERESA LEWIS survived her husband little more than two years, dying on the 6th of November, 1865. Besides the ‘Sketches of the Contemporaries of Lord Chancellor Clarendon,’ mentioned in the original notice of Sir George Lewis, she edited the ‘Memoirs of Miss Berry,’ and two novels, ‘The Semi-detached House’ and ‘The Semi-attached Couple.’

* LEWIS, JOHN FREDERICK, R.A. [E. C. vol. iii. col. 874]. In the memoir just cited it was mentioned that Mr. Lewis had begun to paint in oil, and had already, in two successive years, sent a couple of elaborate pictures painted in that material to the exhibition of the Royal Academy. By this time he had in fact decided to abandon water-colour for oil-painting as his professional practice. He accordingly resigned his office of president of the Society of Painters in Water Colours in 1858, and in the following summer was elected an associate of the

Royal Academy, and in 1865 an academician. His oil-paintings, as exhibited at the Academy, have continued to be distinguished by the characteristics of his earlier water-colour pictures of oriental subjects, namely, extraordinary minuteness of detail, remarkable richness of colour, and brilliant sunlight effects. Nor has the class of subjects changed materially: ‘An Intercepted Correspondence, Cairo;’ ‘The Money-Changer: a scene in a Cairo Bazaar;’ ‘Interior of a Royal Tomb, Brussa;’ ‘Temple of Com-Ombos, Upper Egypt;’ ‘A Lady, Constantinople,’ and the like, affording scope for those combinations of quaint oriental architecture, character, and costume with which his name is so intimately associated.

LEYBOLD, KARL, German painter, was born at Stuttgart, March 29, 1786. He was instructed in the rudiments of art by his father, Johann Friedrich Leybold (born at Stuttgart in 1755, died 1838), a clever miniature-painter, engraver to the court, and professor of engraving in the Imperial Academy of Vienna. Karl Leybold accompanied his father to Vienna in 1799; became a student in the Academy, and painted some classic subjects and landscapes. In 1807 he went to Rome, where he directed his attention chiefly to historical painting. Returning to Stuttgart, he acquired a high reputation for his portraits, was appointed in 1829 professor in the Art-Academy, and in 1841 director of the Gallery of Paintings, which offices he held till his death, July 20th, 1844. Karl Leybold executed numerous paintings and drawings of historical and mythological subjects, and some pieces of a humorous kind, as well as many portraits.

LEYS, BARON JAN AUGUSTE HENRI, an eminent Belgian painter, was born at Antwerp, February the 18th, 1815. He was educated at first for the priesthood, but at the age of 15 entered the atelier of his relative, M. de Braekeleer, devoted himself with ardour to painting, and exhibited with marked success his first picture, a ‘Combat between a Grenadier and a Cossack,’ at the Antwerp Salon in 1833. In order to complete his artistic education, he visited Holland and France, and carefully studied the current practice and development of painting in those countries. His progress was zealously encouraged by M. Couteaux, who gave him commissions for numerous important pictures. From this time M. Leys selected his subjects either from early Belgian history or incidents of general interest, and gradually evolved a style of a distinctively national yet personal character. Selecting by preference events of the fifteenth and sixteenth centuries, and often of a somewhat familiar kind, he filled his canvases with a crowd of small figures, quaint in costume and hard and homely in feature, singularly like in general appearance to those of Van Eyck and Memling, yet never borrowed and varied as in actual life, and placed them in the streets of an old Belgian or German town, the houses and local surroundings being rendered with rare and minute fidelity, yet seldom obtrusively. Hence his pictures presented, at a first glance, a somewhat dry and unattractive air of mediævalism; but it was soon seen that, whilst costumes, buildings, and accessories were represented with the truth of an archæologist, they were felt by the painter to be subsidiary to the human interest, and were kept strictly subordinate; and whilst there was no attempt at rendering any conventional beauty of form or feature more conspicuous than it would have been likely to be in reality, the scene itself was depicted with dramatic force and feeling, and passages of exquisite tenderness and humour revealed themselves as the work was studied. And the pictorial art was as remarkable as the conception. Whilst the scene represented the most ordinary open-air aspect, the management of the light and shadow was in reality of the most refined and subtle order, and the subdued, almost sombre, colouring was as masterly as it was unpretentious and unforced.

At the Paris International Exhibition of 1855 a selection from M. Leys’ pictures, including his ‘Trentaine de Bertal de Haze,’ ‘Promenade hors des Murs,’ and ‘Le Nouvel An en Flandre,’ excited the liveliest interest, and won for the artist one of the grand medals, a circumstance which so delighted his countrymen that on his return to Belgium he received a most distinguished reception. The London International Exhibition of 1862 contained a far finer and more characteristic series of his works—‘The Institution of the Golden Fleece, January 10, 1429—the Oath;’ ‘Margaret of Austria receiving the Oaths of the Archers of Antwerp;’ ‘Publication of the Edict of Charles V. in 1550, introducing the Inquisition into the Netherlands;’ ‘Young Luther singing Hymns in the streets of Eisenach;’ a wonderfully life-like and pleasing work; ‘Roman Catholic Women;’ ‘Copies from Frescoes in the Dining-Room of M. Couteaux at Antwerp:—Guests going to a Feast; Departure and Entering the Town;’

Arrival and Reception; Preparations for the Festival.' But M. Leys' noblest works are those he executed for his native town. The success of the frescoes executed by him in M. Couteaux's house suggested the propriety of adorning in a similar manner one of the chief rooms (now called the Salle Leys) in the magnificent Hôtel de Ville. The municipal authorities offered M. Leys the commission to paint in fresco the events which illustrated the achievement of "the great principles of liberty inscribed in our ancient and glorious communal charters," and the protection and culture of literature and the arts. M. Leys gave himself with enthusiasm to the task: the selection of the historical subjects was entrusted to M. Genard, and some of the most accomplished artists in their several lines were engaged to execute the architectural and decorative portions under the direction of M. Leys. The work occupied M. Leys the last six or seven years of his life, and was hardly completed at his death, which occurred unexpectedly, though he had been for some time out of health, in August, 1869, in his 55th year. M. Leys was made officer of the Order of Leopold in 1840, and commander in 1851; and in recognition of the great merit of his municipal pictures, was created a baron by Leopold II. Several of his works are in the collection of the King of Belgium, the Emperor of Russia, and other sovereigns and princes, and some are in private collections in England; but the larger number belong to M. Auguste Couteaux.

L'HÔPITAL, GUILLAUME F. A., MARQUIS DE [HÔPITAL, G. F. A., MARQUIS DE L', E. C. vol. iii. col. 484].

L'HÔPITAL, MICHEL DE [HÔPITAL, MICHEL DE L', E. C. vol. iii. col. 484].

LIBRI, GIROLAMO DAI, an early Italian painter, was born at Verona in 1472. The son and pupil of Francesco dai Libri, a skilful miniaturist, he practised at first the illumination of manuscripts, in which he was considered to excel all his contemporaries; but he later painted many pictures for churches, though in them he retained much of the old, hard, dry manner of the illuminations. The churches of Verona contain his best known pictures, the most famous being that of the 'Madonna Enthroned,' dated 1526, in the church of San Giorgio Maggiore. Our own National Gallery possesses a 'Madonna, Infant Christ, and St. Anne' (No. 748), which was formerly in the church of Sta. Maria della Scala, Verona. Girolamo dai Libri died at Verona on the 2nd of July, 1555.

LIGORIO, PIRRO, Italian painter and architect, was born in Naples about 1498. He went to Rome, and is said to have studied under Giulio Romano. He painted a fresco of the 'Feast of Herod' in the oratory of S. Giovanni Decollato, which was much admired, and several façades, but gave his attention more to the study of antiquities and architecture. By Pope Paul IV., with whom he was much in favour, he was employed to erect a small palace in the Belvedere wood, and a mausoleum for Pope Pius II., and was appointed architect to St. Peter's. In this last office he greatly annoyed Michael Angelo, and was eventually dismissed, "with little honour," says Vasari, by Pius V. for altering the designs of the great Florentine. He repaired to Ferrara, where he was employed as engineer by Duke Alfonso II. He made a vast collection of drawings and notes on architectural remains in 34 folio volumes, which, after some vicissitudes, were purchased for the royal collection, Turin. A selection from these, relating to Rome, has been published—'Delle Antichità à Rome,' Venice, 1653. Ligorio also prepared a plan in relief of ancient Rome, and a restoration of the Hadrian Villa, which was published by F. Conti in 1751. Ligorio died at Ferrara about 1580.

LIMOSIN, or LIMOUSIN, LÉONARD, a famous French painter on enamel, was born at Limoges about 1505. Nothing is known of his early career. He was placed at the head of the royal enamel manufactory at Limoges by Francis I., and painted a large number of works for that monarch. Under him the manufacture obtained an unparalleled celebrity, and Léonard was pronounced the most excellent workman in the world. In Léonard's hands the art of enamelling assumed an entirely new phase. Instead of confining the enamel within comparatively narrow limits, as in the Byzantine, champlevé, and early Italian methods, he spread an opaque paste over the entire surface of the metal, and upon this painted his subjects, religious and mythological pieces and portraits, in transparent colours with almost the freedom of an artist painting in oil-colours on a panel. The novelty no less than the splendour of his productions caused them to be eagerly sought after, and a vase or plaque of Léonard's painting was esteemed a present worthy of a prince. Even now a genuine work of his is regarded as a prize for either a public or

private collection. Among the most famous of Léonard Limosin's works are the series of large mythological subjects, a part of the decorations of Francis's château of Madrid; the four large plaques executed for the tomb of Diana of Poitiers; and a series of plaques executed for Henri I., and now in the Louvre. The South Kensington Museum contains several undoubted specimens by him, some of them signed, and two dated 1539. They afford good illustrations of his style and range of subjects: thus one large plaque has a representation of a 'Banquet of the Gods'; others 'Cupid and Psyche,' the 'Laocoon,' and other mythological subjects; whilst one very fine plaque has 'The Crucifixion' beautifully painted, another a St. Barbara. For one of the specimens, a small ewer and dish, the museum authorities gave 400*l*. Léonard was in the habit of adopting the designs of Leonardo da Vinci, Raffaele, Giulio Romano, Primaticcio, Jean Cousin, and other celebrated painters; but he treated them with great freedom, and the colour was for the most part wholly his own, and very brilliant. Léonard is believed to have died about 1580: his dated works range from 1532 to 1574. In the Limoges town-hall are some oil paintings attributed to him. His son, François Limosin, was also a good artist, though not equal to his father: some of his enamels are in the South Kensington Museum.

LINCOLN, ABRAHAM, sixteenth president of the United States of America, was born in Hardin county, Kentucky, February 17th, 1809. His mother, the widow of a poor farmer, migrated with her young family in 1816 to Spencer county, Indiana; and there Abraham, from his seventh to his twenty-first year, spent an active and laborious life. He was in succession a farm-labourer, a woodcutter, and a boatman on the Wabash and the Mississippi; receiving only a few months of school education. In 1830 he removed into the state of Illinois, where he worked as a field-labourer, then served as a shopman, and then volunteered into a regiment engaged in war with the Indians. One of his occupations, that of woodcutter or rail-splitter, brought him local celebrity, he and one companion having split 3000 rails in a day.

Settling at Springfield in 1832, he became a member of the legislature of Illinois in the following year, and retained his seat during four sessions. Gradually abandoning mechanical labour, he practised as a land-surveyor, and then studied the law, to the practice of which he was admitted in 1836. He became a successful advocate at the bar, and at the same time an active member of the Whig party in politics. In 1844 he supported the candidature of Henry Clay for the presidency; although this failed, the movement placed Mr. Lincoln in favour, and led to his election to Congress in 1846. The part he took in the abolitionist struggle was so decided, especially in opposition to the extension of slavery in newly formed states and territories, that he gradually assumed a leading position. He opposed the war with Mexico as unconstitutional. From 1849 to 1854 he confined his attention chiefly to legal practice; but in the last-named year he was chosen leader of the newly formed Republican or Northern party, in opposition to the Democrat or Southern party. He was defeated in a contest for admission into the Senate in 1855; in 1856 he supported the candidature of Fremont for president, against Buchanan; and in 1858 he was again unsuccessful in an election as senator for Illinois, Mr. Douglas and "squatter sovereignty" polling more votes than Mr. Lincoln and "anti-slavery." It was his fortune to become president without filling the intermediate post of senator.

In 1860 the Chicago Convention selected Mr. Lincoln instead of Mr. Seward as Republican candidate for the presidency; and he won the victory, defeating three other candidates, Douglas, Breckinridge, and Bell. His success so exasperated the slave states (which had all voted against him) that a movement was at once commenced to secede from the Union, with a determination to wage war if the right of secession were denied. Between the time of his election (November, 1860) and his entrance upon the duties of his office (March, 1861), six states had seceded from the Union, and the Confederate government for the south had been formed. Mr. Lincoln himself was never bitter in his political battles. When a deputation of 'Wideawakes' came to congratulate him on his election he said, "I rejoice with you in the success which has so far attended the Republican cause. Yet in all our rejoicings let us neither express nor cherish any harsh feelings towards any citizen who by his vote has differed from us." The remainder of his life was bound up with four years of civil war. In his first presidential address he declared that he had neither the right nor the inclination to interfere, directly or indirectly, with the maintenance of slavery in the states where it already existed; his duty would be to prevent

the spread of slavery to other states, and to forbid the secession of any states from the Union. When Fort Sumter was captured by the Confederates, April 11th, he called for 75,000 volunteers. When they took the United States arsenal at Harper's Ferry, and defeated the United States Volunteers at Bull Run, he asked the sanction of Congress to raise an army of 500,000 men; and by December, 1861, he had more than 600,000 troops in the field. In that month he had to decide the delicate 'Trent' affair: his officers had forcibly removed Messrs. Slidell and Mason, two Confederate commissioners, from an English mail steamer, and had made them prisoners; he admitted that the act was unjustifiable, released them, and thus got rid of the danger of hostilities with England. During the military operations of 1862—in which McClellan, Banks, Pope, Burnside, and Rosecranz contended with Lee, Stonewall Jackson, Bragg, and other Confederates—the Federals lost so greatly that the president called for 300,000 more men in July, and another 300,000 in August.

President Lincoln was authorised by Congress to abolish slavery in the district of Columbia, to prohibit it in the territories, to compensate the slave-owners in any state that would abolish slavery, to employ negroes in the Federal army, to confiscate the slaves of rebels, and at length to proclaim the freedom of all slaves in all the states. This last-named decisive step was adopted by Lincoln as a military necessity: he would have avoided interference with slavery in the Southern States if he could have preserved the Union without it. In 1863 the president was incessantly engaged in supplying men, money, arms, food, and equipments to the armies engaged in the struggle at the Potomac, the Rappahannock, the Rapidan, Chancellorsville, Gettysburg, Vicksburg, Charleston, Chattanooga, and Chickamauga. In 1864, by the appointment of General Grant as commander-in-chief, the president strengthened the fortunes of the Union; in the month of March he had 1,000,000 men in arms; and the greatest battles and the finest generalship on both sides belonged to this year.

Early in 1865 he called out another 500,000 men; but he did not live to witness the end of the war. Elected a second time to the presidency, he made his second inaugural address in March, 1865; but on April 14th, while attending a theatre in Washington, he was assassinated by John Wilkes Booth, an actor. The Federal politicians made a strong attempt to connect President Davis and other leading Southerners with this crime; but the charge entirely failed in evidence. The assassination of President Lincoln created a profound sensation throughout the Union. The assassin escaped for the time, but was hunted down, and, refusing to surrender, received some wounds which proved mortal. Every honour was paid to the memory of the president. In July, 1870, a bill passed both Houses of Congress giving to his widow an annual pension of 3000 dollars.

President Lincoln, a gaunt, wiry, hard-featured man (exceeding six feet three inches in height), was kind and genial by nature; and was much liked by those with whom he had personal relations: as a statesman his ultimate rank will not be very high. The exciting events of his presidency have led to the publication of a very large number of books and pamphlets concerning him. A few of these are political squibs and satires: such as 'Old Abe,' the 'Lincoln Catechism,' 'Abraham Africanus I.,' and 'Revelations according to Abraham.' But by far the larger portion are eulogistic, under the various forms of Memoirs, Sketches, Services, Notes, Reminiscences, Speeches, Addresses, Proclamations, Letters, Odes, Monodies, &c. The titles of these publications need not be given in detail; but among the authors may be named Bancroft, Ludlow, Arnaud, Eddy, Harding, Krauth, Bacon, Poore, Benjamin, Townsend, Sarmiento, Barrett, Holland, Stone, Arnold, Thayer, Crosby, Manoel, Everest, Perkins, Sturz, Badger, Hoffmann, Raymond, Carpenter, Jermon, Lowe, Topham, Fougues, Stoddart, Gaddis, Saredo, Hall, Naton, Pascal, and Newell.

LINDENSCHMIDT, WILHELM, German historical painter, was born at Mainz in 1806. He received a good classical education in the gymnasium of his native city, and learned the rudiments of design from his father, Johann Lindenschmidt, a medalist of reputation. In 1823 he entered the Art Academy of Munich, and in the following year that of Vienna. At first he painted classical and religious subjects, the latter in the manner of Cornelius, at whose recommendation he was employed by the crown-prince Ludwig to paint some of the frescoes in the arcades of the Hofgarten, Munich. He also painted, 1829–31, a large battle-piece in fresco representing the 'Peasants beating off the Austrians in 1704' on the exterior of the church at Sindling, by

Munich, which was lithographed by Hohe. Other important works which he executed for Ludwig I. were several frescoes in the interior of the royal palace; in the loggia of the Pinacothek; and a series of subjects from early Saxon history in the halls of the castle of Hohenschwangau. His later pictures, whether in fresco or oil, were mostly taken from early German history; but he also painted many religious subjects. He died at Frankfurt-am-Main in 1847.

LINDLEY, JOHN [E. C. vol. iii. col. 891]. This eminent botanist died of apoplexy at his residence, Back Common, Turnham Green, November 1, 1865.

LINDPAINTNER, PETER JOSEF, a German musical composer, was born at Coblenz, December 8th, 1791. His father, who was a musician, had him instructed in the violin, the piano-forte, and the theory of harmony, by Plödtler, Witzka, Winter, and Gratz. He early tried his skill in composition, producing his opera of 'Demophon,' a mass, and a Te Deum, before his 21st year. In 1812 he became chief of the orchestra at the Royal Theatre of Munich; but he also continued a course of study in certain styles of monastic and church music. In 1819 he was appointed director of the Chapel Royal at Stuttgart, which post he occupied until his death. During a period of somewhat over forty years, he composed about twenty operas, six ballets, four musical melodramas, the oratorio of 'Der Jüngling von Nain,' the oratorio of 'Abraham,' four masses, a funeral march, a 'Te Deum,' several motetts and psalms, and new instrumental accompaniments to Handel's 'Judas Maccabeus.' His best opera is 'Der Vampyr,' and the best ballet (in regard to the music) 'Joko.' Lindpaintner's instrumental compositions are numerous and varied, comprising pianoforte and violin solos, stringed trios and quartettes, concertos, and orchestral symphonies. His vocal pieces comprise songs, chants, part songs, and choruses, many of which are popular in Germany. In 1852 he directed the Philharmonic Concerts, London; and in 1853 composed his last opera, 'Les Corsets.' He died August 21st, 1856.

LINGELBACH, JOHANNES, a celebrated painter of the Dutch school, was born at Frankfurt-am-Main in 1625. Whilst quite young he went to Amsterdam, and after studying there some time proceeded to Paris, where for two years he was diligently occupied in the study and practice of painting. He then went to Italy, where he stayed six years. In 1650 he returned and settled in Amsterdam, in which city he died in 1687. Lingelbach imitated the manner of Wynants and Wouvermans; but his execution is less masterly, and his colouring colder. He is in fact one of the painters whose style marks the incipient stage of the decline of painting in Holland. His most successful pictures are views of Italian and Dutch sea-ports, in which he introduces numerous small figures busily employed. He also painted markets, fairs, scenes of the carnival, with much skill and a strong sense of humour. His small figures and animals were much admired, and he was occasionally induced to paint them in the landscapes of Wynants and other contemporaries. There are a few clever etchings by him.

LIOTARD, JEAN ÉTIENNE, miniature painter, was born at Geneva in 1702. He was designed for a mercantile calling; but a copy which he made of a miniature by Petitôt was so much admired, that he was permitted to pursue his inclination for art. In 1725 he went to Paris, where he met with much success. In 1738 he proceeded to Rome, whence he accompanied Lords Sandwich and Bessborough to Constantinople, and from there, by the advice of the British ambassador, he came on to London. At Constantinople he had assumed the Turkish custom, and suffered his beard to grow "down to his girdle," and the novelty of his appearance, "and his extravagant prices," says Walpole, conduced as much as his talent to the popularity of 'the Turk,' as he was commonly called. He stayed in London two years, and executed a large number of portraits in miniature, and crayons of members of the fashionable circles. In 1772 he revisited England, and again stayed a couple of years. This time he brought over a collection of pictures which he sold by auction, but he also diligently employed his pencil. He retired to his native place in 1776, and died there in 1790. Liotard's likenesses were pronounced faithful; they are hard, minute, and seldom flattering. In his English miniatures he frequently affects a Turkish costume. He etched a portrait of himself in a Turkish habit, and a few other heads. He also executed some enamels. A twin-brother, JEAN MICHEL LIOTARD (died about 1760), was an engraver of some ability; he was a pupil of B. Audran, and resided for several years at Venice.

* LIOUVILLE, JOSEPH, a French mathematician and astronomer, was born at St. Omer, March 24th, 1809. He

studied at the École Polytechnique, 1825 to 1827, and there acquired a knowledge of mathematics, which qualified him to fill various posts in after-life, at l'École des Ponts et Chaussées, l'École Polytechnique, the College of France, and the Faculty of Sciences. He was elected a member of the Academy of Sciences in 1837. In 1848 he was for a short time engaged in political affairs, as member of the National Assembly for the department of Moselle; but his attention has been chiefly given to scientific subjects. For many years he edited the 'Journal des Mathématiques pures et appliquées.' His own mathematical and astronomical papers exceed three hundred in number. They were mostly inserted in the journal which he edited, and which, for several years, was known as 'Liouville's Journal'; the rest were first published in the 'Annales de Chimie,' the 'Annales Mathématiques,' the 'Journal de l'École Polytechnique,' Crelle's 'Journal,' the 'Comptes Rendus,' the 'Mémoires des Savans Étrangers,' the 'Connaissance des Temps,' the 'Nouvelles Annales Mathématiques,' &c. His astronomical papers relate to periodical inequalities in the movements of the planets; secular variations in the intersection of the orbit-planes of Jupiter and Saturn; perturbations in the excentricity of the planetary orbits, &c. The great majority of his papers, however, are on mathematical subjects, in which they take a wide range. He has also edited new editions of mathematical works by Monge, Navier, &c. M. Liouville was appointed officer of the Legion of Honour in 1861, and a member of the Bureau des Longitudes in 1864.

LISTER, JOSEPH JACKSON [E. C. iii. col. 904], the well-known improver of the microscope, died at an advanced age, October 24th, 1869.

* LISZT, FRANZ, ABBÉ, a celebrated pianist and musical composer, was born at Raiding, Hungary, on the 22nd of October, 1811. His father, who was employed on the estate of Prince Esterhazy, encouraged a musical tendency which the boy displayed; Franz became a facile player on the pianoforte at six years old, and played publicly at a concert at Presburg at nine. Two Hungarian noblemen, Count Amadé and Count Szapary, agreed to provide 600 florins a year for six years, to enable the boy to obtain a thorough musical education. Under this arrangement, Franz was taken to Vienna, where he studied harmony under Salieri, and pianoforte composition under Czerny. He became proficient in the works of Clementi, Hummel, and Beethoven, but seemed to regard all as too easy for him. Concerts given by him at Vienna, Munich, and finally at Paris, in 1823, attracted much attention, and Franz was patronised as a boy-prodigy, a pet of princes and ladies. This adulation might have spoiled him; but his father, to keep him steady, insisted on his practising Bach's fugues every day, and studying composition under Püerand Reicha. In 1825, an opera called 'Don Sancho,' introduced the youthful musician as a composer; but it possessed little merit, and received little attention. He paid two or three visits to England, where his playing excited great admiration. The death of his father in 1827 leaving young Liszt without control, he alternated, for a time, between the dissipation of Paris and a species of religious mysticism. In 1830 he composed his 'Symphonie Révolutionnaire,' suggested by the political events at Paris. In 1831 he heard Paganini for the first time; the idea thereupon seized him that he would become the Paganini of the pianoforte, and the general verdict of Europe is that he succeeded in that aim. He became indeed a master of all styles, from the science and severity of Bach to the richness and fancy of Weber. His visits to the principal capitals of Europe were a long series of brilliant successes; but in 1847 he settled quietly down at Weimar, as director of the court concerts and operas. He composed fantasias on favourite operas so extremely difficult that few except himself could play them. His friendship with Richard Wagner and Hector Berlioz led him to a taste for the romantic school of music; all three believed that a musical composition, as a work of art, ought to tell its own story without the aid (or the incumbrance) of words. That which Mendelssohn modestly attempted in simple compositions ('Lieder ohne Wörter'), they proclaimed could be fully achieved by larger compositions in the music of the future which they advocated. Liszt made many more visits to Paris and London, and many also to Rome, where his religious feeling more than once tempted him to enter the Church. In 1861 there was much public talk concerning a marriage between him and Princess Wittgenstein, which was at first sanctioned and then opposed. Resigning his position at Weimar, he gradually turned his attention towards the Vatican, became an ecclesiastic, and has since been known as the Abbé Liszt. In 1866 he composed a grand mass which met

with much success at Prague, Leipzig, Amsterdam, and other cities, but failed when introduced at the church of St. Eustace, Paris, though Liszt was himself the organist, and Auber and Berlioz were among the auditors.

As a composer, the works of Liszt previous to the year 1848 were chiefly pianoforte fantasias and concertos, in which mechanical difficulties were most profuse; but since that time he has aimed rather at romantic orchestral compositions—the stories without words, adverted to above. These form a series, under the general title, 'Symphonische Dichtungen für grosse Orchestra' (Symphonic Poems for full Orchestra). Among them are 'Tasso,' 'Die Hunnenschlacht,' 'Faust,' 'Die Ideale,' 'Orpheus,' and 'Prometheus.' Besides masses and other sacred pieces, he has composed an oratorio 'Die heilige Elisabeth,' but the style is more that of Wagner than of the great masters of ecclesiastical composition.

* LITTRÉ, MAXIMILIEN PAUL ÉMILE, a French scholar and publicist, was born on the 1st of February, 1801, at Paris; and, after having gone through a course of preliminary education with great distinction, applied himself to the study of medicine. The love of literature diverted him from the practice of his profession, although he did not cease to pursue it in its historical and literary aspects. At the same time his researches into science and modern languages were wide and profound. In 1828 he became one of the joint conductors of the 'Journal Hebdomadaire de Médecine'; and, in 1837, founded, in association with M. Dezeimeris, a new journal of surgery and medicine, entitled 'L'Expérience,' in which he published several articles indicative of the tendency which he afterwards developed to the positive doctrines of Auguste Comte. He was also a contributor to the 'Gazette Médicale de Paris'; and furnished many important articles to the 'Dictionnaire de Médecine,' &c., the eleventh and twelfth editions of which (8vo, Paris, London, and New York, 1858 and 1865) were issued under the joint superintendence of M. Littré and Dr. Ch. Robin. M. Littré contributed several articles illustrative of the history and literature of medicine to the 'Revue des Deux Mondes,' in which appeared 'Des Grandes Epidémies' (January 15, 1836); 'De la Physiologie: Importance et Progrès des Études physiologiques' (April 15th, 1846), and others. But his chief claim to distinction in this kind rests upon his very learned and exhaustive edition of Hippocrates, 'Œuvres Complètes. Traduction nouvelle, avec le Texte grec en regard, collationné sur les Manuscrits et toutes les Éditions. Accompagnée d'une Introduction, de Commentaires médicaux, de variantes et de Notes philologiques: suivie d'une Table générale des Matières,' 10 vols. 8vo, Paris, 1839—61, the erudition of the first volume of which procured M. Littré's admission, February 22nd, 1839, as a member of the Académie des Inscriptions et Belles-Lettres. In addition to this distinction, M. Littré is a member of the Académie Impériale de Médecine; of the Natural History Society of Halle; of the Biological Society of Paris; of the Medical Society of Athens; and is a corresponding member of the Académie Herculannée d'Archéologie. The decoration of the Legion of Honour was also offered to him, but declined.

In politics M. Littré is a staunch advocate of democracy, and for twenty years, 1831 to 1851, was a contributor to the 'National,' of which he acted, for about six months after the death of Armand Carrel, as editor-in-chief. He looked with hope upon the Revolution of February, 1848; and even accepted office as an unpaid municipal councillor of the city of Paris, from which he retired disappointed in October, never again to break by the distractions of active political life the tenour of his literary and philosophic pursuits. Upon the publication of the scheme of positivism by M. Auguste Comte, Littré embraced it with ardour, and his partisanship has coloured the speculations, social and political, of the remainder of his life. His works, besides those already mentioned, many of which have a closer or remoter connection with the positive system, comprise an exposition of the doctrine of Comte, entitled 'De la Philosophie Positive,' 8vo, Paris, 1845; 'Application de la Philosophie Positive au Gouvernement des Sociétés et en particulier à la Crise actuelle,' 8vo, Paris, 1849; 'Conservation, Révolution, et Positivisme,' 12mo, Paris, 1852; 'Paroles de Philosophie Positive,' 8vo, Paris, 1859, second edition, 12mo, 1863; 'Auguste Comte et la Philosophie Positive,' 8vo, Paris, 1863; 'La Philosophie Positive: Revue dirigée par E. Littré & G. Wayrouboff,' 8vo, Paris and Versailles, 1867, &c.; the Introduction to the recent edition of Comte's Works and Introductions and Prefaces to various works written for the illustration and popularisation of the philosophy of Comte. M. Littré is the translator of Dr. Strauss's 'Leben Jesu,' his

version of which gave rise to some discussion, and especially called forth the animadversions of M. L. C. de Plasmán, in his 'Les Strauss Français. Lettres critiques sur les Doctrines antireligieuses de M. Littre,' &c., 12mo, Paris, 1858; and he has also produced a translation of Pliny's Natural History. Of a more miscellaneous character are his 'La Vérité sur la Mort d'Alexandre le Grand,' 16mo, Paris, 1865, and his 'Études sur les Barbares et le Moyen Age,' 8vo, Paris, 1867; whilst his chief philological labours have resulted in his 'Histoire de la Langue Française. Études sur les Origines, l'Étymologie, la Grammaire, les Dialectes, la Versification, et les Lettres au Moyen Age,' 2 vols. 8vo, Paris, 1862, second edition, 2 vols. 12mo, 1863; and his massive 'Dictionnaire de la Langue Française,' 4to, Paris, 1863, &c., calculated to occupy about thirty numbers, or "livraisons," of which the twenty-second (Por—Pyx) was published in 1869. The title-page of this work will supply a competent idea of its aims and method:—'Dictionnaire de la Langue Française: contenant (1°) pour la Nomenclature: Tous les Mots qui se trouvent dans le Dictionnaire de l'Académie Française, et tous les Termes usuels des Sciences, des Arts, des Métiers et de la Vie pratique; (2°) pour la Grammaire: La Prononciation de chaque Mot figurée et, quand il y a lieu, discutée; l'Examen des Locutions, des Idiotismes, des Exceptions, et, en certain Cas, de l'Orthographe actuelle, avec des Remarques critiques sur les Difficultés et les Irrégularités de la Langue; (3°) pour la Signification des Mots: Les Définitions; les diverses Acceptions rangées dans leur Ordre logique, avec de nombreux Exemples tirés des Auteurs classiques et autres; les Synonymes principalement considérés dans leurs Relations avec les Définitions; (4°) pour la Partie historique: Une Collection de Phrases appartenant aux anciens Écrivains depuis les premiers Temps de la Langue Française jusqu'au seizième Siècle, et disposées dans l'Ordre chronologique à la Suite des Mots auxquels elles se rapportent; (5°) pour l'Étymologie: La Détermination ou du moins la Discussion de l'Origine de chaque Mot établie par la Comparaison des mêmes Formes dans le Français, dans le Patois et dans l'Espagnol, l'Italien, et le Provençal ou Langue d'Oc.'

LITTROW, JOSEPH JOHANN VON, German astronomer, was born at Bischof Teinitz, Bohemia, March 13, 1781. His early tuition and occupations bore no particular relation to science; for after studying law, medicine, and theology at Prague, he served for a short time in the Austrian army under the Archduke Charles, and in 1803 became preceptor to the young Counts Renard. But while in the last-named situation, he devoted his leisure time to the study of astronomy and mathematics, which led to a definite change of employment. In 1807 he became professor of astronomy at Cracow; in 1810 professor at Kasan; in 1816 co-director of the Observatory at Buda; and in 1819 director of the Vienna Observatory, which he remodelled and re-organised. The rest of his life was almost wholly spent in the duties of his office at Vienna. Littrow's scientific papers number about a hundred and ten between the years 1808 and 1837. They first appeared in Gehler's Journal, Zach's 'Monatliche Correspondenz,' the 'Astronomische Jahrbuch,' the 'Memoirs of the St. Petersburg Academy,' Lindenau's 'Zeitschrift,' the 'Astronomische Nachrichten,' the 'Memoirs of the Astronomical Society,' and other scientific records. They relate to the Sun, the Asteroids, Comets, Aberration, Nutation, Eclipses, the Planets, the Eye-pieces of Telescopes, the Repeating Circle, the Barometrical Determination of Heights, the Thermometer, Longitudes, the Calculus of Probabilities, and other scientific matters. Besides these, he wrote many distinct volumes and treatises. Those relating to astronomy were, 'Theoretische und Praktische Astronomie,' 3 vols. 8vo, 1821—27; 'Ueber der Kometen des Jahres 1832,' 1833 to 1835; 'Ueber die Sterngruppen und Nebelmassen,' 1835; 'Die Doppelsterne,' 1835; 'Die Wunder des Himmels,' 1834—53, a valuable work on general astronomy; and especially nineteen folio volumes of Annals or Proceedings of the Vienna Observatory. Four works were entitled 'Calendographie,' 1828; 'Dioptrik,' 1830; 'Gnomonik,' 1831 and 1838; and 'Chronographie.' Another, on the measurement of heights, was 'Höhenmessungen durch Barometer,' 1823. On the subjects of the calculation of widows' pensions, life annuities, and life assurance, he published 'Anleitung zur Berechnung der Leibrenten und Wittwen Pensionen,' 1829, and 'Ueber Lebensversicherungen,' 1832. Littrow died at Vienna, November 30th, 1840. Many of his miscellaneous papers were collected into 'Vermischte Schriften,' 1846.

* LITTROW, KARL LUDWIG VON, eldest son of Joseph Johann, was born at Kasan, July 18, 1811. After being well grounded in astronomy by his father, he became assistant-

director of the Vienna Observatory; and in 1842 chief director. His scientific papers, commencing in 1836, have ranged over nearly the whole domain of astronomy, and now amount to upwards of a hundred in number. Many of these are official records of his labours at the Observatory, and are published in the 'Annalen der Wiener Sternwarte.' In 1849 he assisted Struve in the conduct of the Austro-Russian Trigonometrical Congress; and he has taken part in re-editing Gehler's 'Physikalisches Wörterbuch.'

LIVENS, or LIEVENS, JAN, an eminent Dutch painter, was born at Leyden in 1607. His first master was J. Verschoten, and he was afterwards a pupil of Peter Lastman, along with Rembrandt, with whom he throughout life maintained a warm friendship. He visited England in 1630—33, and whilst here is said to have painted portraits of the king (Charles I.), the queen and the royal family. On his return he settled in Antwerp, was made a member of the Society of St. Luke in 1635 and of the Guild of Painters of the Hague in 1661. He painted several altar-pieces, historical subjects, and portraits, the latter including those of Van Tromp, Ruyter, and other men of historic fame. Livens painted somewhat in the manner of Rembrandt, but with less force and brilliancy, as well as originality; works by him are, however, often attributed to Rembrandt. In his conception of scriptural subjects he adopted the low familiar manner of Rembrandt; but, though his drawing is better, he is inferior in feeling as well as in majesty of light and shadow and in colour to his great prototype. His portraits, however inferior in other respects, are more varied, and probably truer as likenesses, than those of Rembrandt. Livens left nearly sixty etchings—imitations of Rembrandt's—and in one or two instances, as the 'Raising of Lazarus,' little inferior to them. He also made a few drawings for engraving—or, as some think, himself made the engravings—on wood. He died at Antwerp in 1663.

LIVERSEEGE, HENRY, was born at Manchester in 1803. Weak and deformed from infancy, he was harshly treated by his father, and owed what instruction he received to the kindness of an uncle. Unable to join in the rough sports of boys of his own age, he taught himself to draw, and as he grew towards manhood, acquired sufficient skill to paint portraits, and thus secure a livelihood. But he disliked this branch of art, and abandoned it as soon as he began to find purchasers for pictures of imaginative subjects. His first exhibited paintings were of 'Banditti,' at the Manchester Exhibition of 1827. These he followed by others from the novels of Sir Walter Scott. But, feeling his deficient technical culture, he went (1828) to London, where he drew in the British Museum, and copied the old masters at the British Institution. He also applied for admission as a student at the Royal Academy, but was told that his application was informal, and did not apply again. After a year or more thus employed, Liverseege returned to Manchester. With increased technical knowledge, his pictures displayed much more self-reliance and originality, better colour, greater force of character, and a more definite purpose. They at once became popular, and were every year more and more sought after. In the Royal Academy and British Institution exhibitions of 1831 his pictures, though only of cabinet size, were among the leading attractions. Stimulated by success, he laid himself out for greater achievements; but he had always been ailing; his health suddenly broke down, and he died January 13th, 1832, when only in his 29th year. Liverseege painted most from books, his favourite authors being Shakespeare, Scott, and Cervantes, and his best pictures from these—'Christopher Sly and the Hostess,' 'Isabella and the Black Dwarf,' and 'Don Quixote in his Study.' But he also painted original subjects, of which 'The Recruit' and a 'Cobbler reading Cobbett's Register' were perhaps the most popular. The best of his finished pictures have been engraved in mezzotint, and published in a collective as well as a separate form, 'Works of H. Liverseege,' 37 plates, royal folio, 1833—35.

* LIVINGSTONE, DAVID [E. C. vol. iv. col. 279; vi. col. 1010]. A full account of Dr. Livingstone's geographical explorations will be found under AFRICA, E. C. S., GEOG. DIV. Here we propose giving only the salient points of his life, after his return to England on December 12, 1856. His time at home was mainly occupied in preparing an account of his African journeys for the press, and in arranging for fresh exertions. His work is entitled 'Missionary Travels and Researches in South Africa, including a sketch of sixteen Years' Residence in the Interior of Africa, and a Journey from the Cape of Good Hope to Loanda, on the West Coast; thence across the Continent, down the River Zambesi, to the Eastern Ocean,' 8vo, London, 1857. Early in

1858, he again left England in order to explore the Zambesi, with a view to opening up channels of trade with the interior. He was accompanied by his brother, Charles Livingstone, as also by Messrs. Kirk, Thornton, Baines, and others. The mouth of the river was reached, May, 1858, and in September of the same year the party had ascended up to the Portuguese settlement, Tette. In January, 1859, he commenced the ascent of the unexplored river, Shiré, and proceeded about 200 miles up it, when his progress was stopped by the Murchison Falls. The vessel was left at Chibisa, at the foot of the falls, and Drs. Livingstone and Kirk proceeded on foot in search of Lake Shirwa, which was first seen on April 18. On September 16, Lake Nyassa was discovered. In 1860 Livingstone ascended the Zambesi above Tette, carefully examined the magnificent Victoria Falls, and visited Sesheke, the residence of Sekeletu, the chief of the Makololo. In 1861 he revisited Lake Nyassa, launched a small boat on it, and traversed its whole length of about 200 miles. On February 14, 1864, he left Africa for England. These explorations furnished the materials for a 'Narrative of an Expedition to the Zambesi and its Tributaries, and of the Discovery of the Lakes Shirwa and Nyassa,' 8vo, London, 1865.

Livingstone stayed but a short time in England. Early in 1866 he again started for Africa, as her Majesty's consul in the interior of that continent. On March 24, 1866, he reached the mouth of the Rovuma river, but, finding no landing-place, he proceeded to the fine harbour of Pemba. Making his way overland in a S.S.W. direction, until he struck the Rovuma, he then proceeded nearly parallel with the Ngomano, where the Rovuma and Nienda join. He then proceeded westward to Mataka, where he stayed from July to September. He then tried to pass round the northern end of Lake Nyassa, but his men, hearing of the raids by the Mazitu tribe, were afraid to go. He then attempted to cross the lake; but the Arabs at the crossing-station hid all the boats. He was consequently compelled to pass round the southern end of the lake. On the way, a number of sepoys in his employ plotted how to compel him to return to the coast. They secretly killed his camels; and accordingly they were dismissed. At the south end of the lake all his baggage-bearers, men from Johanna, left him; and the chief of them, Ali Moosa, returned to Zanzibar, where he reported that Livingstone had been killed by the Mazitu. This report was supported by circumstantial details, which, notwithstanding Moosa was known to be a confirmed liar, obtained credence, although a few persons suspected it to be untrue. An expedition was sent out at the expense of the government, under the command of Mr. Young, the main result of which was to prove that Livingstone had not been killed at the place named by Moosa, and that he had advanced in safety a five days' journey beyond. From the south end of the lake Livingstone went northwards, through Lobisa, to Bemba, from which place he sent despatches home, bearing date February 1, 1867, whereas, according to Moosa's report, his death would have occurred about September, 1866. The Lobisa country had been devastated by the Mazitu; so that provisions were scarce, and Livingstone and his party suffered severely from hunger. He himself was very much reduced. He says, "I am a mere ruckle of bones; did all the hunting myself; and wet, hunger, and fatigue took away the flesh." He had had no difficulties with the natives, and had only experienced the petty annoyances which all explorers meet with. His greatest loss had been his medicines. He intended staying in the Bemba district for awhile, and then to push on slowly to Ujiji, on the shores of Lake Tanganyika, where he expected to be in May, 1867. His journey, however, was much delayed. From some later despatches, dated near Lake Bangweolo, July 1868, we learn further details. He discovered Lake Liemba, April 1867, and was endeavouring to explore a river-like portion of it, which was said to flow into Lake Tanganyika; but, a war breaking out between a chief and some ivory-traders, he was compelled to desist. He was then about to explore the west side of Tanganyika, but on his way he obtained supplies of provisions, cloth, and beads from an Arab party, which enabled him to persist in his former plan. He reached Lake Moero, September 8, 1867, proceeded to the town of Cazembe, where he stayed forty days, and then started for Ujiji; but when within thirteen days of Tanganyika, he was stopped by the flooded state of the country. He states that the sources of the Nile are in the valley in which Cazembe lies, and about 10° or 12° S. All his attendants but four had deserted him. He hoped to reach Ujiji in two months, and he seems to have subsequently arrived there. Fresh supplies have been sent to Ujiji for his use by the British government, and Mr. James Young. In October 1870, he was in the country of the Ma-

BIOG. DIV.—SUP.

nyema, on the west shore of Lake Tanganyika. He was then well, but without means, and was waiting in the hope of being able to return with a caravan to Ujiji in April 1871.

LLANOVER, LORD [HALL, RIGHT HON. SIR BENJAMIN, E. C. vol. iii. col. 261; E. C. S. col. 634].

LLORENTE, JUAN ANTONIO, a Spanish historical writer, was born on the 30th of March, 1756, at Rincon-del-Soto, near Calahorra, of an ancient family of limited fortune, and was educated at the expense of his maternal uncle, Don Josef Gonzalez y Mendizabal, a generous and well-beneficed ecclesiastic; first, in Latin grammar at Aldeanueva de Ebro, and afterwards in philosophy at Tarazona. On the 21st of December, 1770, he received his first clerical tonsure from the hands of the Bishop of Calahorra; and in October, 1773, having completed his course of philosophy at Tarazona—not Tarragona, as is stated with an almost wanton ignorance by every biographer but himself—repaired to Saragoza for the study of law, where he graduated as bachelor in that faculty on the 30th of April, 1776, and, on the 23rd of December following, was instituted to a benefice. On the 23rd of May, 1777, he received the sub-diaconate; was made deacon on the 19th of December, 1778; admitted to the priesthood on the 29th of May, 1779; took his degrees of bachelor and doctor of canon law respectively on the 15th and 20th of April, 1780, at the university of Valencia; and later in the same year was appointed to a canonry in the cathedral church of Tarazona. In the latter part of 1781 he repaired to Madrid, for the purpose of being admitted as an advocate of the Real y Supremo Consejo de Castilla; and on the 26th of November was elected a member of the Real Academia de Sagrados Canones, Liturgia e Historia Ecclesiastica de España, which had been established at Madrid as the Academia de S. Isidoro Arzobispo de Sevilla. In 1782 he was appointed vicar-general to the Bishop of Calahorra, with which were conjoined other diocesan offices, the duties of which occupied the day, whilst he devoted much of the night to the production of an operetta, or lyrical drama, entitled 'El Recluta Gallego.' In 1784, the year of the death of the bishop, his patron, and of the consequent lapse into the hands of the cathedral chapter of the diocesan offices, Llorente says that he abandoned, frankly and fully, "the principles of ultramontaniam as applied to jurisprudence, of scholasticism as applied to theological doctrines, and of the peripatetics as applied to philosophy and the natural sciences." He became at once a liberal and a rationalist, maintaining that "there is no authority external to ourselves which has the right to subjugate our reason." Yet, in 1785, he was made commissary of the Inquisition at Logroño; becoming in the following year a member of the Real Sociedad de Amigos del Pais, in which year he also produced a treatise entitled 'Preferencia de los Embaxadores de España á los de Francia en los Concilios generales, en la Corte de Roma, y en otras Asembleas diplomaticas.' In 1788, he was named by the new Bishop of Calahorra to be one of the synodical examiners of candidates for the licentiate to preach the gospel, and in the same year was called to Madrid, in order to become confidential counsellor and agent to the Duchess de Sotomayor, one of the principal ladies of the household of Queen Luisa, in whose behalf he interested himself in genealogical antiquities, and produced a treatise entitled 'Historia de los Pleytos de la Casa de Sotomayor sobre Señorios de Pueblos y otros Derechos desde el Siglo XIII.' In the year following he published a small archaeological volume, entitled 'Monumento Romano descubierto en Calahorra dia 4 de Marzo de 1788,' 4to, Madrid, 1789, which had first appeared in vol. xviii. of the 'Memoriale Litterario' of Madrid. In the beginning of 1789 he was appointed to be secretary-general of the Holy Office; and in 1790 became an honorary fellow of the Academia de Bellas Letras of Seville, and received from the king a canonry in the cathedral church of Calahorra, to which, towards the end of 1791, he found it expedient to retire from the intrigues which threatened his interests at court. Here he had the opportunity of offering hospitality to several French ecclesiastical émigrés, for his kindness to whom he received the name of Padre de los Clérigos Franceses, and in furtherance and illustration of whose fortunes he produced his 'Historia de la Emigracion de los Clérigos Franceses á España,' of which, however, the politics of the time forbade the publication. Llorente had for some time meditated a plan of reform in the working of the Inquisition, and he was encouraged to draw up such a plan by the Inquisitor-general, Don Manuel Abad-la-Sierra, Archbishop of Selimbria, who gave it a qualified adhesion. It was, however, unsuccessful, as was another attempt in the same direction, in which Llorente was associated with the Bishop of Calahorra and with Jovellanos, the Minister of Grace

and Justice. The proposal, which aimed at giving publicity to the proceedings of the tribunal of the Holy Office, was frustrated by the downfall of Jovellanos, and the arrest of Llorente himself, who was deposed from his appointment, and sent for a month's retreat to a convent. In 1805 he was recalled to Madrid; and, through the influence of powerful friends, was appointed by King Carlos IV., on the 9th of February, 1806, to a canonry in the cathedral of Toledo, the mother church of Spain, and afterwards, with other distinctions, to the chancellorship of the university of Toledo; and on the 10th of June, 1807, was promoted by the king to be a caballero eclesiastico de la Real y distinguida Orden Española de Carlos III. He was elevated to several high offices in Madrid, chiefly as a reward for a work which Godoy, Prince of the Peace, commissioned him to write in the interests of centralisation, and against the ancient liberties of the Basque provinces, entitled '*Noticias historicas sobre las tres Provincias Vascongadas*,' 3 vols., Madrid, 1806. Upon the occasion of the invasion of Spain by the French, he appeared as the partisan of the latter, and responded freely to the order of Murat, at that time (May 23rd, 1808) Governor of Spain, which commanded him to repair to Bayonne, in order to take part, as a member of the *Asemblea de Españoles notables*, in the project of drawing up a new constitution for Spain. King Joseph Bonaparte made him a state-councillor; and after the abolition of the Inquisition in 1809, all its archives were placed at his disposal, for the purpose of examining them, and of compiling a history from them. For two years he was occupied, aided by several assistants, in copying the most important documents. The result of his labours appeared in Paris, where, after a short sojourn in London, he settled upon his expatriation as an adherent of Joseph Bonaparte, when the latter lost the Spanish crown, in the shape of a work on the Inquisition, which has brought credit to its author as being its best historian, and as the "*Suetonius of the Inquisition*." It was published in a French version, made by M. A. Pellier, under the superintendence of the author, as '*Histoire critique de l'Inquisition d'Espagne, depuis son Etablissement jusqu'au Règne de Ferdinand VII.*,' 4 vols. 8vo, Paris, 1817-18, second edition, 1818, Spanish issue, '*Historia critica de la Inquisicion de España*,' &c., 10 vols. 12mo, Madrid, 1822, English abridged translation, '*The History of the Inquisition of Spain, from its Establishment to the Reign of Ferdinand VII.*,' 8vo, London, 1826. Llorente was not allowed to continue at Paris without molestation; and when he published his '*Portraits politiques des Papes, considérés comme Princes temporels et comme Chefs de l'Eglise*,' 2 vols. 8vo, Paris, 1822, the hatred of the clergy was excited against him so much that he was ordered in the beginning of December, exposed in his old age to all the severities of a very inclement season, to leave Paris in three days, and France without delay. Soon after arriving at Madrid, where he was honourably received, he died from the fatigues of the journey, on the 5th of February, 1823.

Llorente, amongst a great number of miscellaneous works in history and literature, contributed several preparatory to, or in illustration of, his great work on the Inquisition. Some of these are '*Disertacion sobre el Poder que los Reyes Españoles ejercieron hasta el Siglo duodecimo en la Division de opispodos*. Con un *Appendice*,' &c., 4to, Madrid, 1810; '*Anales de la Inquisicion de España*,' 2 vols. 8vo, Madrid, 1812-13; '*Memoria historica sobre qual ha sido la Opinion nacional de España acerca del Tribunal de la Inquisicion*,' &c., 8vo, Madrid, 1812; '*Discurso sobre una Constitucion religiosa, considerada como Parte de la civil nacional. Edicion aumentada*,' 8vo, Burdeos, 1821; and an autobiography entitled, '*Noticia biografica de D. Juan Antonio Llorente: o Memorias para sa Historia de su Vida escritas por el Mismo*,' 8vo., Paris, 1818.

LLOYD, BARTHOLOMEW, was born 5th February, 1772, at New Ross, Wexford. He lost his father early, but, through the kindness of an uncle, was placed under the care of the Rev. Robert Alexander, of Ross. In 1787 he entered Trinity College, Dublin, as pensioner, and three years later obtained a first scholarship. In 1796 he obtained a fellowship for scientific distinctions. During some years he performed the duties of college tutor, and in 1813 was appointed professor of mathematics. He now delivered courses of lectures, for the purpose of introducing a knowledge of the analytical methods of the French mathematicians, about the same time that Woodhouse was delivering a similar course at Cambridge. His treatise on Analytic Geometry did good service. In 1822 he was appointed professor of natural philosophy, and soon afterwards published a treatise on mechanical philosophy. In 1831, when Dr. Kyle was raised to the episcopacy, Lloyd was elected

provost of Trinity. He immediately set about remodelling the course of collegiate studies, and effected many useful reforms. Dr. Whewell, in his '*History of the Inductive Sciences*,' places Lloyd among that new generation of mathematicians in whose hands "it is reasonable to suppose the analytical mechanics of light will be improved as much as the analytical mechanics of the solar system was by the successors of Newton." He also points out the curious phenomena of conical refraction which Professor Hamilton had predicted from the Fresnelian doctrine of double refraction, and which "his friend Professor Lloyd verified as an experimental fact." Dr. Lloyd died November 24, 1851. As a testimony of their sense of his services the university authorities have instituted a Lloyd mathematical exhibition.

LLOYD, ROBERT, English poet, was born in 1733. The son of Dr. Pierson Lloyd, under-master of Westminster School, he was educated at that school, and standing first on the list of scholars in 1751, was sent to Trinity College, Cambridge, where he distinguished himself by his talent for versification, by his social habits, and by his irregular life. Cowper, who had been with him at Westminster School, addressed to him a poetical epistle, whilst still an undergraduate, in which he speaks of "Gentle Bob" as "sole heir and single of dear Mat Prior's easy jingle." But he seems to have paid less attention to the special studies of the place than to English verse, and he wrote to the '*Connoisseur*' that he was "universally agreed to be ruined for having concerned himself with hexameter and pentameter more than with diameter." It was, however, by more serious irregularities that he was nearly wrecked. At Westminster he had been contemporary with Colman, Churchill, and Bonnell Thornton, and the seed had been sown which, later, bore more or less evil fruit in each of them. Lloyd, however, took his B.A. degree in 1756, and that of M.A. in 1761, and his father procured for him the post of usher in Westminster School. But he soon tired of the drudgery of teaching: he had contributed to his friend Colman's '*Connoisseur*' several poetical pieces, including the once generally popular '*Wealthy Cit*,' which Colman justly lauded for its easy elegance; and he began to contemplate the then perilous step of adopting literature as a profession. Two odes on '*Obscurity*' and '*Dulness*,' written in 1755, in conjunction with Colman, in ridicule of Gray and Mason, attracted a good deal of notice. He made his first independent venture by publishing, in 1760, a semi-critical poem, '*The Actor*,' which achieved instant popularity, and suggested to his friend Churchill his more powerful '*Rosciad*,' the superior merit of which Lloyd was the first to proclaim. For some months he undertook the poetical department of Dr. Kippis's '*Library*,' and on the suggestion of Colman wrote the '*Tears and Triumphs of Parnassus*' on the death of George II., and '*Arcadia*,' a dramatic pastoral, on the marriage of George III., both of which were performed, without much success, at Drury Lane Theatre. He now issued proposals for publishing, by subscription, a 4to volume of poems, and in 1762 commenced the monthly issue of '*The St. James's Magazine*,' relying on the literary aid of his college and other friends, and his own versatile industry, for supplying the matter. Thornhill, Colman, Denis, and, in at least one instance, Cowper, sent contributions; but the bulk of the work had to be provided by Lloyd, who, with all his facility, was unequal to the demand. After a trial of eighteen months, the magazine passed into the hands of Dr. Kenrick, and Lloyd was arrested for debts incurred during its progress, and lodged in the Fleet Prison. The debts seem to have been too heavy for his father or his friends to discharge; but Churchill provided him with sufficient to meet his daily expenses, and commenced a subscription to remove his liabilities, whilst Lloyd laboured at any miserable booksellers' hack-work he could procure. Churchill's unexpected death at Boulogne, November 4th, 1764, put an end to any hope of release from that quarter. Lloyd was deeply attached to Churchill, and when he received the news of his death was seized with sudden sickness, and exclaiming, "I shall follow poor Charles," took to his bed, from which he never rose again, dying on the 15th of December, 1764. A comic opera, adapted by him from the French, had been produced, on the 28th of November, at Drury Lane with some success, but too late to be of service to him. '*The Poetical Works of Robert Lloyd, A.M.*,' with an account of the Author, by W. Kenrick, LL.D., was published in 2 vols. 8vo, 1774. Lloyd will hold his place among our minor poets. In the "easy jingle" of fable and epistle he displays rare skill; but the thought, like the expression, seldom rises above elegance. His name will, perhaps, be most often mentioned in connection with Churchill and his associates.

LOCHNER, or LOTHENER, STEPHAN, known by his

contemporaries as MEISTER STEPHAN, a celebrated early German painter, was a native of Constanza, and settled in Cologne, where he painted, in 1430, the famous 'Dom-bild' of the 'Adoration of the Kings,' which is still carefully preserved in the cathedral; purchased a house in 1442; and was elected by his guild as town councillor in 1448 and 1451, in which last year he died. Lochner's works bear a strong resemblance to those of the Van Eycks and Memling, and, if less brilliant, are at least equal to them in depth of feeling and expression. His great work is that mentioned above; but Cologne possesses several others, in the Museum and elsewhere, and there are numerous pictures attributed to him in the galleries of Berlin and Munich. In our National Gallery is a small tempera picture by him (No. 705), of 'St. Matthew, St. Catherine of Alexandria, and St. John the Evangelist.'

LOCKE, JOSEPH [E. C. vol. iii. col. 916] died suddenly, from an attack of iliac passion, at Moffat on the 18th September, 1860.

* LOCKYER, JOSEPH NORMAN, F.R.S., astronomer and spectroscopist, was born on the 17th of May, 1836. Engaged during the day in a professional pursuit, he has devoted other portions of his time to investigations in astronomy and the connected sciences. The 'Memoirs' and 'Proceedings' of the Royal Astronomical Society, and the 'Transactions' and 'Proceedings' of the Royal Society, as well as other scientific journals, contain papers by him on astronomical subjects. Among them are 'Observations on the Planet Mars,' with numerous drawings, 1863; 'Observations on Sun-Spots,' 1865; and several relating to the chromosphere or supposed gaseous envelope of the sun. The last-named subject is one to which astronomers now attach a high degree of importance. It has long been known that, during a total solar eclipse, red flames or protuberances become visible round the margin or disc of the eclipsed sun; and the eclipse of 1868 enabled these ruddy appearances to be studied with the spectroscope. Two years earlier, however, Mr. Lockyer conceived that a particular modification and application of the spectroscope might possibly render the red flames visible during ordinary sunlight, without waiting for the rare phenomenon of a total eclipse. He communicated his views on this subject in a paper to the Royal Society in 1866; but he found that the instruments at his command were ineffective for the purpose. In January of the following year the Royal Society assisted him with a grant to defray the cost of a fine new spectroscope, the dispersive power of which, by the successive action of several prisms, would so lessen the intensity of the sun's light as to permit the fainter light of the red protuberances to come into view. Various circumstances delayed the completion of this instrument until the autumn of 1868, in which year, on the 20th of October, Mr. Lockyer succeeded in seeing the red protuberances during the forenoon of an ordinary day. A controversy afterwards arose concerning the priority of this observation, as between Mr. Lockyer and M. Janssen. Inquirers to whom these questions of precedence are of importance, will have to take into account three pairs of dates—those on which the two astronomers respectively conceived the idea, those on which they succeeded in realising it, and those on which the results were publicly announced—matters which need not be discussed here; but there is ample evidence that each astronomer worked independently of the other, and with arrangements devised by himself. In 1866 Mr. Lockyer edited an English translation of Guillemin's 'Heavens, an Illustrated Handbook of Popular Astronomy,' 8vo, London. In 1868 he published 'Elementary Lessons on Astronomy,' 16mo, one of Macmillan's school class-books; to which, 'Questions' were prepared, in 1870, by Mr. J. F. Robertson. Mr. Lockyer, in conjunction with Mr. Balfour Stewart, prepared a brief treatise, 'The Sun,' published in 1870 in a revised edition of Chambers's 'Miscellany of Instructive and Entertaining Tracts.' He is a fellow of the Royal and the Royal Astronomical Societies.

* LOGAN, SIR WILLIAM EDMOND, geologist, was born at Montreal in 1798. He was educated at the High School and University of Edinburgh. In 1818 he joined the business of his uncle, Mr. Hart Logan, in London, and ultimately became a member of the firm. In 1829 he became the manager of the copper smelting-works and coal mines near Swansea, belonging to his uncle. When his uncle died in 1838 he relinquished this post, and entered upon his special career as a geologist. During his residence at Swansea he had shown his ability as a surveyor by the careful examination which he had made of a portion of the South Wales coal-field. The maps and sections made by him were adopted and published by the Geological Survey. In 1840 he read a paper 'On the Character of the Beds

of Clay lying immediately below the coal-seams of South Wales (Transactions of the Geological Society, vi. pp. 491—498, 1842), in which he was the first to point out that these beds, commonly known as underclays, were the old soils on which the vegetation, represented by the coal-beds above, then grew. These threw great light upon the way in which most coal has originated, and on the nature of *Stigmaria*. In 1841 he visited the coal-fields of Pennsylvania and Nova Scotia, and examined the Canadian rocks. About this period the Geological Survey of Canada was being organized, and he was appointed the director. The result of the survey, which he has most successfully conducted, has been to demonstrate that these rocks, which were supposed to be azoic and non-stratified, are amongst the oldest stratified sedimentary beds in the world; that they consist of immense thicknesses of strata which form groups, to which he has given the names of Laurentian and Huronian; and that in the lowermost group, the Laurentian, organic remains occur, though sparingly. Full details are given in the publications of the Survey. He has taken an active part in procuring collections illustrating the mineral resources of Canada for the various International Exhibitions, and in drawing up descriptive explanations of them. In 1856 he was knighted for his services, and the Wollaston medal was awarded to him by the Geological Society of London. He resigned his directorship a short time back.

LOMAZZO, GIOVANNI PAOLO, Italian painter and writer, was born at Milan in 1538, and learned painting of G. B. della Cerva. His first important commission was a copy of Da Vinci's 'Last Supper' for the refectory of a convent in Milan, having completed which he addressed himself to original composition. He painted numerous pictures, the most admired being the 'Sacrifice of Melchisedech,' in the library of the Passione, and a large fresco illustrative of the 'Forty Days' Fast, which he painted for the refectory of St. Agostino at Piacenza. Lomazzo was greatly esteemed not only as a painter, but for his extensive knowledge of art, and he was invited to Florence by the Grand Duke Cosmo I., to take the superintendence of his collections. At the age of thirty-three he lost his sight; but he found solace in turning his artistic knowledge to account. He dictated a treatise on painting, 'Trattato della Pittura,' Milan, 1584, which quickly passed through several editions, and, as embodying the views and traditions of the great masters of Italian art, is a work of exceeding value, though much in it is very fanciful. Of less value, and still more fantastic in form and treatment, is his 'Idea del Tempio della Pittura,' 1590. Lomazzo wrote a good deal about art in his poetic 'Grotteschi,' contained in his 'Rime, divise in sette libri; aggiuntavi la Vita dell' Autore descritta da lui stesso in rime sciolte,' 1587. He died in 1600.

* LONGET, FRANÇOIS ACHILLE, physiologist and anatomist, was born at St. Germain-en-Laye, in 1811. He is the principal physician at the hospitals at St. Denis and Ecouen, an officer of the Legion of Honour, and a member of a large number of scientific bodies, including the Académie des Sciences. He is one of the most eminent of the experimental school of physiologists, and has given especial attention to the functions and properties of the various elements of the nervous system. His principal separate works are, 'Traité d'Anatomie et Physiologie du Système nerveux de l'Homme et des Animaux vertébrés,' 2 vols. 8vo, Paris, 1842; and 'Traité complet de Physiologie,' 8vo, Paris, 1850—59; third edition, 1869, which last is a standard text-book on physiology. His papers, which are nearly thirty in number, include important contributions on the functions of the roots of nerves; on the spinal marrow; on the action of the nerves on the laryngeal muscles in producing voice; on the functions and structure of the facial nerve; on the pneumogastric nerves, and on the effect of the inhalation of sulphuric ether on the nervous system. These papers have appeared in the 'Comptes Rendus,' the 'Archives générales de Médecine,' the 'Annales des Sciences Naturelles,' or in the 'Annales Médico-psychologiques,' of which last journal he is one of the editors.

LONGSTREET, JAMES, American general, was born in South Carolina, about 1821. In 1838 he matriculated at the United States Military Academy, West Point; and entered the army in 1842 as second lieutenant of infantry in the 4th Regiment, from which he exchanged into the 8th in 1842. In 1847, with the rank of first lieutenant, he went to take part in the Mexican war, and obtained the rank of captain for his services at Churubusco, and that of major at Molino del Rey; he also fought at Monterey and Contreras, and was wounded at Chapultepec. He next served for a time in Texas; and was appointed paymaster in the army in 1858. When the civil war broke out in 1861,

Longstreet, like most other South Carolinian officers, threw up his commission in the United States army, and joined the Confederates as brigadier-general. He fought at Blackburn's Ford, distinguished himself at the first battle of Bull's Run, led the attack at Manassas Junction, and commanded the 4th brigade of Beauregard's 1st corps at Centreville. In 1862, with the rank of major-general, he rendered valuable services against Pope, McClellan, and Burnside, at Chickahominy, Shenandoah, Hagarstown, and Antietam, and was made lieutenant-general for the aid he afforded to Lee in winning the battle of Fredericksburg, where he commanded the left wing of the Confederate army. In 1863 he was engaged at Chancellorsville and Gettysburg, gaining great distinction in the battle at the last named place, by the manner in which he led the Georgia volunteers against the Federal batteries. He was next sent to strengthen the army of Tennessee, where he assisted Bragg in winning the battle of Chickamauga in November; but, when Grant succeeded Rosecranz in command of the Federals, Bragg was defeated, and Longstreet forced to retreat. When Grant invaded Virginia in 1864, and carried the war into that State, Longstreet greatly aided Lee, who placed much trust in him. He was wounded in May, at the battle of the Wilderness; and his wound forced him into many months of unwilling inactivity. On his recovery he joined General Early in the Shenandoah Valley; but the Federals had by that time become too strong to permit the Confederates to assume the offensive, or even to maintain the defensive. The civil war came to an end without giving Longstreet an opportunity for any further services of a striking character. He was much liked by his soldiers, who placed great reliance on his courage and skill.

*LOOMIS, ELIAS, LL.D., an American astronomer, was born at Willington, Connecticut, on the 7th of August, 1811. On completing his education at York College, Connecticut, he became professor of mathematics and physics at Western Reserve College, Ohio; and in 1844 was appointed to a similar professorship at New York University, which he still holds. His scientific publications are:—'On Certain Storms in Europe and America,' 4to, Washington, 1848; 'Historical Notes on the Discovery of the Planet Neptune,' 8vo, New York, 1848; 'Astronomical Observations,' published at intervals in connection with the Hudson Observatory; 'Elements of Algebra,' 12mo, New York; 'Elements of Geometry and Conic Sections,' 8vo, New York; 'Trigonometry and Tables of Logarithms,' 'Elements of Analytical Geometry and of the Differential and Integral Calculus,' 8vo, New York, 1851; 'Introduction to Practical Astronomy, with a Collection of Astronomical Tables,' 8vo, New York; 'Recent Progress of Astronomy, especially in the United States,' 12mo, New York, 1851; 'Treatise on Arithmetic, Theoretical and Practical,' 12mo, New York, 1856; 'Treatise on Meteorology,' 8vo, New York, 1868. Later editions of some of these books have appeared. Professor Loomis has also contributed a large number of scientific papers to 'Silliman's Journal,' the 'Transactions of the American Philosophical Society,' 'Sturgeon's Annals of Electricity,' the 'Proceedings of the American Association,' and 'Gould's Astronomical Journal.' The astronomical papers relate to shooting stars, comets, the possibility of a lunar atmosphere, planetary rotation, the satellites of Uranus, the August and November meteors, Professor Kirkwood's theory of planetary distances, comparison of star-catalogues, &c. On other branches of science his papers relate to the magnetic needle, terrestrial magnetism, the determination of longitudes by the electric telegraph, electrical phenomena in buildings, the measurement of latitudes and longitudes, the measurement of heights by the barometer, the resistance of the air to falling bodies, hurricanes and tornadoes, meteorological observations, rainfall and waterspouts, the moon's influence on the weather, &c.

LOOS, DANIEL FRIEDRICH, German medallist, was born at Altenburg, in Saxony, January 15th, 1735. He was a pupil of Stieler, and served an apprenticeship of seven years in the die department of the mint at Leipzig. In 1756 he was appointed engraver to the mint at Magdeburg; but, on the suppression of that establishment, was attached to the mint at Berlin, of which he became principal medallist. Loos improved the machinery, and greatly elevated the style of art of the Berlin mint. He executed numerous medals commemorative of passing events and in honour of distinguished personages. Several of them have been engraved in 'Médailles de la Révolution,' 'Trésor de Numismatique,' &c. Loos was a member of the Berlin Academy. He died October 18th, 1819.

LOOS, GOTTFRIED BERNHARD, son of D. F. Loos, born

at Berlin, August 6th, 1774, inherited a large share of his father's talent, which he improved by diligent culture. Gottfried Loos was appointed master of the Berlin mint in 1806, and, later, general warden. He executed numerous excellent medals, and fully sustained the high character of the establishment. He wrote several useful essays on general numismatics, which were published in a collected form: 'Sammlung einzelner Aufsätze über Gegenstände des Münzwesens und der Münzkunde,' in three parts, Berlin, 1822; a treatise on gold and silver coins for commercial use, 1821; and a guide to the detection of base coin, 1828. Gottfried Loos died at Berlin, July 29th, 1843.

LORCH, MELCHIOR, German engraver, was born at Flensburg, in Schleswig, about 1527. He engraved both on copper and on wood, and is one of the best of the many excellent engravers who at that time flourished in Germany. On copper he engraved portraits (among others of Martin Luther and Albert Dürer) and various figure pieces; on wood, a large cut of the Deluge, printed on two sheets, and a variety of other subjects, the most interesting being a series of prints illustrative of manners, costumes, &c., from sketches made by him during his long journeys in northern Germany, Denmark, Austria, &c. He also engraved a set of prints of the habits of the Turks, and a portrait of the Sultan from drawings made by him in Turkey. The date of Lorch's death is sometimes stated to be 1586, but he appears to have been alive in 1590.

LORENZINI, GIOVANNI ANTONIO, Italian engraver, was born in Bologna in 1665. He studied painting under L. Pasinelli, but turned his attention to engraving, in which he shortly acquired distinction. With a painter's feeling for general effect rather than elegance of line, Lorenzini trusted largely to etching and the dry point. Of a religious turn of mind, he entered the order of Franciscans, but continued to engrave till his death, in 1740. Among his early prints are a 'St. Anthony,' and a 'Martyrdom of St. Ursula,' after his master Pasinelli; but his later prints are chiefly after P. Veronese, Tintoretto, Guercino, Guido, and other more eminent painters. He engraved several of the plates in the Gallery of the Grand Duke of Tuscany. Bartsch and Nagler give full lists of his prints.

LOSCH, JOSEPH, German medallist, was born in 1770 at Amberg, in the Upper Palatinate. Trained as a die-cutter in the mint of his native town, he improved his taste by the study of ancient Greek gems; and on the death, in 1796, of the principal engraver to the Amberg mint, Losch was selected to succeed him. The Amberg mint was soon after given up; but in 1803 Losch was attached to the staff of the mint at Munich, and five years later was made principal medallist. This office he retained till his death in 1826. Under Losch the Bavarian coinage was much improved. The medals engraved by him include many struck in commemoration of passing events; the visits of distinguished personages; as rewards for military skill, or proficiency in literature, science, or art; portraits, &c.; and they are above the average of their class. His son, JOSEPH LOSCH, born at Munich in 1804, who succeeded his father as chief medal engraver in the Munich mint, has engraved several good occasional medals.

LOUDON, JANE WEBB [E. C. vol. iii. col. 932]. Mrs. Loudon, the popular authoress of various horticultural works, died July 13, 1858, aged fifty-eight years.

LOUVETURE, TOUSSAINT [TOUSSAINT LOUVETURE, E. C. vol. vi. col. 138].

LOUVILLE, JACQUES EUGÈNE D'ALLONVILLE, CHEVALIER DE, a French astronomer, was born at the Château of Louville, near Chartrain, July 14th, 1671. On the completion of his school studies he entered the Marine in 1690, and fought at the battle of La Hogue in 1692; then joined the army, and attained the rank of captain in 1700. He now served as a brigadier in the army of the King of Spain, who gave him the title of chevalier; but was recalled to the French army, fought, and was made prisoner at the battle of Oudenarde. Two years later he exchanged, and became colonel of the Queen's Dragoons. Quitting the army after the peace of Utrecht, he directed his energies to mathematics and astronomy. In 1713 he went to Marseille, to determine the latitude by measuring the height of the pole; in 1714 he was elected member of the Academy of Sciences; and in 1715 visited London, in order to observe a total eclipse of the sun. He established an observatory, and a workshop for making some of his instruments, in a small country house which he purchased in 1717, near Orleans. He measured very closely the angular diameter of the sun; and his solar tables were published by the Academy in 1720. He devised a new method of calculating eclipses; and put forth a

new theory concerning the secular decrease in the obliquity of the plane of the equator to that of the ecliptic. Among his scientific controversies was one against Leibnitz's view of the *Vis Vivæ*, and another against Bernoulli. His scientific papers appeared originally in the 'Mémoires' of the Academy and 'Le Mercure.' In September, 1732, he had a severe attack of lathargic fever, but during it studied his own symptoms as philosophically, says Fontenelle, as though he were observing external physical phenomena. A second attack, however, quickly supervening, carried him off in a few hours, at the age of 61.

LOVER, SAMUEL [E. C. vol. iii. col. 952]. Mr. Lover died on the 6th of July, 1868, aged 70.

* LOWE, RIGHT HONOURABLE ROBERT, M.P., P.C., &c., Chancellor of the Exchequer, was born at Bingham, Nottinghamshire, in 1811. His father, the Rev. Robert Lowe, rector of Bingham, was the object of a series of violent attacks in Cobbet's 'Register,' in consequence of his having originated in his own parish the principle of Poor Law administration which was afterwards adopted by the Poor Law Commissioners for the whole kingdom. Mr. Lowe was educated at Winchester and at University College, Oxford; and distinguished himself whilst an undergraduate for his energetic liberalism at the Union Debating Society. In 1833 he took his B.A. degree, standing first class in classics, and second class in mathematics; and proceeded M.A. in 1836, having been elected in 1835 to a fellowship of Magdalen College, which he vacated by his marriage in the following year. He attained a high reputation as a private tutor in the university; and in January, 1842, was called to the bar by the Society of Lincoln's Inn. Later in the same year he sailed for Australia, in the ship that carried out the Act of Parliament creating the Representative Assembly, or Legislative Council, of New South Wales, which, consisting of thirty-six members, of whom twenty-four were elected and twelve nominated by the Governor, superseded the despotic rule which had prevailed whilst New South Wales was a mere convict colony. Of this Assembly, Mr. Lowe, who had early attained a lucrative practice at the colonial bar as an advocate and as a chamber counsel, was nominated a member by the governor, the late Sir George Gipps, in October, 1843, in which year he was a member of the committee on the Land Question, to the drawing up of whose report he largely contributed. He also acted as chairman of the Committee on Education, in which capacity he drew up a report in strong antagonism to the evil results of the extreme denominationalism of the colonial system, and in favour of what was known as Lord Stanley's, or the Irish National, system, with well-trained masters under the control of an unpaid board, with a paid secretary. The mutual intolerance of ecclesiastical parties, who agreed alone in their opposition to the scheme, deferred its success, although it subsequently formed the basis of the educational system adopted generally throughout Australia. In the latter end of 1844, Mr. Lowe, for the sake of greater freedom of political action, vacated the seat which he held as nominee of the Government in the Legislative Council; but was returned to this body in April, 1845, as an elected member for the counties of St. Vincent and Auckland. He now became prominent by the ardour with which he resisted in the Legislative Council, in the press, and at public meetings, the arbitrary burdens which the governor sought to impose on the occupants of crown lands—an attempt which was abandoned by Sir Charles Fitzroy, who in 1846 succeeded Sir George Gipps as Governor-General. The next struggle between the Government and the squatters found Mr. Lowe in opposition to his late clients and allies; and as chairman of the Land Committee of 1847 he prepared a report which is regarded as a nearly exhaustive statement of the principle of free trade in land, in opposition to the monopoly desiderated by the squatters. In consequence of his attitude upon this question, Mr. Lowe, in 1848, lost his election for Auckland; but was returned, without canvass, to the Legislative Council as member for Sydney. During the rest of his stay in the colony, he was chiefly remarkable for the energy with which he advocated and carried various measures of law reform—the abolition of imprisonment for debt on first process; the expediting of legal proceedings, especially in Equity cases; and the institution of a Board of Examiners, appointed by the colonial judges, who were authorised to admit properly qualified gentlemen to the colonial bar, without the obligation of a legal education in England.

In 1850 Mr. Lowe returned to England, and in July, 1852, obtained a seat in the House of Commons as member for Kidderminster; and made his first short but successful speech

in Parliament on the 29th of November, on the Courts of Law (Ireland) Bill. His next effort was made on the 7th of December, on the subject of Limited Liability and the Law of Partnership; and on the occasion of his third speech, made on the 13th of December, in opposition to Mr. Disraeli's budget, he achieved a signal triumph. On the 27th of January, 1853, he was appointed one of the secretaries of the Board of Control, which office he held till February, 1855. From August, 1855—when he was made a Privy Councillor—to March, 1858, he acted as Vice-President of the Board of Trade and Paymaster-General; and in June, 1859, was appointed President of the Board of Health and Vice-President of the Education Board of the Privy Council, but resigned in April, 1864. He sat for Calne from 1859 to 1868, and in November of the latter year was returned as the first member for the University of London, of the Senate of which he had been a member since 1860. He opposed Lord Russell's Reform Bill in 1866, disapproving that measure as a dangerous step in the direction of democracy; and upon the accession to power of the Derby administration, opposed the Reform Bill introduced by Mr. Disraeli in 1867, during the debate upon which in committee he sought to introduce the principle known as cumulative voting, which was lost, however, by a majority of 314 against 173. His most important addresses on the extension of the franchise were collected in a volume entitled 'Speeches and Letters on Reform: with a Preface,' 8vo, London, 1867, in which he advocated the experimental method of treating political subjects, as opposed to the theological and the metaphysical. On the 9th of December, 1868, he assumed office in the Gladstone administration as Chancellor of the Exchequer, and his first budget, which was introduced on the 8th of April, 1869, was remarkable for the adroitness with which, by anticipating the taxes—"discounting a bill at nine months," as his critics said—he sought to meet the exceptional expenses of the Abyssinian expedition. In other respects it aimed at the equalization of taxation and the rectification of various anomalies. His most recent budget, April, 1871, was distinguished for an attempt to introduce a tax on lucifer matches, which met with almost unanimous condemnation, and was necessarily abandoned: the budget was considerably modified, without being rendered less unfair or onerous. As a member of the Liberal Government, Mr. Lowe has taken a prominent part in the various measures which have characterised its existence; and is in favour of the admission of Dissenters to the degree of M.A. at Oxford and Cambridge, and their consequent participation in the government of the universities. He is an ardent advocate for the promotion of education, whether in primary schools or at the university; and especially insists upon the importance of boys and young men having a knowledge of the institutions of their own country, in preference to the dead and gone institutions of the ancient classical countries. His principal speeches in this sense were delivered on the 1st of November, 1867, at the Philosophical Institution, Edinburgh, the University of which city conferred on him the degree of LL.D.; and on the 22nd of January, 1868, before the members of the Philomathic Society of Liverpool. Mr. Lowe was one of the foremost members of the Government to animadvert upon the position of England with reference to the belligerents in the war between France and Germany. Addressing an audience at Elgin in September, 1870, he repudiated mediation on the three-fold ground that belligerents knew their relative power better than bystanders; that giving advice to a belligerent must involve taking sides; and that this country could not mediate without becoming the object of the future resentment of both parties.

Many of Mr. Lowe's leading speeches, in and out of parliament, on political and miscellaneous subjects, have been separately published immediately after delivery; but in their present shape they are at once too slight and too numerous to admit of detailed mention. It may be added that Mr. Lowe, in addition to his other distinctions, is an elected trustee of the British Museum.

* LOWELL, JAMES RUSSELL, an American poet and man of letters, son of the Rev. Charles Lowell, D.D., pastor of the West Church, Boston, U.S., and a member of a family distinguished for culture and literary attainments, was born at Cambridge, Massachusetts, on the 22nd of February, 1819. He became a student of Harvard College, where he graduated in 1838, and recited a "class poem" which was published with the title of 'A Poem recited at Cambridge,' 8vo, Cambridge, 1839, and which contained many strokes of vigorous satire and pungent humour. Having gone through a course of legal study at Harvard University, he was admitted to the bar in 1840, and entered

upon practice at Boston. But he almost immediately abandoned this career, and devoted himself to literature. In 1841 he published a volume of poems, of much promise as indicating that they were the result of original feeling and observation, with the title of 'A Year's Life,' 8vo, Boston, 1841, which has never been reprinted, although many of the pieces have been incorporated with the subsequent collections of the author's writings. In January, 1843, he commenced, in association with Robert Carter, the publication of 'The Pioneer,' a literary and critical Magazine, Boston, which, notwithstanding that it numbered Poe and Hawthorne amongst its contributors, died with the issue of its third (March) number. The following year saw the issue of a second series of 'Poems,' 12mo, Cambridge, first three editions, 1844, another edition, 2 vols. 8vo, Boston, 1849, English edition, 8vo, London, 1844, which contained 'A Legend of Brittany,' 'Prometheus,' 'Miscellaneous Poems,' and 'Sonnets.' Mr. Lowell had contributed to the 'Pioneer' a short series of 'Essays on the English Song-Writers,' which exhibited a fine critical faculty, and the idea of which he now expanded into 'Conversations on some of the Old Poets,' 12mo, Cambridge, two editions, 1845, English edition, 8vo, London, 1845, which are in fact a series of essays, thrown into the form of dialogue, upon Chaucer, Chapman, Ford, and poets and poetry in general, interspersed with remarks on miscellaneous topics of a social or political character. Three years afterwards appeared his third collection of 'Poems,' 12mo, Cambridge, 1848, amongst which were 'The Present Crisis,' 'The Summer Storm,' 'Above and Below,' 'Extreme Unction,' 'On the Capture of certain fugitive Slaves near Washington,' and others which obtained great popularity as being levelled against the institution of slavery. The same year, he published a poem founded on the legend of the search for the Holy Graal, entitled 'The Vision of Sir Launfal,' 12mo, Boston, 1848, 16mo, 1855, sixth edition, 8vo, 1858; and also an ingenious review article on the American writers of the present day, done into rhyme as 'A Fable for Critics,' 12mo, New York, 1848, fifth edition, 12mo, Boston, 1856. Of nearly simultaneous publication with 'The Vision,' was a satire mainly directed against slavery and the invasion of Mexico by the United States in 1846—47, which had for the most part already appeared by instalments in the newspapers of the day. This satire, which consisted of various poems in the Yankee dialect; the droll characteristics of which they very happily portrayed, was ostensibly the production of Mr. Hosea Biglow, and from him entitled 'The Biglow Papers: Edited, with an Introduction, Notes, Glossary, and copious Index, by Homer Wilbur, A.M., pastor of the First Church in Jaalam, and (prospective) Member of many literary, learned, and scientific Societies,' 16mo, Cambridge, 1848, third edition, 1856, a work which has passed through several editions in the United States, and which has been frequently reproduced in England. In July, 1851, Mr. Lowell paid a visit to Europe, where he travelled in England, France, and Switzerland, and resided for a considerable period in Italy, returning to America in December, 1852. He visited Europe a second time in May, 1855, in order the more fully to qualify himself for the duties of the chair of Modern Languages and Belles-Lettres in Harvard College, to which he had been appointed in January of that year, in succession to Professor Longfellow, who had resigned. After spending more than twelve months in study, during which he made Dresden his chief place of residence, he went home in August, 1856.

Several editions of Mr. Lowell's collective poems have appeared in America, as, for instance, his 'Complete Poetical Works,' revised, and with additions, 2 vols. 16mo, Boston, 1850, &c., new edition, 2 vols. 8vo, Boston, English edition, with an Introduction by A. R. Scoble, 18mo, London, 1852 and 1853, and in 'Beeton's Companion Poets,' with a Preface by W. B. Stevens, 8vo, London, 1865, &c. His remaining works, in prose and verse, comprise 'Fireside Travels,' 8vo, Boston, 1864; 'Under the Willows and other Poems,' 8vo, Boston, 1869, English edition, 8vo, London, 1869; 'The Cathedral: A Poem,' 12mo, Boston, 1870; 'Among my Books,' 8vo, London, 1870; and a work in which he collectively reproduced several papers which have already had a fugitive publication, entitled 'My Study Windows,' 8vo, London, 1871, containing essays on 'My Garden Acquaintance,' 'On a certain Condescension in Foreigners,' on Chaucer, Pope, Carlyle, Swinburne, &c. He has likewise edited, for Brown and Co.'s Series of the British Poets, the Poetical Works of Marvell, Donne, Keats, Wordsworth, and Shelley; and has signalled his powers of prose composition in criticism, politics, and general literature, by a vast number of articles in various periodical publications. Thus he

has been connected, either editorially or as a contributor, with the 'National Anti-Slavery Standard,' folio, New York; the 'Atlantic Monthly: Devoted to Literature, Art, and Politics,' 8vo, Boston, 1857, &c., of which he was for some years the editor; the 'North American Review and Miscellaneous Journal,' 8vo, Boston, 1815, &c., of which he was also a sometime editor; 'Southern Literary Messenger: Devoted to every Department of Literature and the Fine Arts,' 8vo, Richmond, 1835, &c.; 'Graham's Magazine;' the New York 'Knickerbocker;' 'Putnam's Monthly Magazine of American Literature, Science, and Art,' 8vo, New York, 1853—1857, new series, 1868, &c.; and, not to attempt to exhaust the list, to Ripley and Dana's 'New American Cyclopædia,' 16 vols. 8vo, New York, 1858—1863, to which especially he contributed a noteworthy article on Dante.

LUBBOCK, SIR JOHN WILLIAM, BART. [E. C. vol. iii. col. 962]. During the latter few years of his life his pursuit of scientific investigation resulted in the publication of but few papers. His latest important inquiry was on the lunar theory. He died at High Elms, Farnborough, June 20, 1865.

* LUBBOCK, SIR JOHN, BART., naturalist and banker, is the son of Sir J. W. Lubbock, Bart., whom he succeeded in the baronetage in 1865. He was born April 30, 1834, and was educated at Eton and at Trinity College, Cambridge. He commenced writing scientific papers as early as 1853, when his attention was chiefly given to the crustacean family *Calanidæ*, and was afterwards extended to the *Entomostraca*. One of the most noticeable of this group of papers was 'An Account of the two Methods of Reproduction in *Daphnia* and of the Structure of the Ehippium,' in 'Philosophical Transactions' for 1857, pp. 79—100. This led to his writing another paper, 'On the Ova and Pseudova of Insects,' in the 'Philosophical Transactions' for 1859, pp. 341—369, and other papers on the ova of *Buccinum* and the *Annulosa*. From about 1861 he commenced publishing a series of papers on the antiquity of man, based partly upon his own observations and partly upon published data. These relate mainly to the kitchen-refuse heaps, or Kjökkenmøddings, of Western Europe, and the lake-dwellings of Switzerland. These and other papers of similar import were collected, and, together with an account of the habits, customs, and mental condition of the least civilized peoples of the present time (intended to throw light on the evidence existing respecting the oldest-known peoples), were published under the title of 'Prehistoric Times,' 8vo, London, 1865, second edition, 1869. The portion relating to savages has been largely expanded to form a later work bearing the title of 'The Origin of Civilization, and the Primitive Condition of Man,' 8vo, London, 1870. In 1862 he discovered two aquatic *Hymenoptera*, one of which, *Polynema natans*, is the first recorded instance of an insect which swims under water with its wings. Previous to this discovery, no British *Hymenoptera* had been known to be aquatic. In a paper on *Chloëon dimidiatum*, he indicates how the mature form is gradually acquired during a series of twenty or more moultings. He has written a few papers on banking matters, such as the clearing-house system, &c. He was one of the editors of the 'Natural History Review.' He is president of the Anthropological Institute, and member of Parliament for Maidstone.

LUCAS, SAMUEL, was born at Bristol in 1818. The son of a tradesman, he was educated with a view to succeeding to his father's business, but at his earnest request was allowed to proceed to Oxford, where he entered Queen's College; in 1841 won the Newdegate prize by a poem on the 'Sandwich Islands,' and in 1845 gained the Chancellor's prize for the English Essay on the 'National Revolutions of Ancient and Modern Times.' He proceeded B.A. in 1842, and M.A. in 1846, in which last year he was called to the bar of the Inner Temple. Mr. Lucas went the western circuit for some years, but did not acquire much practice. In 1853 he became editor of the newly established 'Press' newspaper; but quitted it in little more than a year to connect himself with the 'Times,' for which he wrote literary reviews, and of which successive series were collected and republished under the titles, 'Eminent Men and Popular Books,' 8vo, 1859; 'Biography and Criticism,' being a second series, &c., 1860; and 'Mornings of the Recess, 1861—1864, a series of biographical and literary papers. Reprinted from the "Times," and revised by the Author,' 2 vols. 8vo, 1864. His contributions to the larger reviews were embodied in 'Secularia, or Surveys on the Mainstream of History,' 8vo, 1862. From its commencement in 1859 to 1865, he edited 'Once a Week,' and on leaving it started the 'Shilling Magazine,' which, however, he discontinued at the end of the year. His health having failed, he retired to the country, but did not regain

strength, and died at Eastbourne, Sussex, on the 27th of November, 1868.

LÜCKE, GOTTFRIED CHRISTIAN FRIEDRICH, a German divine and commentator, was born on the 23rd of August, 1792, at Egeln, near Magdeburg, and was educated successively at the Universities of Halle and Göttingen, at the latter of which he became tutor (repetent) in theology, in 1813. In the year following he published his first work, which was a prize essay entitled 'Commentatio de Ecclesia Christianorum Apostolica,' 4to, Göttingen, 1814. In 1816 he repaired to the University of Berlin, where he acted for some time as a tutor (privatdocent); and where he gave a general but independent adhesion to the exegetical system of Schleiermacher. His chief literary works of this epoch were—on the New Testament Canon, &c., 'Ueber den neutestamentlichen Kanon des Eusebius von Cæsarea,' 8vo, Berlin, 1816; and an Outline of New Testament Hermeneutics, &c., 'Grundriss der neutestamentlichen Hermeneutik und ihre Geschichte,' 8vo, Göttingen, 1817. He likewise assisted De Wette in the preparation of his 'Synopsis Evangeliorum Matthæi, Marci, et Lucæ,' &c., 8vo, Berlin, 1818. In the spring of the last-named year he was appointed to be extraordinary professor at Berlin, and in the following autumn to be ordinary professor at the then recently founded University of Bonn. In 1827 he accepted the chair of Systematic Theology at the University of Göttingen; and, after having attained the rank of Consistorial Councillor, died in that city on the 14th of February, 1855.

The most important of the works of Professor Lücke was his Commentary on the Writings of St. John the Evangelist, 'Commentar über die Schriften der Evangelisten Johannes,' 4 vols. 8vo, Bonn, 1820—1832, which has gone through several editions, and of which an English translation was published in 4 vols. 12mo, Edinburgh, 1837. Besides this work, which still retains a high place amongst the most remarkable productions of German exegesis, Lücke published biographical essays on his teacher, Planck, 'Dr. Gottlieb Jacob Planck. Ein biographisches Versuch,' &c., 8vo, Göttingen, 1835; on De Wette, 'Dr. W. M. L. de Wette. Zur freundschaftlichen Erinnerung,' 8vo, Hamburg, 1850; and on Schleiermacher, with the last two of whom he was for some time associated in the conduct of the 'Theologische Zeitschrift' of Berlin. Lücke was further connected, either editorially or as a contributor, with various periodicals. His library was purchased, after his death, for the divinity schools of the University of Cambridge, Massachusetts.

LUDWIG I., KARL AUGUST, King of Bavaria [E. C. vol. iii. col. 970]. From his abdication in 1848 the old king lived a strictly private life. Accepting his position, he ceased to interfere in public affairs, and spent the greater part of his time in Rome, Paris, or Nice, quietly enjoying, after his fashion, art, literature, and society, and winning much personal esteem wherever he resided. After somewhat prolonged suffering, which he bore cheerfully, he died at Nice on the 29th of February, 1868, in his 82nd year, having survived his abdication very nearly twenty years.

* **LUTHER, ROBERT**, a German astronomer, remarkable for his success in discovering asteroids, was born in 1810. He fitted up an observatory at Bilk, near Düsseldorf, in Rhenish Prussia; and there, through the possession of good instruments, a keen sense of vision, and a competent knowledge of the zodiacal belt, he has been able to determine the planetary character of minute specks of light, formerly regarded as fixed stars of small magnitude. His first discovery of this kind was the asteroid or planetoid Thetis, and others followed in rapid succession till they numbered seventeen in all. Their names are Thetis, 1852; Proserpina, 1853; Bellona, 1854; Leukothea, 1855; Fides, 1855; Aglaia, 1857; Calypso, 1858; Mnemosyne, 1859; Concordia, 1860; Leto, 1861; Niobe, 1861; Diana, 1863; Alkmene, 1864; Clio, 1865; Antiope, 1866; Arethusa, 1867; Hecuba, 1869; and the most recent Amalthea, first seen by him March 12, 1871. A more particular account of the periods of discovery of these planetoids, with the elements of their orbits and other particulars, will be found under **ASTEROIDS**, E. C. S., Arts and Sciences Division, col. 174—178. A paper by Dr. Luther, giving the elements of his latest found asteroid, Amalthea, was read before the Royal Astronomical Society, London, April 14, 1871.

Dr. Luther has published nearly a hundred scientific memoirs and papers, mostly in the 'Astronomische Nachrichten.' They relate not only to the asteroids which he himself has discovered, but also to the appearance, position, elements, and ephemerides of many of the others. Some of his papers relate to comets; these and the asteroids have almost exclusively occupied his attention as an astronomical observer. He has written a few papers conjointly with Krüger and Vogel. In 1855 the Académie des Sciences at Paris awarded him a money prize, which he transferred to the town of Leyden, to aid in defraying the cost of establishing an observatory in that town. In 1861 the Lalande Medal was awarded to him for his discoveries.

LÜTKE, PETER LUDWIG, German landscape-painter, was born at Berlin in 1759. In 1785 he went to Italy, and studied for some time under Philip Hackert. He returned to Germany in 1788, and the following year was appointed professor of landscape painting in the Berlin Academy. Lütke was a diligent student of nature, had some acquaintance with the natural history sciences, and finished his pictures with great care. His landscapes are correct, though often cold and formal. Some of his largest and best works are in the palaces of Berlin and Potsdam. He died in 1831. His son, **LUDWIG EDUARD LÜTKE**, born at Berlin in 1801, is a much-esteemed painter and lithographer of landscapes, and architectural and marine subjects.

LYNDHURST, JOHN SINGLETON COPLEY, LORD [E. C. vol. iii. col. 988]. Lord Lyndhurst, notwithstanding his great age, continued to attend, at least occasionally, the sittings of the House of Lords; and if in his last years his voice was not often heard there, he retained his interest in its proceedings, and was regarded by all parties with profound respect. He died at his house, George Street, Hanover Square, on the morning of the 12th of October, 1868, in the 92nd year of his age. Lord Campbell's memoir of him in the 'Lives of Lord Lyndhurst and Lord Brougham,' 8vo, 1869, is a mendacious perversion of the circumstances of his personal as well as of his political career.

LYONS, EDMUND LORD [E. C. vol. iii. col. 990]. Lord Lyons lived but a few months after the memoir just cited was written. He died at Arundel Castle on the 23rd of November, 1858, two days after attaining his 68th birthday, and was succeeded by his eldest son,

* **RICHARD BICKERTON PEMELL**, second **LORD LYONS**, the distinguished diplomatist, born April 26th, 1817. He was educated at Winchester and Christ Church, Oxford, and, having adopted the diplomatic profession, served as attaché to the embassy at Athens 1839—1844, Dresden 1852, and as secretary of legation at Florence 1856—1858. In December, 1858, he was appointed British minister at Washington, which post he retained till February, 1865, when he returned home in consequence of ill-health. In November, 1867, he was nominated ambassador to the Emperor of the French, and retains his position, though now (1871) accredited to the Provisional Government. Lord Lyons was created G.C.B. in 1862, and in 1865 sworn in a member of the Privy Council. In June, 1865, the University of Oxford conferred on him the honorary degree of D.C.L.

* **LYTTON, EDWARD GEORGE EARLE LYTTON BULWER-LYTTON**, first **LORD** [E. C. vol. iii. col. 994]. In 1858 Sir Edward Bulwer-Lytton, under the Earl of Derby, was appointed Secretary of State for the Colonies, and, though he resigned with the rest of the ministry in 1859, he had the happiness, during his short tenure of office, of being the instrument of formally constituting two new British colonies, Queensland and British Columbia. When Lord Derby regained power in 1866, Sir Edward Bulwer-Lytton did not form part of the ministry; but he was almost immediately raised to the peerage as Baron Lytton of Knebworth, and he has not since taken a prominent part in political life. He has, however, continued to exhibit remarkable literary activity. In 1859 he published in a complete form his elaborate novel, 'What Will He Do with It?' which appeared originally in a periodical; and 'A Strange Story,' which also having first appeared as a serial, was issued as an independent publication in 1862. In 1865 appeared his 'Poems;' in 1866, 'Lost Tales of Miletus;' in 1868, 'Miscellaneous Prose Works;' in 1869, 'Translations from Horace;' and in 1870, 'King Arthur,' of which portions had been published some years previously.

M

MACARDELL, JAMES, an eminent engraver in mezzotint, was born in 1728 (Bryan erroneously says, "about 1710"). He was a native of Ireland, and learned his art in Dublin, but practised in London. Macardell was one of the ablest portrait-engravers in mezzotint of any period. He is best known by his prints after Reynolds, which are almost perfect in their rendering of the mind and manner of the great painter. Sir Joshua, as is well known, preferred mezzotint to the other methods of engraving on account of its painter-like breadth, fidelity, and force of general effect, and the softness of the flesh; and it was precisely in these qualities that Macardell excelled; hence, no doubt, he came through Sir Joshua's patronage to be so much employed on his portraits. But he also engraved several heads and figure-pieces after Rembrandt, Rubens, Vandyck, and Murillo, as well as Hogarth, Hudson, and Zoffany. He died June 2nd, 1765, when only in his 37th year.

MACARTHUR, JOHN, the chief founder of wool-farming and one of the earliest promoters of agriculture in Australia, was born at Plymouth, Devonshire, in 1766. He was an ensign in the army at an early age, but, retiring on half pay, studied farming for awhile. Re-entering the army with the rank of captain, he went out, in January, 1790, to New South Wales with a detachment of troops intended for the defence of the colony, then barely two years old. Captain Macarthur, noticing the capabilities of the soil and climate, obtained a grant of 200 acres of land at Paramatta, near the newly founded town of Sydney. He conceived the idea of rearing sheep, with a view to sending to England wool good enough in quality for use by the woollen manufacturers. He purchased rams and ewes of the small Bengal sheep, others of the larger Cape breed, and others from England; crossed the breeds, and gradually improved the fleece. After a few years of trial, he obtained a further cross with the Spanish or Merino breed, and in four successive crossings nearly equalled the real Merino wool. Specimens of cloth, spun and woven with this wool, were sent to England for inspection in 1798. In 1802 he started for England, to solicit from the Government encouragement for this new branch of industry, a grant of unoccupied tracts in the colony as grazing land, and the services of such convicts as might be useful as shepherds. The woollen manufacturers having supported his appeal, the Government granted him 10,000 acres, but required him to resign his army commission. He returned to New South Wales in 1804, taking with him five fine Spanish Merino sheep from the king's farm at Kew, and a number of trees, fruits, and plants of various kinds. He became a large grazier and stock-owner, with 4000 sheep, and also a planter or agriculturist. In 1809 he came again to England, where he remained several years, and then paid visits to France, Italy, and Switzerland, to make himself acquainted with the modes of culture best adapted for crops likely to be suitable for the climate of New South Wales. Returning to the colony with a large supply of seeds and plants in 1817, he greatly enlarged the sphere of his operations. In 1825 he became a member of the Legislative Council. In 1831, despondent at the loss of his eldest son, he retired to a secluded life on his estate at Camden, where he died on the 10th of April, 1834. Two of his sons, James and Sir William Macarthur, were instrumental in displaying the produce of the colony, and drawing attention to its capabilities, at the International Exhibitions of 1851, 1855, and 1862. Mr. Macarthur is justly regarded in New South Wales as the "Founder of the Colony," so far as concerns the most important of its products—wool. He was the beginner of the wool trade in Australia, which has grown to such an extent in eighty years that there are now 14,000,000 sheep in New South Wales, 10,000,000 in Victoria, 5,000,000 in South Australia, 2,000,000 in Tasmania, and 9,000,000 in New Zealand; whilst the wool brought to England from these colonies in a single year, 1870, was no less than 175,000,000 lbs.

MACAULAY, THE RIGHT HON. THOMAS BABINGTON, LORD [E. C. vol. iv. col. 5]. In September, 1857, Mr. Macaulay received the unexpected intimation that it was the desire of the Queen to raise him to the peerage. He took the title of Baron Macaulay, not caring to bury his own name under a territorial designation. Lord Macaulay had but brief enjoyment of his new dignity. His health was much broken, but

there was little apprehension of danger till the end, which "was sudden and singularly quiet. On December 28, 1859, he fell asleep and woke not again." He was buried on the 9th of January, 1860, in Poets' Corner, Westminster Abbey, at the foot of Addison's statue, and close by the grave of Samuel Johnson. He was never married, and his title died with him.

Lord Macaulay left his History a fragment. He continued working at it as long as he could hold a pen, but he carried it no farther than the death of his hero, William III. The two volumes, containing so much as was finished, were published in 1861, with a memoir of Lord Macaulay by his friend, Dean Milman. Two volumes of his miscellaneous works, including a few early pieces and some essays omitted by him from the original selection, have since appeared, and in 1866 'The Works of Lord Macaulay, complete. Edited by his sister, Lady Trevelyan.' 8 vols. 8vo.

***M'CLELLAN, GEORGE B.**, American general and military engineer, was born at Philadelphia, December 3rd, 1826. Receiving a military education at West Point Academy, he quitted that establishment in 1846 with the rank of second lieutenant of engineers. Soon after this he was engaged in the Mexican war, and having distinguished himself at Contreras, Churubusco, Molino del Rey, and Chapultepec, was promoted to be captain of a company of sappers and miners. He was engaged on engineering duty at West Point from 1848 to 1851; introduced the bayonet exercise into the army of the United States; and adapted a Military Manual for the service, which received official sanction. In 1851 he superintended the engineering construction of Fort Delaware; in 1852 assisted Major Marcy in exploring and surveying the Red River country; then acted under General Smith as chief engineer in the survey of Texas; and in 1853 surveyed the western division of one of the routes proposed for a railway across the whole breadth of the American continent. In 1855 he exchanged from the engineers into the cavalry, and accompanied General Robert Lee (at that time an officer of cavalry) to the Crimea, to witness the military operations at Sebastopol. On his return he wrote a work 'On the Organisation of European Armies, and the Operations of War.' Quitting the army in 1857, he became vice-president and engineer of the Illinois Central Railway; and in 1860 accepted similar positions on the Ohio and Mississippi line.

When the Civil War broke out in 1861 he was appointed major-general of the Volunteers of Ohio, Illinois, and Indiana; defeated the Confederates in small engagements at Philippi and Blue Mountains, and took 1000 prisoners at Beverley. When M'Dowell met with his disastrous defeat at Bull Run, M'Clellan was appointed in his stead to command the Army of the Potomac. He established strict discipline among the troops, and obtained from the journalists at Washington a promise that they would not print anything likely to give the enemy a clue to his plans. In November, when General Scott resigned the command-in-chief of the military forces of the United States on account of his advanced age, General M'Clellan was appointed to succeed him; but he surrendered this post in March, 1862, in order to resume the command of the Army of the Potomac, which he had thoroughly reorganised during the winter. The Confederates having retired from the Potomac towards Richmond, M'Clellan determined to attack them on another side; he landed on the peninsula included between the York and James rivers, and marched in the direction of Richmond, the Confederate seat of government. He reached the Chickahominy and York Town in April, turned the enemy's position at the last-named place, and had various alternations of success and failure during the month of May. In June he gained the battle of Fair Oaks, and advanced towards Richmond. But now disaster supervened; his plans became known to the enemy; a flank movement that was to have been made by M'Dowell came to nothing; and M'Clellan, in a series of seven days' sanguinary battles before Richmond, was so completely defeated by Lee that he had to retreat to his gunboats, and to abandon the peninsula with great loss. This abandonment, however, which was ordered by the new commander-in-chief, General Halleck, he executed under protest, as being against his own wishes. He took position at Alexandria, to defend Washington; and having strengthened and disciplined his army, resumed the offensive,

and (after fluctuating fortunes at the second battle of Bull Run, South Mountain, Harper's Ferry, and Antietam) forced Lee to retreat at Hagerstown, and drove him and Stonewall Jackson across the Rappahannock at Sharpsburg in September. President Lincoln, well pleased at this result, wished M'Clellan to push on and capture Richmond at once; but the general, who was one of the Peace Democrats of the North, rather desired some kind of compromise that might restore peace between North and South. This divergence of views led to the supersession of M'Clellan by Burnside in November; and the supersession was virtually the close of M'Clellan's services in the war. He engaged in politics for two years, became leader of the Peace Democrats, made an unsuccessful attempt to obtain the presidency in 1864, and resigned his commission in the United States army in November of that year. General M'Clellan has some of the old Presbyterian training in him, which he showed by a grave severity of discipline, and an encouragement to his soldiers to respect Sunday observance, so far as military necessities permitted. A Washington letter, in the time of the war, stated that the general "takes soldier's fare with the rest, asking no better food and no more luxurious bed than the newest recruited private under his command." Since the peace, he has resumed his connection with railway enterprise: he is president of the Atlantic and Great Western Railway, and in 1870 he accepted the appointment of chief engineer of the docks of New York.

* M'CLINTOCK, SIR FRANCIS LEOPOLD, Arctic voyager, was born at Dundalk in 1810. He entered the navy in 1831, and attained the rank of captain in 1854. From 1850 to 1854 he assisted in the exploration of the Arctic regions. In 1857 he undertook to conduct a search after Sir John Franklin. The voyages of Franklin and others in the Arctic regions form part of a series commencing with that of Cortereal in 1500, the object of which was to discover a north-west passage to China. McClintock's expedition, which started in the Fox from Aberdeen, on July 1, 1857, resulted in demonstrating the route followed by Franklin, which route was in all probability through Lancaster Sound, Franklin Channel, and to the entrance of Victoria Strait. This area comprises the portion of the northern end of the American continent, which had not been discovered prior to 1857. Immediately before Franklin's first voyage the undiscovered portion of the north-west passage was about 2060 miles, and of this Franklin himself navigated 1260, of which 560 miles were performed in his last voyage. Sir F. L. McClintock and his companions, of whom Messrs. Young, Hobson, and Petersen were his most important coadjutors, discovered and mapped 600 miles of new land, thus completing the discovery of a north-west passage and of the northern coast-line of the American continent. Lieutenant Hobson found some documentary evidence under two cairns relating to the death of Franklin, and to some of the events connected with the expedition under his charge. The Fox returned to London on September 23, 1859. In consequence of the success with which this expedition had been conducted, Sir F. L. McClintock had numerous honours conferred upon him, and amongst them were a knighthood, the freedom of the city of London, and the patron's medal of the Royal Geographical Society. In 1864, the Aurora, screw frigate, under his command, escorted the Prince and Princess of Wales to Copenhagen. He has written 'The Voyage of the Fox in the Arctic Seas,' 8vo, London, 1859, 3rd ed., 1869.

M'CULLOCH, HORATIO, R.S.A., was born in Glasgow in 1806; studied art in his native place, and about 1829 removed to Edinburgh, where, with brief intervals, he spent the rest of his life. A 'View on the Clyde,' exhibited by him at Edinburgh in 1829, attracted much notice; and thenceforward he was a constant exhibitor in Edinburgh, though his pictures were seldom seen in London. He painted almost exclusively Scottish scenery, and his landscapes, though usually topographical, were large in style and vigorously executed. 'Views in Cadzow and the Highlands,' 'Mist in the Mountains,' 'Loch Achray,' 'Loch Lomond,' 'Lord Macdonald's Deer Forest,' and the like, were his staple subjects. For many years he was the most popular landscape painter in Scotland, and he undoubtedly ranks among the ablest and most faithful delineators of the romantic scenery of the north. After suffering for several years from successive attacks of palsy, he died at his residence, St. Colm Villa, Trinity, near Edinburgh, on the 24th of June, 1867.

* M'CULLOCH, HUGH, an American statesman and financier, was born in the State of Maine in 1811, and received his education at Bowdoin College. In 1835 he settled in Indiana as a banker, and became president of the Indiana State Bank in 1855. In 1863 he was appointed by President Lincoln to the

newly-established office of comptroller of the currency, at Washington. His success in this office during the remaining period of the Civil War, when the financial requirements of the Federal Government were so unprecedentedly heavy, led to the selection of Mr. M'Culloch as successor to Mr. Fessenden in the office of Secretary to the Treasury, when Mr. Lincoln entered upon his second term of Presidency in 1865.

MACCULLOCH, JOHN RAMSAY [E. C. vol. iv. col. 12]. In 1859 Mr. Macculloch published a second edition of his 'Treatises and Essays on Subjects connected with Economical Policy.' He died on the 11th of November, 1864. A new edition of his 'Dictionary, Geographical, Statistical, and Historical, of the various Countries, Places, and principal Natural Objects in the World,' was issued in 1867, under the editorship of Mr. F. Martin.

* M'DOUGALL, HON. WILLIAM, a Canadian statesman and journalist, was born at Toronto, January 25th, 1822. After finishing his education at Victoria College, he studied law, and was called to the bar. During a portion of his career, from 1848 to 1858, he conducted the 'Toronto Monthly Journal of Agriculture,' a periodical which had an extensive circulation; and during nearly the same period he edited the 'North American,' which was incorporated with the 'Toronto Globe' in 1857. In 1858 Mr. M'Dougall was elected member of the Canadian Parliament; and in 1862 received the appointment of commissioner of crown lands and member of the Executive Council. He resigned with his colleagues in 1864, but later in the same year joined a new coalition Government as provincial secretary. In 1866, as Minister of Marine, he assisted Admiral Hope in organising a flotilla of gunboats to act against the Fenians, if necessary. Mr. M'Dougall assisted in bringing about the union of the British North American colonies of Canada, New Brunswick, and Nova Scotia into a confederation in 1867.

MACDOWELL, PATRICK, R.A. [E. C. vol. iv. col. 15]. Subsequently to the date of the memoir just cited Mr. Macdowell executed two or three poetic figures, such as the 'Day-Dream,' 1858, and 'Eve,' 1865, and some memorial statues, including that of the Earl of Chatham for St. Stephen's Hall, in the New Palace of Westminster; but his chisel was mostly engaged on portrait busts. He died December 9th, 1870.

* MACFARREN, GEORGE ALEXANDER, composer and musical writer, was born in London, March 2nd, 1813. His father, George Macfarren (author of several dramatic compositions, and director of the Queen's Theatre, Tottenham Court-road, and afterwards of the Strand Theatre, died 1843) placed him first under Mr. C. Lucas, and then at the Royal Academy of Music, where he completed his musical training under Mr. C. Potter. Mr. Macfarren has been connected more or less with the Academy ever since, as professor, director, &c. In his numerous compositions, produced during a period of thirty-five years, he has frequently aimed at the establishment of something like a national style of music, based upon old English forms of construction, and avoiding mere imitation of Italian, German, and French music: this has given to Mr. Macfarren a special place among our living composers. His works of an operatic kind are—'The Devil's Opera,' 1838; 'Don Quixote,' 1846; 'King Charles the Second,' 1849; 'Robin Hood,' 1860; 'Jenny Lea' (an 'Opera di Camera'), 1863; 'She Stoops to Conquer,' 1864. Of these, 'Robin Hood' is regarded as the most characteristic and successful. Among his compositions of the cantata and serenata class are 'The Sleeper Awakened,' 1850; 'Leonora,' 1852; 'May Day,' 1856; 'Christmas,' 1859; 'Helvellyn,' 1864. Five of his overtures bear the titles of 'The Merchant of Venice,' 'Romeo and Juliet,' 'Chevy Chase,' 'Don Carlos,' and 'Hamlet.' In 1840 he produced a cantata called an 'Emblematical Tribute,' on the occasion of the marriage of her Majesty; and in 1864 another, 'Freya's Gift,' on that of the Prince of Wales. A 'Cathedral Service,' a Series of Old English Ditties, Songs from Shakspeare, Songs from Tennyson, Songs from Kinglake, Songs from the 'Arabian Nights,' a Harmonised Arrangement of Chappell's 'Popular Music of the Olden Times,' Symphonies, various instrumental compositions, and some hundreds of songs, duets, and glees, bear testimony to Mr. Macfarren's activity as a composer. His 'Rudiments of Harmony' stands high in estimation. He has written critical analyses of the music in Handel's 'Messiah' and other oratorios, Haydn's 'Creation,' Beethoven's Mass in D, and the same composer's 'Fidelio.' Mr. Macfarren took part in the inquiry instituted by the Society of Arts in 1860 concerning concert pitch. In 1867 he delivered six 'Lectures on Harmony,' which were afterwards published.

*MACILVAINE, RIGHT REV. CHARLES PETIT, D.D., Bishop of Ohio, U.S., was born January 18, 1798, at Burlington, New Jersey, a state which his father, the Hon. Joseph Macilvaine, subsequently represented in the Senate of the United States. He was educated at Princeton, where he graduated in 1816; and on the 4th of July, 1820, was ordained deacon by Bishop White. In 1823, after having laboured about two years in Christ Church, Georgetown, he was admitted to priest's orders by Bishop Kemp, of Maryland. In 1825 he became chaplain and professor of history and ethics in the Military Academy at West Point, which he quitted in 1827, on his appointment to the rectory of St. Ann's Church, Brooklyn, New York. He was appointed in 1831 to the professorship of the evidences of revealed religion and sacred antiquities in the University of New York; and in performance of the duties of his office delivered a course of lectures which were afterwards extremely popular and influential in their collected form, as 'The Evidences of Christianity in their external Division, exhibited in a Course of Lectures delivered in Clinton Hall, in the Winter of 1831—32, under the Appointment of the University of New York,' 12mo, New York, 1832, and which has been adopted as a text-book by several American colleges, and has gone through more than thirty editions, having been reprinted in Philadelphia, London, and Edinburgh. On the 31st of October, 1832, Dr. Macilvaine was consecrated "Bishop of the Protestant Episcopal Church in the State of Ohio," the duties of which diocese were lightened in 1859 by the consecration of Dr. Bedell as assistant-bishop. In 1853 the University of Oxford conferred the degree of D.C.L. on Bishop Macilvaine, and in 1858 he received that of LL.D. from the University of Cambridge. He visited this country in 1862 for the purpose of explaining the position and policy of the Federal Government; and on the 22nd of February presided at a public breakfast which was held in Freemasons' Hall, London, on the anniversary of the birth of Washington.

Dr. Macilvaine, who is "distinguished for the soundness and clearness of his evangelical views, and for the expository character of his preaching," has published various 'Episcopal Charges,' and 'Sermons' preached at consecrations, ordinations, and in behalf of missions and of education; and he has been a diligent contributor to periodical religious literature in New York, Philadelphia, and, to a less extent, in London. The most remarkable of his works, which include several 'Memoirs,' are his 'Oxford Divinity compared with that of the Roman and Anglican Churches: with a special View of the Doctrine of Justification by Faith,' 8vo, Philadelphia, 1841, 8vo, London and Thames Ditton, 1841; 'Reasons for Refusing to Consecrate a Church having an Altar instead of a Communion Table,' &c., 12mo, New York, 1846; a series of Twenty-two Discourses, "published at the request of the Convention of the Diocese of Ohio," entitled 'The Truth and the Life,' 8vo, New York, 1855, English edition, 8vo, London, &c., 1855; 'The True Temple: or, the Holy Catholic Church and Communion of Saints, in its Nature, Structure, and Unity. With an Introductory Preface by the Honourable S. Waldegrave, Lord Bishop of Carlisle,' 8vo, London and Philadelphia, 1861; and an article, reprinted from the 'Christian Observer' for May, 1867, with the title of 'A Letter to "Clerical Brethren in Norfolk," on Ritualism and Rationalism in the American and English Churches,' 8vo, London, 1867.

MACLEAY, WILLIAM SHARP, entomologist, was born in London, July 30, 1792. He was educated at Westminster and at Trinity College, Cambridge. Soon after leaving the university he became secretary to the Board for liquidating British claims in France. In 1828 he went to Cuba as commissioner of arbitration to the Mixed British and Spanish Court of Commission, and in 1836 he was appointed judge of the Mixed British and Spanish Court of Justice. In 1856 he returned to England, and in 1857 he retired from the public service. In 1859 he went to New South Wales for the benefit of his health, and settled at Elizabeth Bay, Sydney, where he occupied himself in cultivating rare plants, in prosecuting his studies, and in entertaining his friends. He died at his residence in Elizabeth Bay on the 25th of January, 1865. Although his attention was mainly given to insects, he had an extensive acquaintance with most of the other classes of organic forms. His first important work was 'Horæ Entomologicae,' 2 parts, 8vo, 1819—1821, which has become very scarce, owing to the greater portion of the copies of the first part having been destroyed by fire, and to the second edition having been damaged by water during a high rise of the Thames. He also wrote 'Annulosa Javanica,' 4to,

London, 1825, a work which was never completed. He contributed the 'Illustrations of the Annulosa of South Africa,' in A. Smith's 'Illustrations of the Zoology of South Africa,' 4to, 1849; and wrote numerous papers for various scientific journals. He gave great attention to the systematic classification of organic beings, and was one of the first to clearly point out the necessity of distinguishing between affinity and analogy in the formation of groups. He opposed the prevailing method of arranging the relationships of animals in linear series and dichotomously, and proposed a circular mode of arrangement. Every natural group, he considered, returned into itself, and consisted of ten types, five of which were primary and five subordinate or osculant. In his 'Horæ Entomologicae' he developed his system with remarkable skill. His views were adopted by several eminent zoologists. Thus Vigors applied them to birds, Horsfield to the butterflies, and Swainson to various groups. In Macleay's later writings he considered each group to consist of five types only. This method of circular grouping finds little favour now, as most of the classifications based upon it are necessarily more or less constrained and arbitrary. After 1849 he published little, but he left a large mass of papers ready for publication.

*MACLEOD, NORMAN, D.D., a Scottish divine and author, son of the late Rev. Dr. Norman Macleod, who was a distinguished Gaelic scholar, one of the deans of the Chapel Royal of Holyrood, and a sometime Moderator of the General Assembly of the Church of Scotland, was born on the 3rd of June, 1812, at Campbeltown, Argyshire, and was educated at the Universities of Glasgow and Edinburgh. He further pursued his studies in Germany; and, in 1838, became minister of the parish of Loudoun, Argyshire, a charge which he exchanged in 1843 for that of Dalkeith. In 1851 he was called to the Barony parish, in Glasgow, and received the degree of D.D. in 1858. He is widely known for his breadth and liberality of sentiment, and the zeal with which he has devoted himself to the advancement of the working classes, in whose behalf he has instituted and conducted special services in his church, and connected himself with several associations in Glasgow for their benefit.

Dr. Macleod, who is one of her Majesty's chaplains for Scotland, in which capacity he frequently officiates before the Court in the Highlands, is most popularly reputed as the editor of 'Good Words,' a monthly periodical, which, commenced in 1860, speedily attained a circulation unprecedented amongst works of its character. To this magazine he has been a constant contributor, passing the principal of his later works through its pages before giving them an independent publication. He is the author, *inter alia*, of the 'Earnest Student: being Memorials of J. Macintosh,' 8vo, Edinburgh, 1847, &c., popular edition, 8vo, London, 1863; 'The Home School: or, Hints on Home Education,' 8vo, Edinburgh, 1856, &c.; an 'Introduction' to 'Prevailing Prayer,' 8vo, Edinburgh and London, 1859; 'Parish Papers,' 8vo, London and Edinburgh, 1862; 'The Recognition of Friends in Heaven,' 16mo, London, 1863; 'The Lord's Day: Substance of a Speech delivered at a Meeting of the Presbytery of Glasgow, on Thursday, 16th November, 1865,' 8vo, Glasgow, London, and Edinburgh, 11th thousand, 1865, which gave rise to much animadversion on account of an announcement by the author that he did not believe in the continued obligation of the fourth commandment, and that he based his opinion in reference to the Lord's Day, "not on the Sabbath law of the Decalogue, as to the origin, but on the necessities of Christian worship, and the authority of Christ and his Apostles;" 'Eastward,' 8vo, London and New York, 1866, being a record of travel in Palestine, in company with Mr. Strahan, his publisher; 'Simple Truth spoken to Working People,' 8vo, London, 1867; 'The Old Lieutenant and his Son,' 8vo, London, 1867, which was reproduced in vols. 643 and 644 of the 'Tauchnitz Collection of British Authors,' 16mo, Leipzig, 1841, &c.; 'Reminiscences of a Highland Parish,' 8vo, London, 1867; 'The Starling: a Scotch Story,' 2 vols. 8vo, London, 1867, &c.; 'Address on Christian Missions to India: with general Reference to the Educational Missions of the Church of Scotland,' 8vo, Edinburgh and London, 1868, which was delivered on the 28th of May of the last-named year, as the result of his observations on a tour of missionary inspection throughout the various Presidencies of India, to which he was commissioned by the General Assembly of 1867; 'The Concluding Address to the General Assembly of the Church of Scotland, May, 1869,' 8vo, London, 1869; and various 'Sermons,' 'Lectures,' and 'Addresses.'

MACLISE, DANIEL [E. C. vol. iv. col. 30]. For some years after the publication of the memoir in the E. C., Mr. MacLise was almost exclusively occupied on his great paintings of Waterloo and Trafalgar in the Royal Gallery of the House of Lords. His performance of this commission illustrates remarkably MacLise's conscientious mode of procedure. The original intention of the authorities was to have the pictures executed in fresco; but, dissatisfied with the appearance of the frescoes already painted on the walls of the Houses of Parliament and elsewhere, Mr. MacLise went to Italy to examine the early frescoes and the recent mural paintings and processes, and thence to Germany, in order to study the new method of painting in water-glass, or stereo-chromy, adopted by Kaulbach. Having, after patient comparison, convinced himself of the superiority of the new process, he determined to adopt it, and stayed at Munich till he had thoroughly mastered its technical difficulties. The process as modified by MacLise is explained under WATER-GLASS PAINTING, E. C., Arts and Sciences, Div., vol. viii. col. 743. The pictures are each 45 feet long and 12 feet high, and are painted in water-colours on an intonaco of lime, the water-glass (a soluble silicate of potash) being applied in a diluted state as a varnish. The first of the two pictures, 'The Meeting of Wellington and Blucher on the Evening of the Battle of Waterloo,' was completed in the spring of 1862; 'The Death of Nelson at Trafalgar' occupied two or three years longer. Beyond comparison, they are the finest mural paintings yet executed in England, and far superior to any works of a similar class that have in our time been produced on the Continent. With minute accuracy in circumstance and details—and for everything represented MacLise could produce authority of a kind to satisfy the most exacting historical critic—both pictures combine general truth, breadth of treatment, poetic feeling, and the most powerful and refined sentiment, and exhibit a mastery over technicalities such as is rarely equalled. On the completion of these pictures MacLise returned, somewhat disturbed by the treatment he experienced at the hands of the Government, and depressed by the little sympathy expressed for his ten years' labour, to his easel-painting, but he never worked again at oil-painting with his old vigour. The only pictures of consequence exhibited by him subsequently to the completion of the Waterloo and Trafalgar were—'Othello, Desdemona, and Ophelia,' and 'A Winter Night's Tale,' 1867; 'The Sleep of Duncan,' and 'Madeline after Prayer,' 1868; 'King Cophetua and the Beggar Maid,' 1869, a work executed quite in his old manner; and 'The Earls of Desmond and Ormond,' exhibited posthumously, 1870. Daniel MacLise, after having been for some time out of health, though not seemingly seriously ill, died, at his residence, Cheyne Walk, Chelsea, on the 25th of April, 1870, having just completed the first quarter of his 60th year. MacLise was a member of the Royal Academy, Stockholm. On the death of Sir Charles L. Eastlake, December 1865, the presidency of the Royal Academy was offered him, but declined, and he also declined the honour of knighthood. A marble bust of Daniel MacLise has been placed in the council-room of the Royal Academy, 1871. 'A Memoir of Daniel MacLise, R.A., by W. J. O'Driscoll,' 8vo, 1871, is chiefly concerned with his personal character and private life.

* MACMAHON, MARIE EDMOND PATRICE MAURICE DE, DUC DE MAGENTA, a Marshal of France, was born July 13, 1808, at Sully (Saône et Loire). The MacMahons, an Irish family who had risked and lost much in defence of the Stuarts, settled in France, and intermarried with some of the noble families of that country. The father of Marshal MacMahon was a peer of France, and a personal friend of Charles X. Young MacMahon entered the Military School of St. Cyr in 1825, and on quitting it joined the corps of the *État Major*. He went to Algiers in 1830, and in 1832 accompanied the French expedition to Antwerp as aide-de-camp to General Achard. Returning to Algiers in 1833 with the rank of captain, he served as aide-de-camp, was wounded at the siege of Constantine in 1837, and received the decoration of the Legion of Honour. He was promoted to the rank of major of *Chasseurs à pied* in 1840; lieutenant-colonel of the Foreign Legion in 1842; colonel of the 41st regiment of the line in 1845; general of brigade in 1848; commander of the Legion of Honour in 1849; general of division in 1852; and grand officer of the Legion of Honour in 1853. When Marshal Canrobert quitted the French army in the Crimea in 1855, and returned invalided to France, MacMahon took the command of a division under Bosquet; and upon him fell the onerous duty of leading the assault against the formidable Malakoff fort, which was the key to the Russian position at Sebastopol. The success of this achievement, on the 8th of September, won further honours for MacMahon; he was

made grand cross of the Legion of Honour, and in 1856 a senator; while Queen Victoria bestowed upon him the decoration of the Grand Cross of the Bath. He fought the Italian campaign in 1859; his services there were rewarded by admission among the roll of Marshals of France, and by a peerage title as Duc de Magenta. He took part in a costly and brilliant embassy to Berlin in 1861, as representative of France at the coronation of the King of Prussia; but returned to military duties in 1862, as commander of the Third Corps d'Armée; and in 1864 resumed duty in Algiers. The Government of that colony, for the next five years, brought more harass than honour, through epidemic sickness, the departure of some of the industrious non-military colonists, and hostile incursions by the Kabyles and other tribes; and as late as 1869 Marshal MacMahon had to repel an inroad of natives from the Sahara.

When France declared war against Prussia in July, 1870, Marshal MacMahon was placed in command of the First Corps d'Armée, stationed in the Vosges Mountains and Northern Alsace, to conduct operations on the Rhine frontier. In this important and arduous post he had to pass through a brief but terrible campaign without one gleam of success. During the last week in July his troops held various positions near the Rhine and on the frontier of Rhenish Bavaria. On the 4th of August the Prussians, under the Crown Prince, suddenly appeared on the French side of the frontier, and defeated a portion of the Marshal's army at Weissenbourg. Two days afterwards a more serious defeat was inflicted at Wörth, when the French lost 6000 men, 30 pieces of artillery, 6 mitrailleuses, and 2 eagles. So impetuous was the attack made by the Crown Prince of Prussia, and in such overwhelming force, that the Marshal had to retreat hastily towards the west; the Prussians gained possession of the passes over the Vosges Mountains on the 12th; pushed him towards Toul on the 13th; and he was only enabled by rapid marches to reach the camp at Châlons. Under such hurried councils as could at the time be agreed upon, MacMahon started from Châlons on the 20th, entered Rheims on the 21st, reached Reims on the 24th, and then encountered another Prussian army, under Prince Charles. He was defeated near Montmédy on the 29th, with a loss of 4000 prisoners; at Beaumont on the 30th, with a loss of 10,000 prisoners and 25 pieces of artillery; and at Douzy and Bazeilles on the 31st. His object had been to effect a junction with Marshal Bazaine at Metz; but his plans are believed to have been overruled, and he was obliged to retreat to Sedan, which place was closely invested and besieged by the enemy in enormous force on the 1st of September. MacMahon was wounded; and the Emperor of the French decided to surrender himself and 90,000 trained troops prisoners of war. The time has hardly arrived for tracing the true cause or causes of this terrible series of disasters; but few attribute them to the Duc de Magenta. MacMahon remained at large on parole during the winter of 1870–71, slowly recovering from his wound. In April, 1871, the Government of the National Assembly summoned him to Versailles to take command of the troops engaged against the Government of the Commune at Paris; and he has almost to the moment of writing been engaged in the saddest duty that can occupy a soldier—that of fighting against a portion of his countrymen. Paris being reconquered (June 1871), he has undertaken the next most urgent and onerous task of reorganising the army.

MACNAB, SIR ALAN [E. C. vol. iv. col. 31]. Sir Alan MacNab died on the 8th of August, 1862.

MADERNO, CARLO, celebrated Italian architect, was born, in 1556, at Bissone in Como. Employed as assistant by his uncle, Domenico Fontana, in erecting some obelisks at Rome, his attention was directed to architecture, and he engaged in the study of its principles and practice. One of his first works was the completion of the church of S. Giacomo degl' Incurabili, commenced by F. da Volterra; and this was followed by the façade of S. Susanna and the cupola of S. Giovanni dei Fiorentini, and the Aldobrandini, Rusticucci, and Strozzi palaces. In 1605 he received from the new Pope, Paul V., the appointment of architect to the Vatican, and directions to complete the cathedral of St. Peter. Maderno's design, which was approved by the Pope, was to extend the nave, and so alter the plan of the church from a Greek cross, as designed by Michelangelo, to a Latin cross. The entrance façade and portico were also added by Maderno: their propriety has been a subject of contest ever since their erection, but it is now generally admitted that Maderno's alterations and additions detract materially from the unity and majesty of Michelangelo's design. Maderno's other works include the erection or alteration of the Pontifical Palace

on the Quirinal, and the Olgiate, Lancellotti, and Mattei palaces, and the churches of SS. Chiara and Andrea della Valle. He also acted as military engineer and surveyor of the papal harbours. He died in 1629.

* MÄDLER, JOHANN HEINRICH, Prussian astronomer, was born at Berlin, May 29th, 1794. After serving as director of the Normal School in that city, he joined Beer (brother of Meyerbeer, the composer) in a series of accurate observations and measurements of the moon. In 1836 they completed the publication, in four sheets, of a Map of the Moon, three feet in diameter—the best produced up to that time, and ever since regarded as of the highest authority. A work was afterwards published descriptive of it, 'Allgemeine Vergleichende Selenographie,' 2 vols. Berlin, 1837. His success in these labours led to the appointment of Mädler to the Berlin Observatory in 1836; and in 1840 he was appointed director of the Russian Observatory at Dorpat. He took up with great earnestness the study of the fixed stars, and put forth a theory much discussed since, viz., that all, or nearly all, the visible stars revolve, as if they were planets, round a central sun, the centre of the universe—the direction of which, in reference to the earth, he attempted to indicate. He published annual reports of the observations made at Dorpat, 'Beobachtungen der Kaiserlichen Universitäts Sternwarte zu Dorpat.' The fine instruments at that observatory enabled him to make accurate measurements and tabulations of the stars, some of which he embodied in 'Untersuchungen über das Fixsternsystem.' In 1841 he published, with Beer, a treatise on the Physical Characteristics of the Solar System, 'Beiträge zur physischen Kenntniss der himmelischen Körper in Sonnensystem;' in 1844, an Introduction to the Study of Mathematical and Physical Geography, 'Leitfaden zur mathematischen und allgemeinen physischen Geographie;' in 1845, 'Ueber das Fixsternsystem;' in 1846, a popular treatise on astronomy, and 'Die Centralsonne,' of which a second edition appeared in 1847; in 1851, 'Der Gestirnte Himmel;' in 1851, another work on the same subject, 'Der Fixsternhimmel;' in 1861, the second edition of 'Die Fixsternwelt,' and in the same year, an Account of the Solar total Eclipse, 'Ueber totale Sonnenfinsternisse.' Besides these distinct works, Mädler has contributed nearly one hundred papers to the scientific journals, almost all on astronomical subjects. Among the more important are 'Ueber die Sternsysteme;' 'Uebersicht der neuesten Erweiterungen und des gegenwärtigen Standes unserer Kenntniss der Sonnensystem,' 1846; and 'Ueber den Bau des Weltalls,' 1856. He has also written papers in conjunction with Beer, Gersdorff, and Nohus. Having overtaxed his powers by long-continued observations on the stars, he contracted a malady of the eyes, which rendered necessary his retirement from his office at Dorpat Observatory in 1865; he then returned to Germany.

MADRAZO Y AGUADO, DON JOSÉ DE, an eminent Spanish painter, was born at Santander, April 22nd, 1781. He studied in the Madrid Academy; at Paris, under David; and in Italy. In 1818 he returned to Madrid, on being appointed court-painter by Ferdinand VII.; in 1819 he was made director of the Madrid Academy of the Fine Arts. Madrazo painted religious, historical, and mythological subjects, and some portraits; of these a 'Christ Scourged,' the 'Triumph of Divine over Profane Love,' and an 'Equestrian Portrait of Ferdinand VII.,' which are in the Museum, Madrid, are characteristic examples. His paintings are greatly admired by his countrymen, but they are weak imitations of the style of David. As director of the Academy, Madrazo exerted a powerful influence over recent Spanish art, and Spain owes to him the foundation of the Royal Lithographic Establishment of Madrid, of which he had the entire control. From it he issued the series of lithographs of paintings in the Royal Galleries of Spain, 'Coleccion lithographica de cuadros del Rey de España,' Madrid, 1826—1842, in three folio volumes, a work which is not an unworthy rival of the famous Dresden Gallery, though the lithographs are of very unequal merit. Madrazo also established, in conjunction with De Schoa, the periodical, 'El Artista.' He died in 1859.

* MADRAZO Y KUNT, DON FEDERICO, son of Don José de Madrazo, was born at Rome, February 12, 1815. He was taken by his father to Madrid in 1818, and learned painting under his father and D. A. Lista. He painted a 'Resurrection' when only fourteen years of age, and when nineteen a huge picture of the Deathbed of Ferdinand VII., which, under the title of 'El Amor conugal o Maria Christina,' was lithographed and inserted in the great 'Coleccion' of royal pictures by express command of the Queen. Federico de Madrazo afterwards visited France and Germany, where he became a convert to the theories

of Overbeck, as was shown in his large painting of 'Angels at the Sepulchre announcing the Resurrection of Christ.' His 'Godefrey proclaimed King of Jerusalem' obtained a place in the Museum of Versailles. Madrazo's portraits are, however, more esteemed than his compositions. He was court portrait-painter, and one of his state portraits of Queen Isabel forms the frontispiece to the third volume of the 'Coleccion' above referred to. A long and very eulogistic biography of F. de Madrazo is given in volume vi. of Pastor Daiz's 'Galeria de Españolas Celebres Contemporáneas.' A brother, LUIS MADRAZO, is also a painter of historical and religious subjects.

* MADVIG, JOHAN NICOLAI, a Danish critic, philologist, and statesman, was born on the 7th of August, 1804, at Svaneke, in the island of Bornholm; and was educated successively at the school of Frederiksborg and the University of Copenhagen, in the latter of which he became a docent in 1826, a lector in 1828, and in 1829 professor of the Latin language and literature. As a member of the National Diet, to which he was elected in 1839, he laboured earnestly to promote the interests of his university and the advancement of classical education; whilst as a politician he advocated the principle of Scandinavian unity. In November, 1848, the advanced liberalism of his opinions, and the prominent position he had assumed in promoting the war against the Duchies, procured him the appointment of minister of Public Worship; from which office he retired on his appointment, January 28th, 1852, to the directorship-general of Public Instruction.

His critical and philological works comprise, 'Emendationes in Ciceronis Libros philosophicos,' 8vo, Copenhagen, 1826; 'De Q. Asconii Pediani et aliorum veterum Interpretum in Ciceronis Oraciones Commentariis Disputatio critica,' 8vo, Copenhagen, 1828; 'Ad Virum celeberrimum Joh. Casp. Orellium Epistola critica de Oratorum Verrinarum Libris II. extremis emendandis,' 8vo, Copenhagen, 1830; 'De Coloniarum Populi Romani Jure et Conditione Quæstiones historice,' 2 parts, 4to, Copenhagen, 1832; 'Opuscula academica, ab ipso collecta, emendata, aucta,' 2 vols. 8vo, Copenhagen, 1834—1842; a Latin Grammar for the use of Schools, 'Latinsk Sproglaere til Skolebrug,' 8vo, Copenhagen, 1841, and since republished in several editions, German translation, by L. H. F. Oppermann, 'Lateinische Sprachlehre für Schulen,' 8vo, Brunswick, 1844, third edition, 1857, and others, English translation, by G. Woods, from the German of Oppermann, 8vo, Oxford, second edition, 1851; 'Graesk Ord-føiningslaere, issaer for den attiske Sprogform,' 8vo, Copenhagen, 1846, German translation, 'Syntax der griechischen Sprache, besonders der attischen Sprachform,' 8vo, Brunswick, 1847, English version, translated from the German by H. Browne, and edited by T. K. Arnold, 'Syntax of the Greek Language, especially of the Attic Dialect,' &c., 8vo, London, 1853; 'Emendationes Livianæ,' 8vo, Copenhagen, 1860; and political brochures on the Bill on the Constitution of the Estates of Holstein, &c., 'De holstenske Stænders Forfatningsforslag og Grev Sponneck,' 8vo, Copenhagen, 1859, German translation, 'Der Verfassungsvorschlag der holsteinischen Stände und Graf Sponneck,' 8vo, Copenhagen, 1859; and the National Policy and the Danish Monarchy, 'Den nationale Politik og det danske Monarchie,' 8vo, Copenhagen, 1864. Professor Madvig has likewise edited selections from the Latin poets, and select orations and philosophical treatises of Cicero; and, jointly with J. L. Ussingius, the works of Livy, 'Titii Livii Historiarum Romanarum Libri qui supersunt,' 8vo, Copenhagen, 1861, &c.

MAGINN, WILLIAM, LL.D., a journalist and scholar, was the son of a schoolmaster at Cork, where he was born in the year 1794. Thanks to his own precocity and the skilful training of his father, he was able at ten years of age to enter Trinity College, Dublin; after going through the curriculum of which, he returned to Cork to undertake the management of his father's school. He conducted this establishment for some years, varying his duties with fugitive writing for periodicals, especially for 'Blackwood's Edinburgh Magazine,' to which he was a contributor from the year 1819, and in which his 'Maxims of Sir Morgan O'Doherty,' 16mo, Edinburgh, 1849, made their original appearance. In 1823 he married, gave up his school, and repaired to London, where his varied gifts of scholarship and satire speedily procured him sufficient literary employment. In 1825 he acted as Paris correspondent to a short-lived and unfortunate daily paper called 'The Representative.' Afterwards he became joint-editor of the 'Standard;' and in 1830, in conjunction with Hugh Fraser, projected and established 'Fraser's Magazine,' to which he was for several years the most remarkable contributor. A caustic review of a novel entitled 'Berkeley

Castle' so irritated the author that the latter committed a violent assault upon Mr. Fraser. Maginn adopted the quarrel, and a duel, fortunately a bloodless one, was the result. A Tory in politics, he directed against the members of the Liberal party the gaiety and recklessness of his satire; but the original irregularity of his habits rapidly increased during his latter years, and his circumstances became so much embarrassed that in the beginning of 1842 he found himself lodged as a debtor in the Fleet prison. He recovered his liberty by passing through the Insolvent Debtors' Court; but the shock to his spirits and constitution was so great that he died a short time after, August, 1842, of consumption, at Walton-on-Thames. He was interred in the churchyard there; but his grave is unmarked by a stone. At the period of his death he was in extreme destitution, from which the munificence of Sir Robert Peel, whose party he had served without owing anything to their patronage, came too late to relieve him. Dr. Maginn died in ignorance of the kindness of the benevolent statesman, having not long before dictated for 'Blackwood's Magazine' the close of the last of a series of poems, which were afterwards published as 'Homeric Ballads,' &c., 16mo, London, 1850. Several biographical sketches have appeared of Dr. Maginn; but his works, which have several times been called for in a collected form, have not yet been issued in this country. Many of them have, however, been collected and republished in America, by Dr. R. Shelton Mackenzie, who has enriched them with notes and a biographical notice. They are entitled 'Maginn's Miscellanies,' 5 vols., 12mo, New York, 1855—1857, of which the first and second volumes contain 'O'Doherty's Papers;' the third volume, the 'Shakspeare Papers,' which were afterwards published in London, 8vo, 1859, new edition, 1860; and the fourth and fifth volumes, respectively, the 'Homeric Ballads' and the 'Fraserian Papers.' Some of his stories have been issued as parts of volumes, and have especially figured in 'Tales from Blackwood;' whilst one of his larger works of fiction had a substantive publication as 'John Manesty, the Liverpool Merchant,' 2 vols., 8vo, London, 1844.

* MAGNE, PIERRE, a French senator and financier, was born on the 3rd of December, 1806, at Périgueux, where, after having studied law at Toulouse, he commenced practice as an advocate in 1831. He represented Périgueux in the Chamber of Deputies from 1843 to 1848, during which interval he sustained confidential relations with Marshal Bugeaud, and attracted attention by the ability of a report which, as a member of the committee on the budget in 1845, he drew up on the finances of Algeria. He was appointed successively "directeur du contentieux" to the Ministry of War, July 11th, 1846, and under-secretary of state to the same department, 24th November, 1847. On the triumph of the Revolution of February, 1848, he retired to his practice at Périgueux; from which he emerged in November, 1849, to fill the office of under-secretary for finance. On the 10th of April, 1851, he was appointed to the ministry of Public Works, an office which he filled, with two short intervals—between the 26th of October and the 1st of December, 1851, and the 22nd of January and the 28th of July, 1852—until 1854, when he was called to succeed M. Bineau as finance minister, being in turn succeeded, in November, 1860, by M. de Forcade Laroquette. He now became one of the first two ministers without a portfolio, M. Billault being the other; and in this capacity took part in the deliberations of the Senate, of which he had been named a member on the 31st of December, 1852. He resigned office at the end of March, 1863, in consequence of a difference of opinion with M. Fould; and was appointed by the Emperor—who had, in August, 1854, promoted him to be Grand Cross of the Legion of Honour—to be a member of the Privy Council, April 1st, 1863. On the 13th of November, 1867, M. Magne was recalled by imperial decree to the ministry of Finance, which he resigned on the 27th of December, 1869, with all his colleagues, in order to make way for the cabinet of M. Emile Ollivier.

MAGNOL, PIERRE, botanist, was born at Montpellier, June 8, 1638. He evinced from his earliest years a strong inclination for botanical studies. In 1659 he took his degree of doctor of medicine; in 1663, on the recommendation of Tournefort, he was appointed one of the king's physicians; in 1667 he offered himself for the professorship of botany at Montpellier, but was rejected on account of his having embraced the Protestant religion. He then occupied himself in exploring various parts of France, the Alps, and the Pyrenees. When the Edict of Nantes was issued Magnol renounced Protestantism, and in 1694 was appointed professor of medicine at Montpellier.

In 1697 he became director of the Botanical Gardens of Montpellier, and in 1707 was elected to succeed Tournefort as a member of the Academy of Sciences, the rule requiring that every member be a resident in Paris being set aside in his favour. He died in his native town, May 21, 1715. His writings comprise—'Botanicum Monspelienae,' 8vo, Lyon, 1676, of which subsequent editions appeared at Montpellier in 1686 and 1688; 'Prodromus Historiæ generalis Plantarum in quo familiæ plantarum per tabulas disponuntur,' 8vo, Montpellier, 1689; 'Hortus Regius Monspelienensis,' 8vo, Montpellier, 1697; 'Novus character Plantarum in duos tractatus: primus de herbis et subfructibus, secundus de fructibus et arboribus,' 4to, Montpellier, 1720; and several scientific articles. His most important work is the 'Prodromus,' in which he contributed towards the establishment of the natural method of classification by recognising the existence of natural groups, for which he proposed the word family, and which he defined by the characters presented not only by the fruit, but by every other portion which affords distinctive characters. He himself did not make much advance in classifying, owing to his not being acquainted with the principle which was established by Bernard de Jussieu, viz., the subordination of characters. His name and fame are commemorated in the beautiful genus, *Magnolia*.

* MAGNUS, EDUARD, German painter, born at Berlin, January 7, 1799; studied in the first instance medicine and philosophy, and then architecture, but eventually turned to painting, and became a pupil of Schlesinger. His first picture was exhibited in 1826. He then went to Rome, where he remained several years. In 1835 he returned to Berlin; in 1837 he was elected a member of the Berlin Academy, in 1844 professor, and in 1866 member of the Senate. Magnus's reputation rests chiefly on his genre pictures and portraits. Of the former many are of Italian peasants, fishermen, &c. His portraits include the royal family of Prussia, Thorwaldsen, Mendelssohn, Jenny Lind, Sonntag, and other eminent persons, and are considered to be faithful and characteristic likenesses.

MAGNUS, HEINRICH GUSTAV, was born at Berlin, 2nd May, 1802. He was a student at Berlin University, and studied chemistry at Stockholm and at Paris. In 1831 he returned to Berlin, and, as privat-docent, delivered lectures on Technology and also on Physics, of which subjects he became professor at the university in 1845. He died at Berlin on the 4th of April, 1870. From the year 1825 to the time of his death he published a very large number of papers, chiefly in Poggendorff's 'Annalen,' on subjects connected with chemistry, physics, and physico-chemistry. Some of his later investigations referred to the conduction, absorption and polarisation of heat by different gaseous and liquid media. His well-known work, 'Hydraulische Untersuchungen,' 8vo, Leipzig, 1855—1859, is a revised reprint of papers that had already appeared in the 'Annalen.'

MAGNUSSON, FINN or FINNUR, a celebrated Scandinavian archaeologist, was born on the 27th of August, 1781, at Skalholt, in Iceland; and after receiving his earlier education from his maternal uncle, Bishop Hans Finnson, repaired in 1797 to the University of Copenhagen. Having completed his studies in arts and in law, he returned to Iceland in 1803, and practised as an advocate at Reykjavik. In 1815 he was appointed to a professorship at Copenhagen; and delivered lectures in the University and the Academy of the Fine Arts, on ancient northern literature and mythology. Throughout a series of years he devoted himself to the exposition and illustration of the mythology and Saga-history of the north of Europe, on the former of which themes especially his writings are extremely valuable and important. He died at Copenhagen on the 24th of December, 1847.

His works comprise a treatise on the Most ancient Abode and the Migrations of the Caucasian Race, 'Udsigt over den kaukasiske Mennekestammes ældste Hjemsted og Udvandringer,' 8vo, Copenhagen, 1818; Contributions to Northern Archaeology, 'Bidrag til nordisk Archaeologie,' 8vo, Copenhagen, 1820, Swedish translation, Stockholm, 1825, in which he maintained the adaptability of the northern legends for the purposes of artistic representation, by which he provoked considerable discussion; a Translation and Exposition of the elder Edda, &c., 'Den ældre Edda. En Samling af de nordiske Folks ældste Sagn og Sange ved S. Sigfusson. Oversat og forklaret,' &c., 4 parts, 8vo, Copenhagen, 1821—1823; an Exposition of the Doctrines of the Eddas in relation to the Origin and Nature of the Universe, the Gods, &c., 'Eddalaeren og dens Oprindelse,' &c., 4 vols. Copenhagen, 1824—1826, a work of vast research and great ingenuity, in which the author regards the Eddas chiefly, if not exclusively, as poetic

pictures and interpretations of the phenomena of external nature; *Review of the Life and Career of Snorre Sturlesön*, 'Udsigt over Snorre Sturlesön's Liv og Levnet,' 8vo, Copenhagen, 1823; '*Priscæ veterum Borealiæ Mythologiæ Lexicon: cuncta illius Cosmologica, Theosophica, et Dæmonica Numina Entia et Loco Ordine alphabetico indicans, illustrans et a magna Parte cum Exteris ista contingentibus comparans. Accedit septentrionalium Gothorum, Scandinavorum, aut Danorum gentile Calendarium, ex Asia oriundum, jam primum expositum et cum variis cognitarum Gentium, Fastis, Festis, et solemnibus Ritibus vel Superstitionibus collatum*,' 4to, Copenhagen, 1828; a large work on Runes, '*Runamo og Runerne*,' Copenhagen, 1841. Besides a considerable number of fugitive and less important contributions to poetical, monumental, and mythological antiquity, Magnusson produced, in conjunction with Rafn, an important work on the *Historical Monuments of Greenland*, '*Grönlands historiske Mindeaaerker*,' 3 vols. Copenhagen, 1838—1845.

MAHONEY, FRANCIS SYLVESTER, a scholar and journalist, better known by his *nom de plume* of FATHER PROUT, and a member of a younger branch of the ancient family of Mahoney, of Dromore Castle, county Kerry, was born at Cork, about the year 1805. He was educated from an early age at a Jesuit college in France, and was afterwards a student at the University of Rome; and returning from Italy in clerical orders, performed for a short time the duties of a Roman Catholic priest in Ireland. His connection with the Society of the Jesuits having been severed, he devoted himself to literature as a profession, and his ripe scholarship, combined with his powers of wit and pathos, ensured his welcome reception as a contributor to '*Fraser's Magazine*,' then under the direction of Dr. Maginn, for which he wrote a series of pseudonymous papers, which were afterwards published as '*The Reliques of Father Prout*,' 2 vols., 12mo., London, 1836, and since re-issued as one of the volumes of '*Bohn's Illustrated Library*.' He subsequently spent some years in travelling through Hungary, Asia Minor, Greece, and Egypt; and in January, 1846, accepted the invitation of the late Charles Dickens to undertake the post of Roman correspondent of the '*Daily News*,' to which he contributed a series of articles, which were republished as '*Facts and Figures from Italy*,' by Don Jeremy Savonarola, Benedictine Monk, addressed during the last two Winters to Charles Dickens, Esq., being an Appendix to his "*Pictures*," 8vo, London, 1847. For the last eight years of his life Mahoney was Paris correspondent of the '*Globe*,' of which journal his letters were one of the chief attractions; and, in spite of a long and complicated illness, he continued to fill the duties of his post until a few weeks before his death, when he was obliged to delegate them to another hand. He died at Paris on the evening of the 18th of May, 1866.

MAIRAN, JEAN JACQUES DORTOUS DE, was born at Béziers, 26th November, 1678, of a family belonging to the lower nobility. When only four years of age, he lost his father, but was carefully educated by his mother. He studied in the College of Toulouse, and, becoming master of his own actions at the age of 16, he preferred to lead a retired studious life. In 1698 he went to Paris, and passed four years in studying mathematics and physics. Returning to his native town, he resumed his quiet life, and was a little alarmed at the acclamation with which some Memoirs of his were received by the Academy of Bordeaux between 1715 and 1717. For the better cultivation of science he determined to settle in Paris, where he became an Associate of the Academy in 1719. His '*Dissertation sur la Glace*' appeared first in 1715 and 1717, and again in 1749. His '*Traité Physique et Historique de l'Aurore Boréale*' also went through several editions. He likewise wrote on subjects connected with heat, light, astronomy, and mechanics. He was also employed by Government in certain scientific inquiries, and in 1740 succeeded Fontenelle as Perpetual Secretary of the Academy; but he accepted the post for three years only, and in 1743 became full member. He was also a Fellow of the Royal Society of London and other societies, and was for some time editor of the '*Journal des Savants*.' In addition to his numerous publications, we may notice a volume of '*Éloges*' of the academicians who died while he was secretary. He is not so happy in this branch of literature as Fontenelle, but nevertheless sustains the high character of this peculiarly French mode of writing. Voltaire frequently consulted Mairan on subjects connected with science. Mairan died on the 20th of February, 1771, from the effects of a cold, caught in going to a dinner-party at the Prince de Conti's, and wishing to spare the men who carried his chair in consequence of the rigorous weather.

MAISTRE, JOSEPH, COMTE DE, an Italian statesman and man of letters, member of an ancient family which was originally of Languedoc, and son of Count François Xavier de Maistre, president of the Senate of Savoy, was born at Chambéry on the 1st of April, 1753, being the eldest of a family of ten children. He received his earlier education from the Jesuits, a respect for whose order he inherited from his mother; and having completed his course of legal studies at the University of Turin, entered the magistracy on the 6th of December, 1774, and became, on the 29th of January, 1788, a member of the Senate of Savoy, at that time under the presidency of his father. After the incorporation of Savoy with France, as the *Département du Mont-Blanc*, in December, 1792, he retired first to Aosta, and next, after his return from a few days' visit to Turin in January, 1793, to Chambéry, which, on his refusing to take any kind of oath to the new Government, he was compelled to quit and to seek refuge at Lausanne. Here he lightened the troubles of exile by the production of several works, especially of '*Lettres d'un Royaliste savoisien à ses Compatriotes*,' 8vo, Lausanne, 1793, and '*Considérations sur la France*,' 8vo, London (which should probably be read as Neuchâtel), 1796, and frequently reprinted in Paris and elsewhere, new edition, 8vo, Lyon, 1861, the circulation of which was jealously though unsuccessfully forbidden by the French authorities, and which procured for the author a complimentary letter from Louis XVIII. In 1797, M. de Maistre, accompanied by his wife and family, repaired to Turin on the invitation of Charles Emmanuel IV.; and when in December, 1798, the king was obliged to give up his continental possessions, he retired to Venice, which he left, after passing about a year in a state scarcely removed from destitution, to occupy the post of grand chancellor of the Island of Sardinia. In this office, the duties of which were made very arduous by the arrears and lawlessness of a long period of war and disaster, he exhibited great tact and powers of conciliation. In September, 1802, he accepted the post of envoy-extraordinary and minister-plenipotentiary to the Court of St. Petersburg, in which city he arrived on the 13th of May, 1803. He distinguished himself for the ability with which, during a period of fourteen years, he conducted negotiations in the interest of his country; and he won the confidence of the Emperor Alexander, from whom he received many tokens of esteem. He devoted his leisure to studies in philosophy and religion; the result of which appeared in a number of treatises, some of which were of posthumous publication. The works written at this epoch comprise his '*Essai sur le Principe générateur des Constitutions politiques et des autres Institutions humaines*,' 8vo, St. Petersburg, 1810, 8vo, Paris, 1814, &c. &c., new edition, 8vo, Lyon, 1864, a résumé of his political doctrines, in which he maintains that God is the one source of authority on earth, where he is represented by kings and aristocracies. Any attack on religion is thus a prelude to the destruction of social and political order. The rights of the people, he holds, repose on the will and the benevolence of the monarch, and it is both useless and dangerous to build them on a written and unelastic contract, like a constitution, which, to be serviceable, should be free of innovations, and confined exclusively to a declaration of antecedent rights; an annotated Translation from Plutarch, entitled '*Sur les Délais de la Justice divine dans la Punition des Coupables*,' 8vo, Paris, 1816, 8vo, Lyon, 1829, &c.; '*Du Pape*,' 2 vols. 8vo, Lyon, 1819, second edition, enlarged and corrected, 2 vols. 8vo, Lyon, 1821, third edition, 1830, new edition, 12mo, Paris, 1860, and 8vo, Lyon, 1862, Spanish translation, '*Del Papa y de la Iglesia galicana*,' 12mo, Paris, 1847, English translation, by Æ. McD. Dawson, '*The Pope: considered in his Relations with the Church, temporal Sovereignties, separated Churches, and the Cause of Civilization*,' 8vo, London, 1850, a work still regarded as one of the standard Catholic defences of the doctrine of papal infallibility, which claims for the Pope, as the representative of God on earth, the right to be heard as God; '*De l'Eglise gallicane dans son Rapport avec le souverain Pontife, pour servir de suite à l'Ouvrage intitulé, "Du Pape,"*' 8vo, Paris, 1821, and often reprinted, new edition, 8vo, Lyon, 1862, in which the author attacks the champions of Gallican liberty, Bossuet, Fleury, and others; '*Les Soirées de Saint-Pétersbourg: ou, Entretiens sur le Gouvernement temporel de la Providence. Suivies d'un Traité sur les Sacrifices*,' 2 vols. 8vo, Paris, 1821, seventh edition, 2 vols. 8vo, Lyon, 1854, a work consisting of eleven conversations between three persons, whose opinions differ very slightly from each other, and who treat of the justice of war and of capital punishment, and the difficulties and the justice of the divine government of the world; '*Examen de la Philosophie de Bacon*,

où l'on traite différentes Questions de Philosophie rationnelle,' 2 vols. 8vo, Paris and Lyon, 1836, new editions, 2 vols. 8vo, Lyon, 1845 and 1864, in which the author depreciates Lord Bacon, and disparages critical philosophy in general. M. de Maistre left St. Petersburg in May, 1817, on his return to Turin, where he was received with much favour and distinction by the king, who conferred upon him several honours; so that at the time of his death he was a minister of state, regent of the Grand Chancellery of Sardinia, and chevalier grand cross of the orders of St. Maurice and St. Lazare. He died of paralysis on the 26th of February, 1817, and was buried in the church of the Jesuits at Turin.

The works of Count Joseph de Maistre, besides those already mentioned, comprise, 'Eloge de Victor Anédée III., Duc de Savoie, Roi de Sardaigne,' &c., 8vo, Lyon, 1775, the earliest production of the author; 'Lettres à un Gentilhomme russe sur l'Inquisition espagnole,' 8vo, Paris, 1822, 8vo, Lyon, 1864, English translation, by A. McD. Dawson, 'Letters to a Russian Gentleman on the Spanish Inquisition,' 18mo, London, 1851, in which the Inquisition is advocated and defended; 'Lettres inédites,' 8vo, St. Petersburg, 1858; 'Lettres et Opuscules inédits du Comte Joseph de Maistre, précédés d'une Notice biographique par son Fils, le Comte Rodolphe de Maistre,' 2 vols. 8vo, Paris, 1851, "nouvelle édition, revue, corrigée, et augmentée," 2 vols. 8vo, and 12mo, Paris, 1861; 'Mémoires politiques et Correspondance diplomatique de J. de Maistre, avec Explications et Commentaires historiques, par Albert Blanc,' 8vo, Paris, 1858, second edition, 8vo, 1859, which, if it exhibited a few discrepancies as compared with the antecedently expressed opinions of the author, showed him as full of the expectation of an entirely new political and social order, in which all the states of the world should be closely united, under the Pope as president—an idea which has since become almost the formula of a school of Roman Catholic writers; 'Pensées du Comte Joseph de Maistre sur la Religion, la Philosophie, la Politique, l'Histoire et la Littérature, recueillies et annotées par un Père de la Compagnie de Jésus,' 2 vols. 12mo, Toulouse, 1864; 'Œuvres de Joseph de Maistre,' 7 vols. 8vo, Brussels, 1838; 'Œuvres du Comte J. de Maistre,' 4to, Paris, 1841; 'Œuvres,' &c., "nouvelle édition," 4 vols. 8vo, Lyon, 1864; and 'Œuvres posthumes,' &c., "nouvelle édition," 4 vols. 8vo, Lyon, 1864.

MAISTRE, XAVIER DE, a writer of much delicacy, wit, and ingenuity, and a younger brother of the subject of the preceding notice, was born at Chambéry, in October, 1763, and early in life entered the military service of Sardinia. His talent for writing was manifested by an accident. When he was about twenty-six or twenty-seven years of age, and whilst in the performance of garrison duty at Alexandria, he was placed under arrest for having been concerned in a duel; and, in order to divert himself during the monotony of his detention, wrote a little work, which he afterwards, in 1793, submitted to his brother, Count Joseph de Maistre, at Lausanne. The latter, struck with the uncommon life, grace, and delicacy of the style, caused it to be published, and it appeared with the title of 'Voyage autour de ma Chambre,' 8vo, Turin, 1794, and often reprinted, English translation, 'A Journey round my Room,' 12mo, London, 1840. Despairing of the affairs of his native country, Xavier de Maistre, after having taken part in the Italian campaign of the Austrians and Russians in 1799, repaired to Russia, in the military service of which country he hoped for advancement through the influence of Marshal Suvarov. When the latter, however, was disgraced, De Maistre supported himself for some time by his pencil; and, upon the arrival of his brother as envoy-extraordinary to the Court of St. Petersburg, he was placed, by his influence, first in an office in the department of the Marine, and afterwards, in April, 1805, was nominated by the Emperor Alexander to the directorship of the library and the museum of the Admiralty at St. Petersburg, with the rank of lieutenant-colonel. Subsequently he was appointed to a staff colonelcy; and in the campaign of the Caucasus obtained the rank of major-general. In 1825 he revisited his native country, and spent some years at Naples. But being recalled to St. Petersburg in 1839, he repaired thither, and devoted the rest of his life to literary and scientific pursuits, especially chemistry, to which he made some respectable contributions. He died in St. Petersburg, on the 12th of June, 1852.

The remaining works of Xavier de Maistre include 'Le Lépreux d'Aoste,' 1811, frequently reprinted in Paris and elsewhere, English translation, 'The Leper of Aosta,' Philadelphia (U. S.), 1825, and 24mo, Aberdeen, 1856; 'Les Prisonniers du Caucase. La Jeune Sibérienne,' 18mo, Paris, 1815, &c., English

translation of the latter story, which is one of real life, and the basis of Madame Cottin's 'Élisabeth'; 'Prasca Loupouloff: a Russian Narrative,' 12mo, London, 1838; 'Expédition nocturne autour de ma Chambre,' 8vo, Paris, 1825, &c., a kind of sequel to the 'Voyage,' &c., with which it was conjoined in an English translation, 8vo, London, 1843; 'Œuvres,' &c., 3 vols., 18mo, Paris, 1825; 'Œuvres Complètes,' &c., 2 vols., 8vo, and 4 vols., 32mo, Paris, 1828, 12mo, 1838, 8vo, Brussels, 1838, new editions, 12mo, Paris, 1854, 8vo, 1862 and 1868, &c.; 'Œuvres Choiesies,' 12mo, Paris, 1864.

MAITLAND, REV. SAMUEL ROFFY, D.D. [E. C. vol. iv., col. 59.] Dr. Maitland died at his residence, Gloucester, on the 19th of January, 1866, aged 64.

MAJOR, THOMAS, line-engraver, was born about 1719. He studied under Le Bas, in Paris, where several of his early plates were executed. Major engraved figure-pieces and portraits, but he excelled as a landscape-engraver. His best plates are those after Berghem, Teniers (two 'Flemish Festivals'), Rubens ('Landscape with a man driving sheep'), Claude Lorraine, and G. Poussin. 'The Ruins of Pæstum,' after drawings by J. B. Borra, is a well-known series of twenty-four plates published by him in 1768. Mr. Major was engraver to the king, George III., and for forty years held the more lucrative post of engraver to the Stamp-office. He died December 30, 1799.

MALAN, CÉSAR HENRI ABRAHAM, a Swiss divine, was born at Geneva, on the 7th or 8th of July, 1787, and educated at Geneva, in the Grand Collège, of which he became a regent; and was consecrated to the ministry in 1810, after which he officiated for many years as a pastor of the State Church. He lost his academical position as regent in 1818, the circumstances of his deposition being explained in 'Pièces relatives à la Destitution du Ministre Malan de sa Place de Régent de la cinquième Classe du Collège de Genève,' 8vo, Geneva, 1819, English translation, 1820; and in 1825 was deprived of his pastoral office, having rendered himself obnoxious by the theological views he had adopted under the influence of Dr. Mason, of New York, and Robert Haldane, of Scotland. He now became a member of a mystic association of Methodists, which had been founded about 1818 by Pasteur L. Empaytaz, and the members of which were derisively known by the sobriquet of Mômiers. Of this communion he presently became the principal leader and apologist, and gave it the name of l'Eglise du Témoignage. In 1826 he was created D.D. by the University of Glasgow; and he died at Vandœuvres on the 8th of May, 1864.

Dr. Malan was a voluminous author, producing many works of a pious and devotional character, and especially being prominent as the sacred poet and the apologist of his church. His writings include, besides sermons and addresses, 'Venez et Voyez,' 12mo, Geneva, 1817; 'Le petit Garçon chrétien' and 'La petite Fille chrétienne,' Geneva, 1818; 'Les Chants de Sion: ou, Recueil de Cantiques de Louanges, de Prières, et d'Actions de Grâces à la Gloire de l'Eternel,' 12mo, Geneva, 1826, fifth edition, 12mo, Paris, 1841, and several others. With the later editions of the 'Chants de Sion,' tunes, which were also the composition of Dr. Malan, were incorporated, and a 'Supplement' of sixty-six new 'Chants,' forming a second volume; 'Theogenes; or, a plain and scriptural Answer to the solemn Question: Am I, or am I not, a Child of God?' 12mo, London, 1828, which was reprinted in the first year of its issue, and of which a French edition was afterwards published; 'Jésus-Christ est l'Eternel Dieu manifesté en Chair: Première Réponse à l'Ecrit de M. le Professeur Chenevière, contre le Dieu des Chrétiens,' Geneva, 1830, second edition, 8vo, 1831; 'Le Méthodisme Genevois,' 8vo, Geneva, 1831; 'Six Discours prononcés dans la Chapelle du Témoignage, près Genève,' 8vo, Geneva, 1833; 'Le Procès du Méthodisme de Genève, mis devant ses Juges compétents, par C. Malan, Docteur en Théologie, Ministre déclaré déchu de l'Eglise de Genève, et Régent déposé du Collège de cette Ville,' 8vo, Geneva, 1835; 'Le Témoignage de Dieu, annoncé dans des Sermons, des Homélie, et des Instructions familières,' 8vo, Paris, 1838; 'Les Grains de Sénevé: ou, Recueil de Traités religieux, d'Entretiens et d'Anecdotes évangéliques,' 4 vols. 12mo, Paris, 1844; 'Pourrai-je entrer jamais dans l'Eglise romaine, aussi longtemps que je croirai toute la Bible?' &c.; third edition, 12mo, Paris, 1844, English translation, 'The Church of Rome examined: or, Can I ever enter?' &c., 8vo, London, 1840; 'Le Véritable Ami des Enfants et des jeunes Gens,' 1830, fourth edition, 4 vols. 12mo, Paris, 1845. The American Tract Society and the publishing department of the Dutch Reformed Church

have printed many of the tracts, &c., of Dr. Malan; and his 'Church of Rome,' &c., translated by Dr. Robert Baird, New York, 1844, his 'Stories for Children,' 1852, and his 'Pictures from Switzerland,' 1854, have been issued in English translations in America. Of translations of his works published in England may be mentioned 'The True Cross: a Narrative as profitable to Protestants as to Roman Catholics,' 8vo, London, 1834; 'The Rechabites: a solemn Warning to sincere Disciples of Jesus,' 8vo, London, 1844; 'Sketches for Youth,' 8vo, London, 1845; 'Sermons translated from the French: to which is prefixed a Sketch of the late religious Discussions at Geneva,' 8vo, London, 1819; 'Missions at Home,' 8vo, London, 1826; 'Recollections of the Rev. C. Malan: being Notes of Sermons preached by him in Edinburgh,' 8vo, London, 1827; 'The Weathercock: or, the Difference between Faith and Sight. With a Preface on Personal Assurance, by the Translator,' 8vo, London, 1830; and 'Gospel Seeds: a Collection of unpublished Pieces on the revealed Truths in the Word of God. Part 1,' 8vo, London, 1833.

* MALAN, SOLOMON CÆSAR, a philologist and Anglican divine, son of the late Dr. C. H. A. Malan, of Geneva, was born in that city in 1812, and was educated there and at Edmund Hall, Oxford. Here he distinguished himself for his oriental learning, carrying off the Boden Sanscrit scholarship and the Pusey and Ellerton Hebrew scholarships. In 1837 he graduated B.A. in the second class of Literæ Humaniores; and in the following year, 1838, was appointed classical professor at Bishop's College, Calcutta, where he received ordination from the bishop of the diocese. On account of impaired health, he returned to England after a few years' absence; and, having been admitted to Balliol College, Oxford, he proceeded M.A. in 1843, in which year he was made a priest by the Bishop of Winchester. In 1845 he was presented to the vicarage of Broadwindsor, Dorsetshire, after having been curate successively at Alverstoke (1843—44) and Crowcombe (1844—45); and was subsequently appointed rural dean and Diocesan Inspector of Schools. During a sojourn which he made in Arabia, Palestine, and various parts of Europe, he completed his familiarity with various oriental dialects; and he stands amongst the foremost of living philologists for the range and versatility of his acquirements. Besides translating and editing various devotional treatises from oriental Christian writers, Mr. Malan has published an 'Outline of Bishop's College, and of its Missions in the Neighbourhood of Calcutta,' 8vo, London, 1843; 'Who is God in China—Shin or Shang-Te? Remarks on the Etymology of Elohim and of Theos, and on the Renderings of those Terms into Chinese,' 8vo, London, 1855; 'A Letter to the Right Hon. the Earl of Shaftesbury, on the Buddhistic and Pantheistic Tendency of the Chinese and Mongolian Versions of the Bible published by the British and Foreign Bible Society,' 8vo, London, 1856; a Translation, with critical Notes, of 'The Threefold San-tse-king: or, Trilateral Classic of China,' 8vo, London, 1858; 'Magdala and Bethany,' 8vo, London, 1857; 'The Coasts of Tyre and Sidon,' 8vo, London, 1858; 'Letters to a Young Missionary,' 8vo, London, 1858; 'On Ritualism,' 8vo, London, 1867; and 'An Outline of the Early Jewish Church from a Christian Point of View,' 8vo, London, 1867.

MALLET DU PAN, JACQUES FRANÇOIS, a Swiss publicist, son of a Protestant clergyman, and member of an "ancient family, which had for many years given magistrates to the Republic of Geneva, and scholars to the Republic of Letters," was born at or near Geneva, in the year 1749. After going through the ordinary curriculum of the Académie, or University, he devoted some time to the study of law, from which he was attracted by the superior charms of literature. In 1772 he made the acquaintance of Voltaire, through whose influence he was appointed by the Landgrave of Hesse-Cassel to a professorship of history and belles-lettres. The inaugural lecture which marked his assumption of this office was published with the title of 'Discours de l'Influence de la Philosophie sur les Lettres,' 8vo, Cassel, 1772. After some months, however, he resigned, and repaired, first to London and afterwards to Brussels, and was received as a collaborateur by M. S. N. H. Linguet, whom he had known at Geneva, in the production of his 'Annales politiques et littéraires.' After M. Linguet had been committed to the Bastille, in consequence of a visit which he had imprudently paid to Paris in 1779, Mallet continued the 'Annales' with the modified title of 'Mémoires historiques, politiques et littéraires sur l'Etat présent de l'Europe,' 5 vols., 8vo, Geneva (Paris), 1779—1782. A paper which appeared in it in the last year of its issue, and which was substantively published as

'Tableau historique et politique de la dernière Révolution de Genève,' 8vo, Geneva, 1782, spoke the truth with such severity as to offend all parties, and to make it expedient for the writer to leave his native city, where he had for some time resided. He accordingly repaired to Paris, where he published the 'Journal historique et politique de Genève,' of which the first number appeared early in 1783, and which was merged, in 1788, into the 'Mercure de France,' &c., the amalgamated publication being continued under the editorship of M. Mallet, who had been a contributor to the 'Mercure' for some years previously. In the face of the advancing revolutionary spirit he won great credit by his publication, during the three years' sitting of the first French Assembly, of an analysis of its debates, which was read throughout all Europe, and considered a model of discussion no less luminous than impartial. His moderation, and the favour with which he regarded the royal family of France, exposed him to many losses, annoyances, and interruptions; but at the same time they procured him the confidence of the king, who entrusted him, in May, 1792, with a secret mission to the Emperor of Austria and the King of Prussia, which, with whatever zeal it was conducted, was attended with little success. The confiscation of his property, including his library and papers, some of the latter of which were unfinished works of his own, followed soon after his departure from Paris; and, finding himself unable to return to France, he sojourned for some time at Geneva, whence he corresponded with the ministers of England, Austria, and Prussia. In 1793, whilst resident at Brussels with the Archduke Charles, he published a work on the French Revolution, which so aptly expressed the opinions of Burke, that the latter was accustomed to say that, when he read it, he thought he had written it himself, so exactly consonant was it with his sentiments. This work was entitled, 'Considérations sur la Nature de la Révolution de France, et sur les Causes qui en prolongent la Durée,' 8vo, Brussels, 1793, English translation, 'Considerations on the Nature of the French Revolution, and on the Causes which prolong its Duration,' 8vo, London, 1793. In the following year he published a treatise, 'Sur les Dangers qui menacent l'Europe,' 8vo, Hamburg and Leipzig, 1794, English translations, 'Dangers which threaten Europe: Principal Causes of the Want of Success in the late Campaign,' 8vo, London, 1794, and 'The Dangers, &c. To which is added the Eras of Events subsequent to the Revolution of France,' &c., 8vo, New York, 1795. In 1794 M. Mallet returned to Switzerland, which, after varying his residence in different towns and cantons, he was finally obliged to quit in 1798, in consequence of the action of the French Directory, to which he had made himself obnoxious by several of his writings. He now took refuge in England, having, it was said, been invited thither to silence the political reformers of the day; and where, under the patronage of the Government, he established a fortnightly periodical, entitled 'Mercure Britannique: ou, Notices historiques et critiques sur les Affaires du Temps,' 5 vols., 8vo, London, 1798—1800, the last issue of which, No. xxxvi., bore the date of the 25th of March, 1800. The first three numbers of the 'Mercure,' &c., contained a descriptive and patriotically indignant history of the invasion of Switzerland by the French, which was substantively published as 'Essai historique sur la Destruction de la Ligue et de la Liberté helvétiques. Extrait du "Mercure Britannique," Octobre, 1798,' 12mo, London, 1798, English translation, 'History of the Destruction of the Helvetic Union and Liberty,' 12mo, Boston (U. S.), 1799. M. Mallet died at the house of his friend, the Comte Lally-Tollendal, at Richmond, Surrey, on the 10th of May, 1800, and four days after was buried in the new churchyard of that parish. He died of a consumption, which was accelerated by his antecedent hardships and his unremitting labours, facing his end with a serenity which was only disturbed by the uncertainty of the future fortunes of his wife and family of five children, for whom a provision, however, was promptly made by public and private subscriptions.

The works of M. Mallet, in addition to those which have been already mentioned, include, 'Du Pêril de la Balance Politique de l'Europe: ou, Exposé des Motifs qui l'ont altérée dans le Nord, depuis l'Avènement de Cathérine II. au Trône de Russie,' 8vo, London (Paris), 1789, and an annotated edition, 8vo, London (Warsaw), 1789, English translation, "with a preliminary Discourse, and additional Notes by Lord Mountmorres," who refers the original to Gustavus III., King of Sweden, 'The Danger of the Political Balance of Europe,' &c., 8vo, London, second edition, corrected, 1791; 'Lettre à M. de B., sur les Evénements de Paris, au 10 Août, 1792,' 8vo; 'Lettre à un

Membre du Corps Législatif sur la Déclaration de Guerre à la République de Venise, 8vo, 1797; 'Lettre à un Membre du Corps Législatif sur la Révolution actuelle de Gènes,' 8vo, 1797; 'Correspondance Politique pour servir à l'Histoire du Republicanisme français,' 8vo, London (Hamburg), 1796, English (partial) translation, 'A Translation of a Passage in a Pamphlet of M. du P., intitled "Correspondance Politique:" containing a Vindication of King Lewis the XVI. from a false Charge brought against him,' &c., 8vo, London, 1796; 'Lettre à un Ministre d'Etat sur les Rapports entre le Système Politique de la République française, et celui de sa Révolution,' 8vo, London, 1797; 'A short Account of the Invasion of Switzerland by France, in a Letter from M. M. du P. to M. de M * * * *'. Translated from the French,' 8vo, London, 1798; and 'Mémoires et Correspondance de Mallet du Pan, pour servir à l'Histoire de la Révolution française. Recueillis et mis en Ordre par A. Sayous,' 2 vols. 8vo, Paris, 1851, English translation, 'Memoirs and Correspondence of M. du P., illustrative of the History of the French Revolution. Collected and arranged by A. Sayous,' 2 vols. 8vo, London, 1852.

MALTE-BRUN, a well-known geographer and poet, whose real name is Malte Conrad Bruun, was born at Thisted, in Jutland, August 12, 1775. He was educated for the ecclesiastical profession, but had no taste for theological studies. When the French Revolution broke out, he enthusiastically adopted the ideas which it developed, and determined upon devoting himself to the law. He wrote several political pamphlets, which brought upon him the censure of the Danish Government. He took refuge in the island of Hven, which once belonged to Tycho Brahe, and lived for a time in the large observatory built at the expense of that astronomer. Here he wrote some poems which were published when he went to Copenhagen after the termination of his short exile. The poems acquired considerable popularity. He then started a periodical, entitled 'Tria Juncta in Uno,' which was published during 1797 and 1798, but was then stopped owing to the danger which he incurred of being proceeded against by the Government. He left the country, took refuge in Sweden, but afterwards went to Hamburg, where he was occupied in teaching the children of a merchant. He then selected France as his adopted country, and, after engaging in politics and incurring Bonaparte's displeasure, he determined to occupy himself exclusively in writing geographical descriptions of various countries. These at once found favour, and led to his writing the series of geographical works on which his reputation is founded. In 1821 he assisted in establishing the Geographical Society of Paris. He died of apoplexy, December 14, 1826. His publications are very voluminous; some of the more important are mentioned below. In conjunction with Mentelle and Herbin, he compiled the 'Géographie mathématique, physique, et politique de toutes les parties du monde,' 16 vols. fol. Paris, 1803—1807; 'Tableau historique et physique de la Pologne ancienne et moderne,' 8vo, Paris, 1807, 2nd edition, 1830; and 'Précis de la Géographie Universelle, ou Description de toutes les Parties du Monde, sur un plan nouveau d'après les grandes divisions naturelles du Globe; précédé d'un Histoire de la Géographie chez les Peuples anciens et modernes, et d'une Théorie générale de la Géographie mathématique, physique, et politique,' 8 vols. 8vo, Paris, 1810—1829, with a folio atlas, 2nd edition, 12 vols. 1831—1837, by J. J. N. Huot. The work has been reproduced, either in an abridged or in a more or less modified form, in the French and English languages. Malte-Brun also edited 'Annales des Voyages, etc.,' 24 vols. 8vo, 1808—1815, which was continued as the 'Nouvelles Annales des Voyages' from 1819 onwards. He himself was one of the editors of the first and second series, which form 60 vols. 8vo. The third series commenced in 1834. A selection from his minor works was made by J. Nachez, under the title of 'Mélanges scientifiques et littéraires de Malte-Brun,' 3 vols. 8vo, 1828.

* MALTE-BRUN, VICTOR ADOLPH, geographer, son of Conrad Malte-Brun, was born at Paris in 1816. He was educated at the College of Versailles, and in 1838 commenced his career as professor of history, which post he held successively at Pamiers (1838), at Ste. Barbe (1840), and at the Stanislas College (1846). In 1847 he began to devote himself to geography. He joined the Geographical Society, and in 1855 was elected its secretary-general. He has constructed maps for numerous works, such as Barbie du Bocage's 'Madagascar,' 8vo, 1859; Duval's 'Les Colonies,' 1864; and others. He has edited new editions of his father's 'Géographie complète et universelle,' and is the principal

editor of the 'Nouvelles Annales des Voyages.' In addition to these, he has issued several small works and a few of a more extensive character, such as 'Les États-Unis et le Mexique: Histoire et Géographie,' 4to, Paris, 1862; 'La France Illustrée,' 8vo, Paris, 1855; 'Géographie complète de la France et de ses Colonies,' 8vo, Paris, 1857; 'Histoire Géographique et Statistique d'Allemagne,' 4to, 1866—1868; and 'Pays-Bas Belgique,' 8vo, Paris, 1867.

MALTON, THOMAS, designer and engraver, was born about 1748. Malton made "washed" or coloured drawings of buildings, which were in considerable request, when the newly introduced art of aquatint engraving suggested to him the means of multiplying copies of them for publication. He mastered the method, and applied it with much success. He published a 'Picturesque Tour through the Cities of London and Westminster,' 2 vols. fol., 1792, which has already become of special value to the antiquary; 'Picturesque Views of the University of Oxford,' fol., 1802—3; and he engraved some views of St. Petersburg. He died March 7th, 1804. In nearly all the biographical notices of the engraver, Malton, he is confounded with a namesake, THOMAS MALTON, SENIOR, the author of a 'Royal Road to Geometry,' 8vo., 1775; and 'A Complete Treatise on Perspective,' 2 vols. fol., 1775. Thomas Malton, senior, died at Dublin, February 18th, 1801. The 'Descriptive View of Dublin,' with many illustrations in aquatinta, which some of the biographies place among the works of Thomas Malton, the engraver, was by JAMES MALTON, a designer and engraver of some ability, who died in July, 1803.

* MAMIANI, TERENCE DELLA ROVERE, CONTE, an Italian poet, statesman, and philosopher, was born in 1800, at Pesaro, a coast town in central Italy; and early began to exhibit his talent for poetry, and his addiction to liberalism. In 1831 he took a prominent part in the revolutionary movement which followed the accession of Cardinal Mauro Capellari, as Gregory XVI., to the papal throne, and acted as a member of the Provisional Government of Bologna. After the prompt suppression of this movement through the assistance of Austria, Mamiani fled to Paris, where he devoted himself to literary, philosophic, and patriotic activity, some of the results of which appeared in his 'Inni Sacri,' 8vo, Paris, 1832; 'Nuove Poesie,' 8vo, Paris, 1835; 'Del Rinnovamento della Filosofia antica Italiana. Libro uno,' 8vo, Paris, 1835, third edition, 8vo, Florence, 1836, which provoked some controversy; 'Nostro Parere sulle Cose Italiane,' 8vo, Paris, 1839, &c.; 'Dell' Ontologia e del Metodo,' 8vo, Paris, 1841, Florence, 1848; 'Ausonio: Idillio eroico,' 8vo, Paris, 1842; 'Poesie,' &c., 12mo, Paris, 1843, new edition, 8vo, Florence, 1857; 'Mario Pagano: ovvero, della Immortalità, Dialogo,' 8vo, Paris, 1845; 'Dialoghi di Scienza prima,' 8vo, Paris, 1846, &c. Mamiani returned to Italy in the beginning of 1848; and, on the 4th of May of the same year, accepted from the Pope the post of minister of the interior and of president of the cabinet, which he found it expedient to resign in the latter end of July following. In the month of August he quitted Rome for Turin, where, with Gioberti and other advocates of the principle of Italian unity and independence, he founded the Società della Confederazione Italiana, of which he was one of the three presidents. Returning to Rome, he became minister for foreign affairs in the Galletti cabinet, formed after the assassination of Pellegrino Rossi (November 15, 1848), and the flight of the Pope to Gaeta (November 24th). He laboured zealously, whether in his capacity of minister or as a member of the Costituente Romana, in the attempt to reconcile the pontifical authority with the necessities and demands of the time; and when he found all his efforts futile to withstand the installation of republican government, he withdrew on the same day from public affairs. Although thus acting in the Pope's interest, and anxiously preserving the papal prerogatives where the circumscription of these was not necessary to the unification of Italy, he was banished from Rome by a papal decree issued from Gaeta on the 26th of July, 1849. He retired to Genoa, which, having been naturalised as a Sardinian subject in July, 1855, he was elected, February, 1856, to represent in the national parliament, where he became a zealous champion of the policy of Victor Emmanuel and of Count Cavour, in whose administration he accepted, in 1860, the post of minister of public instruction. In March of the following year he was sent on a mission, the purpose of which was probably scientific, to Athens; and in 1865 was accredited to Berne as the ambassador of the Italian Government.

Count Mamiani has devoted much time and energy to the development of existing institutions for the encouragement of

literature, art, and science, and to the founding of new ones, especially of the Accademia di Filosofia Italiana, which was inaugurated at Genoa in 1850. The *Memorie*, or papers, contributed by Mamiani occupy a considerable proportion of the first two volumes of the 'Atti,' or Transactions of this Society; the principal of them being entitled respectively, 'Dell' Impossibilità d'una Scienza assoluta;' 'Del Bello in Ordine alla Teorica del Progresso;' 'Dell' Uso della Metafisica nelle Scienze fisiche;' 'Sulla Origine, la Natura, e la Costituzione della Sovranità;' and 'Del Diritto di Proprietà.'

Besides the works already mentioned, we owe to Count Mamiani a treatise on the Papacy, 'Sul Papato,' 8vo, Genoa, 1850, Paris, 1851, &c.; 'Scritti politici. Edizione ordinata dall' Autore,' 8vo, Florence, 1851, forming vol. i. of a projected issue of his works; 'D' un Nuovo Diritto Europeo,' 8vo, Turin, 1859, &c., English translation, by R. Acton, "with the author's additions and corrections," 'Rights of Nations: or, the new Law of European States applied to the Affairs of Italy,' 8vo, London, 1860, French translation, by Léonce Lehmann, from the fourth Italian edition, 'Des Traités de 1815 et d'un Nouveau Droit Européen,' 12mo, Paris, 1862; 'Confessioni di un Metafisico,' 2 vols. 8vo, Florence, 1865; 'Prose Letterarie,' 8vo, Florence, 1867; and 'Teorica della Religione e dello Stato e sue speciali attinenze con Roma e le Nazioni Cattoliche,' 8vo, Florence, 1868.

* MANBY, CHARLES, civil and mechanical engineer, was born in Staffordshire in 1804. His father, Mr. Aaron Manby, was proprietor of the Horseley Iron Works; and several other members of the family have been connected with mechanical and engineering pursuits. Before he was of age, and while apprentice to his father as a mechanical engineer, he superintended the construction of a new marine steam-engine with oscillating cylinders, which his father had invented and patented; and he designed and constructed the first iron steamer that went to sea, called the "Aaron Manby," acting as chief engineer when the vessel made her first voyage from London to Paris. He was successively engaged in many engineering works in France—erecting gasworks at Paris; managing the iron works at Charente, which had been established by his father; filling the post of chief engineer at the government tobacco manufactories; constructing marine steam-engines; and remodelling the celebrated Creusot Iron Works, which have since grown to such magnitude. Mr. Manby returned to England in 1829, and was employed as manager of the Beaufort Iron Works, on the confines of Brecknockshire and Monmouthshire, from that year till 1836. He then settled in London as a civil engineer. His professional work has since been chiefly that of a consulting engineer for large undertakings, such as that of the Suez Ship Canal, of which he was a member of the scientific international committee before the enterprise had attained such a form as to be taken up by a commercial company. He has also been engaged on scientific commissions. Mr. Manby has been one of the most prominent members of the Institution of Civil Engineers; he was its secretary from 1839 to 1856; and then, on resigning, was presented with a testimonial, a purse of two thousand guineas, and the title of honorary secretary. He has edited many of the professional papers printed in or reprinted from the Journal of the Institution; and, with Mr. Eaton, prepared the Catalogue of the Institution Library, a second edition of which was published in 1866. He is a Fellow of the Royal and Statistical Societies; and his services to foreign governments, in connection with various engineering undertakings, have obtained for him the insignia of the Legion of Honour, the order of St. Maurice and St. Lazarus of Italy, and the Swedish and Norwegian order of Vasa. Mr. Manby (who since 1856 has been the representative in London of the firm of Robert Stephenson & Co., of Newcastle-on-Tyne) is one of the leading officers of the Engineer and Railway Volunteer Staff Corps, the special character of which has been noticed under BIDDER, GEORGE PARKER, E. C. S. col. 235.

* MANDEL, EDUARD, German engraver, was born at Berlin, February 15th, 1810. His talent for art having been brought under the notice of the king, Frederick William III., he obtained admission to the Academy, and became a pupil of Buchhorn. His first engraving, 'The Warrior and his Son,' after Hildebrandt, 1835, was greatly admired, and he received a commission to engrave Begas's 'Lorelei' for the Prussian Kunstverein. In 1837 he was elected a member of the Academy, and the same year obtained a medal at the Salon, Paris. He has since executed many fine plates, including the portraits of Vandyck and Raffaele, from the originals in the Louvre; the por-

trait of Titian, from the Berlin Museum; Charles I., from the Dresden Gallery; Raffaele's Colonna Madonna, a very beautiful plate; the 'Ecce Homo' of Guido; Carlo Dolce's 'Mater Dolorosa,' and other works from the great masters: his masterpiece in this class being the famous Dresden 'Madonna della Sedia.' Mandel has also engraved several contemporary works, including Kaulbach's 'Gretchen' and Ary Sheffer's 'Christ Weeping over Jerusalem.'

MANGLES, CAPTAIN JAMES, R.N. [E. C. vol. iv. col. 82]. Besides his 'Travels,' Captain Mangles wrote a few geographical treatises, amongst which may be mentioned 'Geography, Descriptive, Delineative, and in Detail: and Hydrography in Detail, combined and universally applied,' 8vo, London, 1849; and 'Guide to the Navigation of the Thames Mouth,' 4to, London, 1853. He died November 18, 1867.

MANIN, DANIELE [E. C. vol. iv. col. 83]. Manin lived not to see even the dawn of that bright day of Italian promise for which he had so long yearned and struggled. He died, an exile, at Paris, September 22, 1857. In the spring of 1861 his statue was erected at Turin, amidst great manifestations of respect for his memory. In 1862 appeared 'Daniel Manin and Venice in 1848—49,' by Henri Martin, with a Preface by I. Butt, Q. C., M.P., 2 vols. 8vo.

* MANNING, HENRY EDWARD, D.D., a Roman Catholic divine and author, son of the late William Manning, M.P., a merchant of London, was born at Totteridge, in Hertfordshire, on the 15th of July, 1808, and was educated successively at Harrow and Balliol College, Oxford, the latter of which he entered in 1827. In 1830 he took his B.A. degree in first-class honours; and was elected to a fellowship at Merton College. He received ordination in due course, and in 1833 was presented to the conjoint rectories of Woollavington and Graffham, in the county of Sussex, and the diocese of Chichester; to the archdeaconry of which he was collated on the 30th of December, 1840. Whilst fulfilling the duties of his ecclesiastical offices in the Church of England, he was for some time one of the select preachers to the university, and in this capacity delivered and published 'Sermons preached before the University of Oxford,' 8vo, Oxford, 1844. To this epoch also belong a great number of occasional sermons—'The English Church: its Succession and Witness for Christ,' 8vo, London, 1835; 'National Education,' 8vo, London, 1838; 'The Rule of Faith,' 8vo, London, 1838, which was followed by an 'Appendix, containing an Examination of certain popular Objections,' 8vo, London, 1838; 'The Mind of Christ, the Perfection and Bond of the Church,' 8vo, Chichester, 1841; 'Penitents and Saints: a Sermon in behalf of the Magdalen Hospital,' 8vo, London, 1844; 'Sermons,' 3 vols. 8vo, 1844—1847. He likewise published his visitation 'Charges,' severally, for a number of years, as well as 'The Principle of the Ecclesiastical Commission examined,' 8vo, London, 1838; 'The Preservation of unendowed Canonries,' &c., 8vo, London, 1840; and 'The Unity of the Church,' 8vo, London, 1842. After many years of preparation for the step, commenced in the influence which he experienced from the "Oxford movement," he was received on Sunday, April 6, 1851, into communion with the Church of Rome, at the Jesuits' Church, Farm-street; and having been admitted to the priesthood by Cardinal Wiseman, and having, whilst at Rome in 1852, received the degree of D.D., he became very zealous for the spread of his new faith in his native country. After filling several minor dignities, he was appointed in May, 1865, to be the second Roman Catholic Archbishop of Westminster and Metropolitan, in succession to Cardinal Wiseman, whose funeral sermon he had preached in the previous February, of which a Spanish translation was published with the title of 'Omnia pro Christo. Oracion funebre pronunciada en las solemnes Exequias de su Eminencia el Cardenal N. Wiseman,' &c., 8vo, Madrid, 1865. Dr. Manning was consecrated at Moorfields, by Bishop Ullathorne, on the 8th of June, 1865; and received the pallium from the hands of the Pope on the 29th of September following. As a prelate of the Romish Church, the Archbishop of Westminster has signalled himself by the devotion with which he has advocated the temporal independence and sovereignty of the Holy See, the dogmas of the immaculate conception and papal infallibility, and generally for the Ultramontanist attitude of his principles and opinions. He is favourably known for his philanthropy, and for the paternal strictness with which he watches over the morals of his flock; whilst beyond his own communion he exhibits a readiness for common action with every denomination of Christians who are zealous to contend, in public

meetings or by parliamentary action, against the prevalence of drunkenness.

His later works include various 'Sermons,' 'Charges,' 'Lectures,' &c.; editions of the lives of several of the saints of the Romish Church, and prefaces and introductions to a considerable number of doctrinal treatises. Amongst his polemical or apologetic productions may be mentioned, 'The present Crisis of the Holy See tested by Prophecy. Four Lectures,' 8vo, London, 1861; 'The last Glories of the Holy See greater than the first. Three Lectures, with a Preface,' 16mo, London, 1861; 'Temporal Sovereignty of the Popes. Three Lectures,' &c., 8vo, London, 1860; 'The Temporal Power of the Vicar of Jesus Christ,' &c., second edition, 8vo, London, 1862, French translation, 'Conférences prêchées à Londres sur le Pouvoir,' &c., 12mo, Paris and Corbeil, 1863; 'The Temporal Power of the Pope in its present Aspect,' 8vo, London, 1866; 'The Temporal Mission of the Holy Ghost: or, Reason and Revelation,' 8vo, London, 1865; 'The Reunion of Christendom: a Pastoral Letter,' &c., 8vo, London, first and second editions, 1866; 'The Centenary of St. Peter and the General Council: a Pastoral Letter,' &c., 8vo, London, 1867; 'England and Christendom,' 8vo, London, 1867; 'The Œcumenical Council and the Infallibility of the Roman Pontiff: a Pastoral Letter to the Clergy,' &c., 8vo, London, 1869.

MANNLICH, JOHANN CHRISTIAN VON, German painter, was born at Strasburg in 1740. He studied painting in his native place; in 1763 went to Paris, and in 1767 to Italy. In 1772 he returned to Germany, and eventually settled at Munich, where, in 1799, he was appointed director of the Bavarian Gallery. Mannlich's oil-paintings are much praised for their correct drawing, perspicuous arrangement, and lively colouring; several of them are in the churches of Bavaria. But he is better known out of Germany by having published, in his capacity of director of the Bavarian Gallery, the extensive series of lithographs (432 in number) from the original drawings in the royal cabinets. For this work, which was commenced in 1810, Mannlich himself supplied some of the plates; but the greater part were executed by his pupils, Piloty and Strixner. In 1817 he commenced the companion series of lithographs by Piloty, Strixner, the Quaglios, Heideck, &c., from the royal pictures. Herr Mannlich also published (with plates) treatises on the Costumes and Habits of the Ancients (4to, 1802); on Beauty; and on Anatomy, for the use of students and amateurs of the fine arts. He died at Munich in 1822.

MANSEL, HENRY LONGUEVILLE, an English divine and metaphysician, eldest son of the Rev. H. L. Mansel, rector of Cosgrove, Northamptonshire, was born in that parish on the 6th of October, 1820, and received his early education at Merchant Taylors' School, London. He was elected scholar of St. John's College, Oxford, in 1839, of which he afterwards became a fellow; graduated B.A. in double first-class honours in 1843; proceeded M.A. in 1847; and B.D. and D.D. respectively in 1852 and 1867. He became a deacon in 1844, and was admitted to priests' orders in 1845, by the Bishop of Oxford. He was appointed reader in moral and metaphysical philosophy in Magdalen College in 1855; and in 1858 delivered the Bampton Lectures, which were published with the title of 'The Limits of Religious Thought, examined in Eight Lectures preached before the University of Oxford in the year 1858, on the Foundation of the late Rev. J. Bampton,' 8vo, Oxford and London, 1858, fifth edition, 8vo, London, 1867, which gave rise to considerable discussion and controversy, into which the Rev. F. D. Maurice especially entered. In 1859 he was appointed Waynflete professor of philosophy; and from 1866 to 1868 filled the office of regius professor of ecclesiastical history, to which was attached a canonry of Christ Church. He was preferred also to be an honorary canon of Peterborough, and chaplain to the bishop of the diocese. In 1868 he became Dean of St. Paul's, London.

The various publications of Dr. Mansel include 'The Demons of the Wind, and other Poems,' 12mo, London, 1838; 'Prolegomena Logica: an Inquiry into the Psychological Character of Logical Processes,' 8vo, Oxford, 1851, second edition, corrected and enlarged, 8vo, Oxford, 1860; an edition, with notes, of Aldrich's 'Artis Logice Rudimenta,' 8vo, 1849, 1852, 1856, 1862, &c.; 'Psychology the Test of Moral and Metaphysical Philosophy: an inaugural Lecture,' 8vo, Oxford, 1855; 'A Lecture on the Philosophy of Kant,' 8vo, Oxford, 1856; 'Metaphysics: or, the Philosophy of Consciousness, phenomenal and real,' 8vo, Edinburgh, 1860, second edition, 1866; and 'The Philosophy of the Conditioned: comprising some Remarks on Sir William Hamilton's Philosophy, and on Mr. J. S. Mill's Examination

of that Philosophy. Reprinted, with additions, from the "Contemporary Review," 8vo, London and Edinburgh, 1866. Dr. Mansel was a contributor to the volume entitled 'Aids to Faith;' and, as an adherent of the philosophy of Sir William Hamilton, took part with Professor Veitch in editing his 'Lectures on Metaphysics,' 8vo, 1859, &c.

MANT, RICHARD, a poet and divine, eldest son of the Rev. Richard Mant, D.D., rector of All Saints' Southampton, and of Fonthill-Bishops, Wiltshire, and author of several theological works, was born at Southampton on the 12th of February, 1776. He received from his father the first rudiments of education, which he continued as a foundation scholar at Winchester, where he was admitted in 1789. Having been somewhat arbitrarily deprived of his scholarship in April, 1793, he entered Trinity College, Oxford, where, in 1794, he obtained a scholarship. He graduated B.A. in 1797, and in the spring of the following year was elected to a fellowship of Oriel College. In the summer of 1799 he carried off the Chancellor's prize for an English essay 'On Commerce,' which was published in the second volume of 'The Oxford English Prize Essays,' 8vo, Oxford, 1830; proceeded M.A. in 1800; and in 1802 was ordained deacon by Dr. Brownlow North, Bishop of Winchester, as curate to his father. After having passed a few months on the Continent, he returned in 1803 to Oriel College, and was soon afterwards ordained priest by Dr. Randolph, Bishop of Oxford. In 1804 he became curate in sole charge of Buriton, a village in Hampshire, where he produced several works calculated for the spiritual benefit and guidance of his parishioners, and where he vacated his fellowship by his marriage on the 22nd of December, 1804. Some time after, he published, with a dedication in verse to Bishop Barrington, a volume of 'Poems,' 8vo, Oxford, 1806, which he followed up, in 1807, with 'The Slave, and other poetical Pieces: being an Appendix to "Poems."' Early in 1808, Mr. Mant left Buriton for the curacy of Crawley, in the same county, which he vacated in December, 1809, in order to assist his father in the oversight of his parish in Southampton. He was preferred, in the spring of 1810, to the vicarage of Coggeshall, in Essex; and in 1812 delivered the Bampton Lectures at St. Mary's, Oxford, which were published with the title of 'An Appeal to the Gospel: or, an Inquiry into the Justice of the Charge alleged by Methodists and other Objectors, that the Gospel is not preached by the National Clergy,' 8vo, Oxford, 1812, sixth edition, 8vo, London, 1816; the favourable reception of which encouraged the publication of 'Sermons for Parochial and Domestic Use,' &c., 3 vols. 8vo, Oxford, 1813-14, fifth edition, 1823. In 1813 he was appointed domestic chaplain to Archbishop Manners Sutton, at Lambeth, and soon after resigned his vicarage of Coggeshall; and, being about this time appointed one of the select preachers in the University of Oxford, delivered a series of sermons against Socinianism, which were published with the title of 'Sermons preached before the University of Oxford, in the Years 1814-16,' 8vo, Oxford, 1816. In March, 1813, he undertook, jointly with Dr. D'Oyly, afterwards rector of Lambeth, the preparation—with explanatory and practical notes, selected from various authors, who, however, in matters of doctrine and discipline, were to be members of the Church of England—of the 'Family Bible,' which, after occupying its editors for nearly four years, was issued in 1817, under the auspices of the Society for Promoting Christian Knowledge, by whom the work was commissioned, and who were the patrons of a supplementary work, carried out after the same method, entitled 'The Book of Common Prayer. With Notes,' &c., 4to, 1820, fifth edition, 1840. In 1815, the same year in which he took his degree of D.D., he was collated to the rectory of St. Botolph's, Bishopsgate, to which he was presented by Dr. Howley, Bishop of London. In 1818 he was presented by the Archbishop of Canterbury to the rectory of East Horsley, in Surrey; and on the 30th of April, 1820, was consecrated by Archbishop Brodrick, in the cathedral of Cashel, to the Bishopric of Killaloe and Kilfenora. In the spring of 1823 he was translated to the see of Down and Connor, over which he presided for nearly twenty-six years; and, in 1842, the charge of the diocese of Dromore also devolved upon him, under the provisions of the Irish Church Temporalities Act, on the decease of Dr. James Saurin. He died on the 2nd of November, 1848, at the rectory-house of Ballymoney, county Antrim.

Bishop Mant was very frequent in his pulpit ministrations; and his publications, whether as 'Charges,' 'Sermons,' or polemical works, were voluminous. They include, 'Biographical Notices of the Apostles, Evangelists, and other Saints: with Reflexions and Collects, adapted to the minor Festivals,' &c., 8vo, Oxford, 1828; 'The Gospel Miracles,' &c., 12mo, London, 1832; 'The Happi-

ness of the Blessed, considered as to the Particulars of their State, their Recognition of each other in that State, and its Difference of Degrees. To which is added, Musings on the Church and her Services,' 12mo, London, 1833, new edition, 8vo, London and Edinburgh, 1870; 'The British Months: a Poem, in twelve Parts,' 2 vols. 8vo, London, 1835; 'The Church and her Ministries: in a Series of Discourses,' 8vo, London, 1838; 'Romanism and Holy Scripture compared,' new edition, 12mo, London, 1839, another edition, 16mo, London, 1868; 'History of the Church of Ireland, from the Reformation (to the Union of the Churches of England and Ireland, January 1st, 1801). With a preliminary Survey, from the Papal Usurpation in the twelfth Century, to its abolition in the sixteenth,' 2 vols. 8vo, London, 1840; 'Primitive Christianity, exemplified and illustrated by the Acts of Primitive Christians,' 8vo, London, 1842; 'Horæ Ecclesiasticæ,' &c., 16mo, London, 1845; 'Horæ Liturgicæ,' &c., 16mo, London, 1845; 'Feriæ Anniversariæ: Observance of the Church's Holy-days no Symptom of Popery,' &c., 2 vols. 16mo, London, 1847; 'The Sundial of Armoy: a Poem. Gnomon Armoyensis,' 16mo, Dublin, 1847; and 'The Matin Bell: or, the Church's Call to Daily Prayer. A Poem,' 16mo, Oxford, 1848.

MANTEGNA, FRANCESCO, son, scholar, and assistant of ANDREA MANTEGNA [E. C. vol. iv. col. 88], was born at Mantua about 1470. His works are probably often cited as the productions of his father; pictures attributed to F. Mantegna are not common. He does not appear to have possessed much original power. The date of his death is uncertain; he was alive in 1517. In the National Gallery is a 'Noli me Tangere' (No. 639), by Francesco Mantegna.

*MANTEUFFEL, OTTO THEODOR, FREIHERR VON, a Prussian statesman, was born at Lübben, in Brandenburg, on the 3rd of February, 1805; and, having received his early education at the Landesschule of Schulpforte, proceeded to the University of Halle, for the study of jurisprudence and political economy. In 1827, he went to Berlin, where, in 1829, he was appointed to a subordinate post (referendarius) in the magistracy, and was shortly afterwards promoted to be councillor at Lückau, where he gave sufficient evidence of ability to procure his election, in 1837, as representative of the Sternberg district, at the Brandenburg Diet. In 1841, he was appointed to a councillorship at Königsberg, the internal affairs of whose government he managed with considerable success and popularity until 1843, when he was nominated to the vice-presidency of the Government of Stettin. In 1844, he was attached as reporting councillor to the Prince of Prussia, with the rank of a privy councillor; and, in the following year, became under-secretary to the Minister of the Interior. In the first General United Diet of Prussia, which was opened on Sunday, April 11th, 1847, in virtue of a royal ordinance which accompanied the decree granting the Constitution, on the 3rd of February previous, and in which the members of the eight provincial Diets assembled for common deliberation, Manteuffel was one of the foremost of those who came soon afterwards to be recognised as conservative members, and strenuously resisted the liberalism of the opposite party. In November, 1848, he became minister of the interior, in the administration of Count Brandenburg, upon whose death, November 6th, 1850, and the accession of Count Ladenberg to the presidency of the Council of Ministers, he was entrusted *ad interim* with the portfolio of foreign affairs. It thus fell to him to represent Prussia at the Conference of Olmütz, November 28th and 29th, in which the interests of Austria were upheld by Prince Schwarzenberg, and the object of which was to prevent by negotiation the rupture which at that time threatened to involve Germany and indeed Europe, in war. He sacrificed much popularity by what was thought to have been his too great deference to the views and the position of Austria, and the concessions which he made in behalf of peace; but his policy was defended, especially by Bismarck, in a speech of the 3rd of December following, on the general ground of the community of interests between Prussia and Austria with reference to revolutions, and the community of action of both States in German affairs. Both Bismarck and Manteuffel had to wait until 1866 for the full justification of the Olmütz Conference, and the supplementary one of Dresden, which opened on the 23rd of December, 1850. On the 19th of the last-named month, Manteuffel was appointed chief of the cabinet, in succession to Count Ladenberg, with which he retained the position of minister for foreign affairs; and on the 13th of January, 1852, was appointed president of the Council of State. For a series of years Manteuffel took the initiative in nearly all the conservative measures of the Prussian Government, and dictated

the forms of diplomatic correspondence with foreign nations. He was long unfavourably known in England for the pro-Russian policy of the Court of Berlin during the war in the East, a policy which first became notorious by his declaration in the Prussian Chamber that Prussia adhered to the Vienna Note, but that she would preserve an independent attitude, and would resist every attempt that might be made to influence her conduct, come from what quarter it might—the strength and the sword of Germany would only be employed to defend German interests. The neutrality thus assumed was rather a passivity which told disastrously upon the Allies; for it enabled Russia to withdraw her troops from the Polish-Prussian frontier, to employ them in the Crimea. The Government of Prussia had, therefore, little claim to be represented at the Peace Congress, which sat at Paris in the last days of March, 1856; but it accepted the invitation which, at the eleventh hour, was given it, "not to negotiate the treaty of peace"—as was stated by Lord Palmerston in the House of Commons, March 14, 1856—"but to accede to the result of the negotiations of those who were more directly interested in the matter." The Prussian representatives were Count Hatzfeldt, then ambassador at Paris, and Baron Manteuffel; and the latter was on this occasion described as "le sombre et austère Manteuffel, un Ministre d'avant le Déluge." Baron Manteuffel finally retired from office on the 6th of November, 1858, on which date he was succeeded by the Prince of Hohenzollern-Sigmaringen, as president of the Ministry and the Council of State, having on the 11th of the previous month—a few days after the appointment of the Prince of Prussia, at present the Emperor William of Germany, to the Regency—been replaced by Baron Schleinitz.

MARCEY, ALEXANDER, was born at Geneva in 1770, the son of a rich merchant, and was destined for commercial pursuits, but after two years' trial, finding them not to his taste, he obtained his father's permission to devote himself to the study of science. The political troubles of Geneva led to his being suspected, and he was condemned by the democratic party, in 1794, to five years of banishment. He now decided on adopting the medical profession, and, having obtained a doctor's degree at Edinburgh in 1797, he established himself in London, and was naturalised in 1800. He became connected with the medical staff of Guy's Hospital, and lectured on chemistry. He also became inspector of the Military Hospital at Portsmouth. On the death of his father-in-law he inherited a considerable fortune, resigned his appointments, and devoted himself to experimental chemistry. In 1815 he returned to Geneva, and was elected a member of the Representative Council, and, in conjunction with De la Rive, lectured on chemistry at the university. In 1821 he returned to London, and died on the 22nd of October, 1822. Between 1792 and 1822, he published various papers in the 'Transactions of the Royal Society' and in the medical journals. His most important work was on the 'Treatment of Calcareous Disorders,' published in London in 1817, which was inferior only to the work of Prout. His wife,

JANE MARCEY, the daughter of a merchant named Haldimund, was well known for her 'Conversations on Chemistry,' Faraday's first book on that science; and we have Faraday's own account of the delight experienced by him in being introduced to the author. She also published 'Conversations on Natural Philosophy,' on 'Vegetable Physiology,' on 'Political Economy,' 'Land and Water,' and a Spelling-book, all of which were at one time very popular. She died in London, June 28, 1853. Their son,

* FRANÇOIS MARCEY, was born in London, 25th May, 1803. He received a scientific education, and became professor of physics in the Academy at Geneva. He was elected a fellow of the Royal Society in 1836. He has published a number of papers on experimental science on his own account, or in conjunction with De la Rive and others.

MARCHESI, POMPEO, celebrated Italian sculptor, was born at Milan, in 1790. The favourite pupil of Canova, he was employed by the great sculptor to complete his later works. Having acquired celebrity by figures from the heathen mythology, Venus, Terpsichore, and the like, he was much employed in the production of religious sculpture and portrait statues. To the former class belong a colossal 'Pieta,' for Milan Cathedral; to the latter, twelve statues of eminent Italians, for the palace at Milan; the Emperor Francis I.; a colossal statue of Charles Emmanuel III., for Novara; Philibert Emmanuel, for the present King of Italy; Goethe, for Frankfurt Library; and numerous busts. He was professor of sculpture in Milan Academy, and died in that city on the 6th of February, 1858.

* MARCOU, JULES, geologist, was born at Salins, April 20, 1824. He was educated at Salins, Besançon, and at Paris. Owing to ill health, he was obliged to return home, and his leisure was spent in exploring the Jura mountains, in the neighbourhood of his native town. In this work he was encouraged by Germain, Thurmann, and Agassiz, with whom he had formed a friendship. The results of his researches were given in 'Recherches géologiques sur le Jura Salinois,' which appeared in the 'Mémoires' of the Geological Society of France, iii. pp. 1—151 (1848). In 1846 he became an assistant in the museum of the Sorbonne. In 1847 he arranged the greater portion of the invertebrate fossils in the museum. In 1848 he was appointed travelling geologist, and, as such, accompanied Agassiz to Lake Superior, and then proceeded alone to Keewenau Point, Lake Huron, and the Niagara. In 1849, he made extensive explorations in the United States, along the line of the Alleghany mountains; in Nova Scotia, New Brunswick, and through Canada, along the valley of the St. Lawrence and the great lakes. His exertions and fatigue brought on typhoid fever. Soon after his recovery, he married, and returned to France. He then resigned his appointment in connection with the Sorbonne museum, and, after staying a few months in the Jura mountains, he again set out for America. In 1853 he published 'A Geological Map of the United States,' with a memoir, 4to; and this was followed by a 'Résumé explicatif d'une Carte géologique des États-Unis et des Provinces anglaises de l'Amérique du Nord,' in 'Bulletins' of the Geological Society of France, xii. pp. 813—935 (1854—55). In 1853 and 1854, he accompanied the scientific expedition, supported by the United States Government, which examined the region between the Mississippi and the Pacific at San Francisco. This journey furnished the materials for several geological papers on the Rocky Mountains. In 1855, having returned to Europe, he was appointed professor of palæontology at Zurich. In 1860 he again visited America, and made researches on the fossils of the older Silurian rocks of that country. In 1862 he issued his 'Carte géologique de la Terre.' Besides the papers and books above mentioned, he has written others relating to the carboniferous, triassic, and cretaceous rocks of America and Europe, to the changes undergone by the Falls of Niagara in the course of fifteen years, and to the old glaciers of Auvergne.

MARCOY, WILLIAM LARNED, American statesman, was born at Sturbridge, Massachusetts, December 12th, 1786. On completing his studies at Brown University, Providence (Rhode Island), he for some time held a post as teacher at Newport, and then studied law at New York. He early acquired influence at New York as a politician, and from 1816 filled various judicial and administrative offices in the State, but resigned them in contemplation of his election in 1832 to the governorship of New York, to which he was re-elected in 1834 and 1836. He continued to take an active share in State and federal politics, and in 1845 was appointed commissioner for the Mexican claims, his conduct of which obtained much applause, and he was nominated by President Polk Minister of War. In 1851 he was put forward as a candidate for the presidency, but gave way in favour of Mr. Franklin Pierce, who, on his election in 1852, appointed Mr. Marcy Secretary of State. In this post it fell to his lot to conduct several affairs of delicacy and importance, especially the questions arising out of Walker's filibustering expeditions, the Canadian and Newfoundland fisheries, the laws regulating maritime relations with foreign countries, and others of equal or nearly equal consequence, and his despatches and memoirs are regarded by American jurists as among their ablest papers on these branches of international law. Mr. Marcy quitted office on Mr. Buchanan's installation in the presidency, 1856. A few months later he had an apoplectic attack, and died suddenly, July 4th, 1857, at Ballston Spa, Saratoga, where he had gone in the vain hope of benefiting his health.

* MARECHAL, CHARLES LAURENT, an eminent French painter on glass, was born at Metz about 1800. Brought up as a workman, he was at length able to enter the atelier of the painter Regnault at Paris, where he remained some years. In 1825 he returned to Metz, and for several years practised as a painter in oil and crayons, with a steadily increasing reputation. About 1840 he was led to direct his attention to painting on glass, in which he met with remarkable success. Windows painted by him have been placed in the churches of Vincent-de-Paul, Ste. Clotilde, St. Valère, and St. Augustin, at Paris; and in various cathedrals and churches at Metz, Limoges, Cambrai, Troyes, &c. He was made officer of the Legion of Honour in 1855. He gained first-class medals at the Great Exhibition of 1851, at the Exposition Universelle of 1855, and the International Exhibition of

1862, "for the highest artistic and executive merit." His son, CHARLES RAPHAEL MARECHAL, gained a similar medal at the Exhibition of 1862, "for his stained glass windows, in which he employed a new process of ornamentation."

MARGRAAF, ANDREW SIGISMUND, was born in Berlin, March 9, 1709, and died there August 7, 1782. His father was an apothecary, and taught him a little chemistry. He also studied under Neumann, and then, after the manner of German apprentices, set out on his wanderings in pursuit of chemical knowledge. On his return to Berlin, he began to publish new facts and processes, which laid the foundation of chemical analysis. His experiments on phosphorus gave the first accurate notions as to this body, and also as to phosphoric acid. He first determined the properties of the earthy basis of alum—alumina—and showed that it existed in clay, and gave to that substance its peculiar properties. He pointed out the nature of soda, and gave an easy method for obtaining pure silver from its chloride. He also wrote on the salts of tartar, on fluor spar, and other subjects, which led to important results. In 1760 he became director of the physical class of the Berlin Academy of Sciences. In 1762 twenty-six of Margraaf's papers were collected, translated into French, and published at Paris. Other papers by him appeared in the 'Memoirs of the Berlin Academy.'

* MARIETTE, AUGUSTE ÉDOUARD, French archæologist, was born at Boulogne-sur-Mer, on the 11th of February, 1821, and educated at the college of his native place. Whilst a teacher of language and design in the college, he gained some notice by a dissertation upon the antiquity of Boulogne; but he devoted all his spare time to the study of the hieroglyphics and antiquities of Egypt, and, after the revolution of 1848, he obtained a post in the department of Egyptian antiquities at the Louvre. In 1850 he was sent by the minister on a scientific visit to Egypt, and, in excavating in the Necropolis of Memphis, had the good fortune to discover the foundations of the Temple of Serapis, and bring to light many objects of interest. The success of his labours led the government to extend the time and scope of his mission, and, being amply supplied with funds, he was enabled to carry out an important series of excavations and investigations. On his return to France, in 1854, M. Mariette was created knight of the Legion of Honour, and appointed adjunct-keeper of the Egyptian Museum. The following year, he spent some months in studying the Egyptian remains in the Berlin Museum, and received the decoration of the Red Eagle. In 1858 he again visited Egypt, and under the auspices of the pasha, who appropriated him a body of 500 labourers, he conducted an important series of investigations in the valley of the Nile, in the course of which he removed the sand accumulated during ages from the bases of the principal temples and monuments, from Memphis to the island of Elephantine. His archæological discoveries were important, and he formed a remarkable collection of antiquities, a selection from which, when shown at the London International Exhibition of 1862, excited great interest, and formed the subject of valuable papers by Mr. Birch and other eminent Egyptologists. Whilst engaged in these researches, M. Mariette assisted in the foundation of the Egyptian Institute, and received the appointment of inspector-general of the monuments of Egypt. M. Mariette has written several papers on Egyptian archæology; but the most important of his writings, as embodying the results of his personal investigations, are the costly but unfinished work entitled 'Le Sérapium de Memphis,' folio, with plates, 1857—64, published under the auspices of the minister of state; 'Lettres à M. le Vicomte de Rongé sur les Résultats des Fouilles entreprises par ordre du Vice-roi d'Égypte,' 8vo, with plates, 1860; 'Nouvelles Tableaux d'Abydos,' 8vo, 1865; 'Fouilles exécutées en Égypte, en Nubie et en Soudan d'après les Ordres du Viceroi d'Égypte,' folio, with plates, &c., 1867; and 'Exposition Universelle de 1867. Aperçu de l'Histoire ancienne d'Égypte pour l'intelligence des Monuments exposés dans le Temple du parc Égyptien,' 8vo, 1867.

* MARKHAM, CLEMENTS ROBERT, geographer and botanist, was born in July, 1830, at Stillingfleet, in Yorkshire. He was educated at Westminster. In 1844 he entered the navy, and served for several years, partly in the Pacific Ocean and partly in the Arctic Regions, as a midshipman, in the expedition sent to search for Sir John Franklin, in 1850 and 1851. In 1852 he left the navy, and then spent some time in travelling in Peru and Brazil. In 1858 he became the honorary secretary to the Hakluyt Society. In 1859—1861 he superintended the collection of cinchona plants in South America, and their transport to India. In 1863 he was elected an honorary secretary of the

Royal Geographical Society, and has retained the office since. In 1867—68 he accompanied the Abyssinian expedition as geographer. His books include 'Franklin's Footstep: a Sketch of Greenland,' 8vo, London, 1853; 'Cuzco: a Journey to the Ancient Capital of Peru . . . and Lima, a Visit to the Ancient Capital and Provinces of Modern Peru,' 8vo, London, 1856; 'Travels in Peru and India, while superintending the collection of Cinchona Plants and Seeds in South America, and their Introduction into India,' 8vo, London, 1862; 'Contributions towards a Grammar and Dictionary of Quichua, the language of the Incas of Peru,' 8vo, London, 1864; 'Report on the Irrigation of Eastern Spain,' 8vo, London, 1866; 'A History of the Abyssinian Expedition,' 8vo, London, 1869; 'The Life of the Great Lord Fairfax,' 8vo, London, 1870; and a summary of the work done by the Geological Survey of India, published in 1871. He has also translated or edited several volumes for the Hakluyt Society, mainly the accounts of ancient travellers in South America. His papers also relate principally to the geography and botany of South America and Abyssinia.

MARMORA, ALBERTO, CONTE DELLA [E. C. vol. iv. col. 113]. From 1819 to 1860 he was engaged upon his scientific description of the island of Sardinia. The completed work consists of three parts, 8vo, 1839—1860, with two parts of a folio atlas. He has written an 'Itinéraire de l'île de Sardaigne,' 2 vols. 8vo, Paris, 1860, which forms a supplement to the foregoing; and several papers relating to the geology of Sardinia and of the Balearic Islands. He died May 18, 1863.

* **MARMORA, ALFONSO, CONTE DELLA** [E. C. vol. iv. col. 112; **VICTOR EMMANUEL**, E. C. S.]

MAROCCHETTI, CARLO, BARON, R.A. [E. C. vol. iv. col. 113.] During the last years of his life Baron Marochetti was constantly receiving important commissions; but none of his later works were decidedly successful, and his popularity gradually declined under the persistent attacks of hostile critics. Among the statues executed by him subsequent to the notice in the E. C., the best perhaps was one of colossal size of the Duke of Wellington for the Strathfieldsaye Memorial, which, as well as the statue, was designed by Marochetti. His other works, mostly in bronze, include a statue of Lord Clive for Shrewsbury, and another of more pretentious character, but not of superior merit, erected near the Duke of York's statue, Waterloo Place; Lord Herbert of Lea, erected in the Market-place, Salisbury; an equestrian statue of Viscount Combermere, erected opposite the principal entrance to Chester Castle; and the recumbent statue of the Prince Consort, for the Albert Memorial, was summarily rejected, and on his death the commission was transferred to Mr. Foley. Baron Marochetti, in the course of a journey to Brussels, was taken suddenly ill, and died at the house of his sister-in-law, the Countess de Sade, Passy, Paris, on the 29th of December, 1867. He was born at Turin in 1805, and was consequently in his 63rd year at the time of his decease.

* **MARSTON, WESTLAND, LL.D.**, dramatist and novelist, was the son of a dissenting minister at Boston, in Lincolnshire, where he was born January 30th, 1820. He was articled to a solicitor in London, and went through the usual course of study; but on the termination of his articles he followed the bent of his own inclination, by adopting literature as a profession. In a career of about thirty years he has produced many works, mostly in one or other of two forms, serious dramas and short tales. In 1841 appeared 'The Patrician's Daughter,' a tragedy in five acts; in 1842, 'Gerald,' a dramatic poem, with other poems; in 1847, 'The Heart and the World,' a play in five acts; in 1849, 'Strathmore; or, Love and Duty,' a tragedy in five acts; in 1850, 'Philip of France and Marie de Méranie,' also a tragedy in five acts; in the same year, 'A Life's Ransom,' a three-act play; and in 1852, 'Anne Blake,' a play in five acts. Among other works by him are 'Borough Politics,' a comic drama in two acts; 'The Hard Struggle,' a short domestic drama; 'Trevanion; or, the False Position,' a play in three acts; 'Pure Gold,' a play in four acts; 'The Wife's Portrait,' a drama in two acts; and two comedies, 'Donna Diana,' and 'Lamed for Life,' 1871. In 1855 appeared his 'Death-ride at Balaklava: a Tale of the Light Brigade.' In 1856 he cooperated with Mr. John Saunders in conducting the 'National Magazine.' Among his more recent works are a novel, 'A Lady in her Own Right,' 1860; a collection of tales, including 'Family Credit,' 1861; and a comedy, 'The Favourite of Fortune,' 1866. In 1870 another collection of his tales appeared, including a new edition of 'The Wife's Portrait.' Dr. Marston

has written the more important of his plays in verse, with a care that raises them above the ordinary level of contemporary dramas. Some of them, acted at the London theatres, are included either in Webster's or Lacy's 'Editions of Acting Plays.'

* **MARTIN, THEODORE**, a scholar and poet, remarkable especially for the vigour and elegance of his verse-translations, was born at Edinburgh in the year 1816, and was educated successively at the high school and the university of his native city. He adopted law as a profession, and for some years practised as a solicitor in Edinburgh; which he quitted in 1846, in order to establish himself in London as a solicitor and parliamentary agent. Devoted to literature from an early period of life, he attracted attention by his fugitive contributions to magazines, which he subscribed with the pseudonym of "Bon Gaultier." It was under this name that he edited the 'Book of Ballads,' 16mo, London, 1845, fifth edition, "illustrated by Doyle, Leech, and Crowquill," 8vo, London and Edinburgh, 1857, which, the joint production of himself and the late Professor W. E. Aytoun, were variously distributed as "Spanish," "American," and "Miscellaneous." A few years after the first issue of the 'Bon Gaultier Ballads,' Mr. Martin published an English translation of 'Kong Rene's Datter: lyrisk Drama,' 12mo, Copenhagen, 1847, the author of which was Henrik Hertz, with the title of 'King Rene's Daughter: a Danish lyrical Drama,' 8vo, London, 1850, second edition, 12mo, Edinburgh and London, 1864. This play was produced on the stage with great effect, its principal character having the advantage of being personated by Miss Helen Faucit, who, on the 25th of August, 1851, became the wife of Mr. Martin at Brighton. Mr. Martin, who was at this time known as one of the writers in the 'Edinburgh Review,' followed up his 'King Rene's Daughter' by translations from another Danish dramatist, Adam Gottlob Oehlenschläger, two of whose plays he published in an English form, and with notes, as 'Correggio. A Tragedy,' &c., 8vo, London, 1854, and 'Aladdin: or the Wonderful Lamp. A dramatic Poem in two Parts,' &c., 8vo, London, 1857. Other translations followed:—Goethe's 'Poems and Ballads,' 8vo, Edinburgh, 1859, second edition, 8vo, Edinburgh and London, 1860, in the production of which he had Professor Aytoun for a collaborateur; Goethe's 'Faust. A dramatic Poem,' &c., 8vo, London, 1865, second edition, 1866, third, 1870; 'The Odes of Horace translated into English Verse [with the Epodes and the Secular Hymn], with a Life and Notes,' &c., 8vo, London, 1860, third edition, 8vo, London and Edinburgh, 1870; 'The Poems of Catullus. Translated into English Verse, with an Introduction and Notes,' &c., 8vo, London, 1861; 'The "Vita Nuova" of Dante. Translated, with an Introduction and Notes,' &c., 8vo, London, 1862; and 'Poems: original and translated [from the German of Goethe, Schiller, and Uhland], "printed for private circulation," 8vo, London, 1863. In 1867 he published a 'Memoir of William Edmondstone Aytoun, D.C.L.;' and he is understood to be occupied in preparing for publication the continuation of the Life of the Prince Consort.

* **MARTIN DE MOUSSY, JEAN ANTOINE VICTOR**, geographer, was born at Moussy le Vieux, June 26, 1810. After studying at Paris, he entered the Military Hospital, obtained his degree of doctor of medicine, and in 1841 went to South America, where he settled down to medical practice at Monte Video. For twelve years he kept a constant register of meteorological phenomena; and he took a prominent part in the defence of Monte Video during the nine years it was besieged. In 1852 he commenced his exploration of the Argentine Confederation. From 1855 to 1858 he was entirely occupied in travelling about the country, and making short excursions into the neighbouring parts of Chili and Bolivia. He made a large collection of facts relating to the geography, ethnography, geology, and statistics of the districts visited by him. From these materials he has drawn up a 'Description Géographique et Statistique de la Confédération Argentine,' 3 vols. 8vo, Paris, 1860—1864. He has also written short accounts of the same country in the reports on the Universal Exhibition of 1867, and contributed articles to the 'Encyclopédie des Connaissances utiles,' the 'Dictionnaire Politique,' and to the 'National' newspaper.

MARTINEZ DE LA ROSA, FRANCISCO [E. C. vol. iv. col. 125.] On the formation of the short-lived Armero-Mon ministry, October 1857, Martinez de la Rosa returned to office as first secretary of state for foreign affairs. In July 1858 he was appointed president of the Council of State in the ministry of O'Donnell. In May, 1860, he was elected president of the Cortes, and re-elected in November, 1861. He died at Madrid on the 7th of February, 1862.

MARTIUS, CARL FRIEDRICH PHILIP VON [E. C. vol. iv. col. 128]. This eminent observer held, in addition to the posts previously mentioned, the perpetual secretaryship of the Academy of Munich, in which capacity he composed numerous *éloges* on deceased scientific men. His great work on palms, '*Historia Naturalis Palmarum*,' fol. 1823—1850, consists of three volumes, and contains 245 plates. His '*Flora Brasiliensis*,' which was commenced in 1829, reached its 48th fasciculus in 1869, and still remains incomplete. He was assisted by many of the most eminent botanists of the day. He also wrote another important work, viz., '*Beiträge zur Ethnographie und Sprachenkunde Amerikas zumal Brasiliens*,' 2 vols. 8vo, Leipzig, 1867, which is an admirable account of the nations of South America, while the section relating to the Brazilians is remarkably full and exhaustive. He died December 13, 1868.

MASSARD, JEAN, an eminent French engraver, was born at Bellême, August 22nd, 1740. In the main self-taught, he formed his style on that of J. C. Wille, of whom he may be considered one of the most successful followers. In 1814 he was appointed engraver to the king. He engraved several plates in the '*Musée Royal*' and the '*Florence Gallery*.' Among his best prints are '*Hagar and Ishmael*,' '*Virgin and Child*,' and '*The Family of Charles I.*,' after Vandyck; '*The Death of Socrates*,' after David; and the '*Broken Pitcher*,' after Greuze. There are also some good prints by him after Raffaele, Domenichino, Rembrandt, &c. He died at Paris, March 16th, 1822.

MASSARD, JEAN-BAPTISTE RAPHAEL-URBAIN, son of the preceding, was born at Paris in 1775. He studied design in the atelier of David, and engraving under his father. His prints are clean in line, and neatly finished, like those of his father, but hardly so vigorous. Among the best are '*St. Cecilia*,' after Raffaele; '*Apollo and the Muses*,' after Giulio Romano; and the '*Rape of the Sabines*,' after David. He died September 27th, 1849.

MATTEI, STANISLAUS, ABBÉ, an Italian musical composer and conductor, was born at Bologna, February 10th, 1750. As a poor boy, he loved to listen to the sacred music at the church of a neighbouring Franciscan monastery, and his eager attention attracted the notice of the celebrated Padre Martini, who was the maestro di capella. Young Mattei entered as a choir-pupil, took the Franciscan vows at the age of sixteen, and became a priest at twenty-one. As a relaxation from severer discipline, he studied the theory and composition of music. He was first the dutiful pupil, then the affectionate friend, then the confessor, of Martini; and when the latter died, in 1784, Mattei succeeded him as maestro di capella. In 1791, and again in 1794, he was president of the Philosophical Society of Bologna. The tenour of his life was changed in 1798, when the French entered Bologna, and suppressed the monastery. He supported himself for some years as a teacher of music, as a maestro di capella at St. Petronia, and as one of the professors at a lyceum maintained by the French for a short time at Bologna. Among his pupils were Morlacchi, Pilotti, Palmerini, Perotti, Mancini, Tadolini, and two who afterwards rose to great eminence, Rossini and Donizetti. In 1808 he was elected member of the musical section in the Italian Institute of Science, Literature, and the Arts. In 1824 he was admitted as one of the associates of the Académie des Beaux Arts, in the French Institute. He continued to fill the office of maestro di capella at St. Petronia till his death, which took place on the 12th of May, 1825. He was held in such general esteem that his funeral was conducted with musical honours. The Abbé Mattei is said to have composed as many as eight hundred pieces of music. Almost every kind of church music is included among them—masses for three, four, six, and eight voices, some with organ and some with orchestral accompaniments; kyries, credos, dies iræ, stabat maters, misereres, funeral masses, motetts, hymns, psalms, graduals; a '*Passione*,' for four voices and chorus; and several offertory symphonies. Of a more secular kind are numerous cantatas, rondos, choruses, trios, recitatives, airs, exercises for figured basses for violins and violas, fugues for the organ and orchestra, &c. In early life he composed an opera buffa for four voices, '*La Bottega del Libraio*,' performed at the Seminario di Bologna, before the Cardinal-Archbishop Gioanetti; and, for the same place, two choruses for an oratorio, '*Sedecias*.' His music generally is characterised by rich harmony and a scientific development of fugue and counterpoint; the solo compositions have less merit. As a teacher of music, he published '*Contrappunti*,' for two to eight voices, 1788; '*Pratica d'Accompagnamento e Contrappunti*,' and '*Principj di Musica*,' 1804.

MATTEIS, PAOLO DE', a celebrated painter of the Neapo-

litan school, was born at Cilento in 1662. He was the best of the scholars of Luca Giordano, whom he equalled in celerity, though not in ability. He was also a pupil of Morandi. He spent three years in France, where he obtained considerable celebrity. At Rome, where he was invited by Pope Benedict XIII., he painted the Minerva and the Church of Ara Coeli. At Genoa he painted a S. Saverio, and an Immaculate Conception for the Church of S. Girolamo. But his chief works were executed at Naples; that on which he most prided himself being the decoration, in ten days, of the large cupola of the Gesù Nuovo (since destroyed) with frescoes in the manner of Lanfranco. His paintings in the Matalona gallery and in the church of the Pii Operai are in a better style. Matteis, Lanzi thinks, may vie with any painter of his age. He is, however, one of the able men who are chiefly memorable as prominent amongst those who helped forward the decline of art in Italy. He died in 1729. Matteis etched some plates, and wrote a folio volume of instructions in design, '*Il Libro d'Insegnamento del Disegno*.'

MATTER, JACQUES, a French philosopher and ecclesiastical historian, was born on the 31st of May, 1791, at Altkendorf, in the Bas-Rhin, and, being destined by his father for the profession of law, was educated successively at the Gymnasium of Strasburg and the University of Göttingen. Afterwards, with the idea of preparing himself for a diplomatic career, he repaired to Paris, where he attended the lectures of Boissonade, Lécrotelle, and others, in the faculty of letters. In 1816, he carried off the prize of the Académie des Inscriptions et Belles-Lettres, for his '*Essai historique sur l'Ecole d'Alexandrie*.' Coup d'Œil comparatif sur la Littérature grecque, depuis le Temps d'Alexandre le Grand jusqu'à celui d'Alexandre Sévère,' 2 vols. 8vo, Paris and Strasburg, 1820, second edition, "entièrement refondue," with the modified title of '*Histoire de l'Ecole d'Alexandrie, comparée aux principales Ecoles contemporaines*,' &c., 3 vols. 8vo, Paris, 1840—44. In 1819, having taken his degree of docteur-ès-lettres, he received, through the influence of MM. Royer-Collard and Guizot, the post of professor of history at the College of Strasburg, and, two years after, was appointed to the chair of ecclesiastical history at the Academy, and to the direction of the Gymnasium of that city. Devoting himself to the studies and the duties of his position, he produced a work with which he a second time obtained the prize of l'Institut, and which was entitled, '*Histoire critique de Gnosticisme, et de son Influence sur les Sectes religieuses et philosophiques des six premiers Siècles de l'Ere chrétienne*,' 2 vols. 8vo, Strasburg and Paris, 1828, second edition, 3 vols. 8vo, Strasburg, 1843—44; and also published his '*Histoire universelle de l'Eglise chrétienne*,' 4 vols. 8vo, Strasburg and Paris, 1829—35, second edition, with the modified title of '*Histoire générale de Christianisme, de ses Institutions et de ses Doctrines*,' 4 vols. 8vo, Paris, 1843. As a tribute to the erudition and ability of the '*Histoire de Gnosticisme*,' Dr. Matter was appointed in 1828, the year of its first publication, to be inspector of the Academy of Strasburg; and, in 1831, became a corresponding member of the Académie des Inscriptions, whose prize he received, for the third time, for his '*Histoire des Sciences mathématiques et cosmographiques à l'Ecole d'Alexandrie*,' which was incorporated with the second edition of the '*Histoire de l'Ecole d'Alexandrie*.' His next important publication was a treatise, '*De l'Influence des Mœurs sur les Lois, et de l'Influence des Lois sur les Mœurs*,' 8vo, Paris, 1832, second edition, 1843, to which the Académie Française awarded an extraordinary prize of ten thousand francs, and the first publication of which was almost synchronous with the author's removal to Paris, to undertake the office of inspector-general of studies. In 1845, he became inspector-general of the libraries of France, officer of the Legion of Honour, and ordinary counsellor of the University. He received the membership of various learned and philosophical societies; and, having contributed much by his writings, which circulated in several European languages, to the interests of education, he died, June 23, 1864.

The works of Dr. Matter, in addition to those which have been already mentioned, include '*De l'Affaiblissement des Idées et des Etudes morales*,' 8vo, Paris, 1841; '*Schelling: ou, la Philosophie de la Nature et la Philosophie de la Révélation*,' 8vo, 1842, new edition, 8vo, Paris, 1845; '*Lettres et Pièces rares ou inédites, publiées et accompagnées d'Instructions et de Notes*,' 8vo, Paris, 1846; '*De l'Etat moral, politique et littéraire de l'Allemagne*,' 2 vols. 8vo, Paris, 1847; '*Une Excursion gnostique en Italie*,' 8vo, Strasburg, 1852; '*Du Ministère ecclésiastique et de sa Mission spéciale dans ce Siècle*,' 8vo, Paris, 1852;

'Histoire de la Philosophie dans ses Rapports avec la Religion depuis l'Ère chrétienne,' 12mo, Paris, 1854; 'Du Vrai Type de l'Eloquence Sacrée: Discours,' &c., 8vo, Paris, 1854; 'La Philosophie de la Religion,' 2 vols. 12mo, Paris, 1857; vol. i., 'La Science de Dieu. La Science du Monde matériel,' vol. ii., 'La Science du Monde spirituel,' 'La Morale: ou, la Philosophie des Mœurs,' 12mo, Paris, 1860; 'Saint Martin, le Philosophe inconnu: sa Vie et ses Écrits,' &c., 8vo, Paris, 1862; 'Emmanuel de Swedenborg: sa Vie, ses Écrits, et sa Doctrine,' 8vo, Paris, first two editions, 1863; and 'Le Mysticisme en France au Temps de Fénelon,' 8vo, Paris, 1864.

MATTEUCCI, CARLO, eminent for his researches in electricity and electro-physiology, was born at Forlì, June 21, 1811. His earlier education was received at Bologna, and his later at the Polytechnic School at Paris. In 1831 he returned to Italy, and resolved to devote himself to the study of physics. Before this, however, the future tendency of his thoughts had manifested itself in a few short papers which he had written on the influence of the electricity on the earth's surface on climate, on the electric power of the sun's rays, and on the action of the voltaic pile. In 1837 he was invited to assume the directorship of the chemical laboratory connected with the Surgical Hospital at Ravenna, and the professorship of physics in the college of the same town. In 1840 he was transferred to the chair of physics at Pisa. In 1846 he was appointed director of the telegraphic line of Tuscany; in 1848 was made a senator; and in 1860 was elected a member of the Italian Parliament. He took a part in reorganising the Italian kingdom, and was named inspector-general of all the Italian telegraphic lines. In 1862 he succeeded Mamiani as minister of Public Instruction. He was a member of numerous scientific societies, and many honours were conferred upon him by his country. The Copley medal of the Royal Society of London was given him in recognition of his merits. He died June 25, 1868. His papers and books are very numerous, but mostly relate to electricity. Amongst the latter the more important are 'Essai sur les Phénomènes Électriques des Animaux,' 8vo, Paris, 1840; 'Lezioni di Fisica,' of which four editions have appeared at Pisa, and three at Naples; 'Lezioni sui Fenomeni fisico-chimici dei corpi viventi,' 2nd ed. 8vo, Pisa, 1846; 'Lezioni di elettricità applicate agli arti industriali, all'economia domestica e alla terapeutica,' 8vo, Torino, 1852; 'Manuale di Telegrafia Elettrica,' 8vo, Pisa, 1851; 'Cours d'Électro-physiologie,' 8vo, Paris, 1858. As minister of Public Instruction, he endeavoured to advance the progress of education in scientific subjects, and wrote some works on the subject, of which the following may be mentioned: 'La Réorganisation Universitaire en Italie,' 8vo, Paris, 1863; 'Sull'indirizzo degli Studi e sul riordinamento dei locali del Museo di fisica e di storia naturale di Firenze,' 8vo, Florence, 1866; and 'Raccolta di Scritti varii intorno all'Istruzione Pubblica,' 2 vols. 8vo, 1867. His papers are upwards of 250 in number. They mostly relate to the electricity of animals, such as the electrical condition of the muscles, the influence of electrical currents in physiological phenomena, and the electrical functions of the torpedo; to the electricity of the air; to diamagnetism; to the electro-chemical decomposition of compounds; and to various questions more or less connected with electricity. He assisted in establishing the law that the amount of electricity which will separate a certain quantity of an element from the substance with which it is combined will also release a quantity of any other element which is chemically equivalent thereto. He ascertained that the electric state of a muscle is modified when in the act of contracting; but this subject was afterwards more fully developed by Raymond. He found that the electro-motive power of a muscle depended not upon the area of the cross section, but upon the length, and that it was greater in proportion to the degree of organisation of the animal, being greatest in mammals and birds. He proved that the processes of nutrition and secretion give rise to electric disturbance. His researches on the torpedo were continued at intervals over many years, and formed the subject of many papers. He demonstrated that the electric organ of the fish is always charged with electricity, that currents are always circulating in the water surrounding its body, and that the organ retains its functions independent of nervous influence. The discharge of the organ is dependent on the will of the animal, or on mechanical irritation of the nerves; but the accumulation of electricity is quite independent of its will. By these and other researches he materially advanced the sciences which he cultivated.

MATTHAI, JOHANN FRIEDRICH, German painter, was born at Meissen, March 4th, 1777. His father, Johann Gotlob

Matthäi (born at Meissen, 1753, died at Dresden, 1832), a sculptor of some ability, and keeper of the Mengs Gallery of Casts at Dresden, was his earliest instructor in art. After leaving the Dresden Academy, Friedrich Matthäi studied in Paris under Casanova; in Vienna, under Füger; then proceeded to Italy, and in 1809 won the prize for painting at Florence. The pictures sent by him from Italy to the Dresden Exhibition excited much interest. He was, in 1809, nominated professor of painting in the Dresden Academy. For a long series of years Matthäi was one of the leaders of the Dresden school of painting, and many eminent living painters of Germany were his pupils. His works are admired for correct drawing, careful finish, and a warm tone of colour, which reminds the observer of that of the Florentine school. He died at Vienna, whilst on a journey, October 23rd, 1845.

MATTHIÆ, AUGUST HEINRICH, a distinguished German philologist, was born on the 25th of December, 1769, at Göttingen, and was educated successively at the Gymnasium and the University of his native town. In 1789, he repaired to Amsterdam, where, while fulfilling the duties of a private tutor, he further developed those studies in philosophy and classical antiquities which had especially occupied his attention at Göttingen. In 1798, he was appointed professor at an educational institution at Weimar; and, in 1801, became director of the Gymnasium of Altenburg, the duties of which office he performed until his death, on the 6th of January, 1835.

The works of Matthiæ, many of which have been especially valuable to the interests of classical education, include, 'Commentatio de Rationibus ac Momentis quibus Virtus nullo Religionis Præsidio munita sese commendare ac tueri possit,' 4to, Göttingen, 1789; 'Animadversiones in Hymnos Homericos cum Prolegomenis de cujusque Consiliis, Partibus, Ætate,' 8vo, Leipzig, 1800; on the Difference of National Character, 'Versuch über die Ursachen der Verschiedenheit in den Nationalcharakteren. Eine Preisschrift,' 8vo, Leipzig, 1802; 'Homeri Hymni et Batrachomyomachia,' &c., 8vo, Leipzig, 1805; 'Miscellanea Philologica,' 2 vols. 8vo, 1803—4, second edition, Leipzig and Altenburg, 1809; a complete Greek Grammar, 'Ausführliche griechische Grammatik,' &c., 8vo, Leipzig, 1808, third edition, 3 vols. 8vo, Leipzig, 1835, &c., French translation, by Longueville and Gail fils, 3 vols. 8vo, Paris, 1831—36, English translation, by E. V. Blomfield, and edited by C. J. Blomfield (afterwards Bishop of London), 'A copious Greek Grammar,' &c., 2 vols. 8vo, Cambridge, 1818, fifth edition, "thoroughly revised and greatly enlarged from the last edition of the original, by J. Kenrick," 2 vols. 8vo, London, 1852, an epitome of which, by C. J. Blomfield, appeared as 'A Greek Grammar, abridged,' &c., 12mo, London, 1822, fourth edition, "revised by the Rev. J. Edwards," 12mo, London, 1834, sixth edition, 1839, new and enlarged edition, by E. S. Crooke, &c., 8vo, London, 1870; Elements of Greek and Latin Literature, 'Grundriss der Geschichte der griechischen und römischen Literatur,' Jena, 1815, &c., third edition, 8vo, Jena, 1834, English translation, 'A Manual of the History,' &c., 4to, Oxford, 1841; Project of a Theory of Latin Style, 'Entwurf einer Theorie des lateinischen Stils,' 8vo, Leipzig, 1826; Handbook of Philosophy, the original German edition of which appeared at Leipzig, 1823, &c., French translation, by M. H. Poret, 'Manuel de Philosophie. Traduit de l'Allemand sur la troisième édition,' &c., 8vo, Paris, 1837; Miscellaneous Writings, &c., 'Vermischte Schriften in lateinischer und deutscher Sprache,' 8vo, Altenburg, 1833. Matthiæ is also known for several valuable editions of the whole, or of portions, of the works of several classical authors, as Homer, Alcæus, Herodotus, Cicero, &c., and especially for his edition of Euripides, 'Euripidis Tragediæ,' 9 vols. 8vo, Leipzig, 1813, and following years; to which a tenth volume of 'Indices' was added by Kamppmann, 8vo, Leipzig, 1837.

MATTHIESSEN, AUGUSTUS, the son of a London merchant, was born the 2nd January, 1831. When between two and three years of age, he was seized with paralysis, from which he never quite recovered. While still very young, he lost both his parents, and his guardians did not agree to his strong desire to devote himself to science, or even to follow his father's pursuit, deeming the paralytic affection from which he suffered sufficient to incapacitate him for either. In order to strengthen his constitution, they selected a business which would require him to be much in the open air of the country, and accordingly apprenticed him to a farmer in Dorsetshire. During the three years which he passed at the farm he devoted much of the time and money that were at his disposal to experiments in chemistry. As soon as he became of age, he went to Giessen, and studied

chemistry and physics under Professors Will and Buff, and also took his degree of doctor of philosophy. He next went to Heidelberg, where under Bünsen's direction he commenced the preparation of the metals, of the alkalies and the alkaline earths, and the study of their physical properties. He further worked on this subject in the laboratory of Kirchhoff, and in 1857 published an account of his experiments on the electrical conductivity of many of the metals, metalloids, and some alloys. In 1857 he returned to England, and worked for a short time under Dr. Hofmann at the College of Chemistry. He afterwards had a laboratory of his own at his house in Torrington Place, and worked there during about four years, on the nature of alloys and the properties of the metals. [See ALLOYS, E. C. S., ARTS AND SCIENCES DIV., col. 99.] He also gave attention to the organic alkaloids, and his latest papers relate to the organic bases, narcotine, morphine, and codeia. In 1861 he became a fellow of the Royal Society, and in 1862 lecturer on chemistry at St. Mary's Hospital Medical School, a post which he exchanged after six years for a similar one at St. Bartholomew's Hospital, where a new laboratory was built under his supervision. Here he continued for some time interested in his work, planning new researches, completing old ones, instructing a large class of students, carrying on an extensive consulting practice, managing everything with precision and regularity, when he was made the subject of a brutal charge, apparently for the purpose of extorting money, the effect of which was so to disturb the functions of an overworked brain, that he died by his own hand on the 6th October, 1870, at the age of 39. His loss to science just as he had attained the foremost position is much to be lamented. He obtained the Royal Medal of the Royal Society in 1869, and in 1870 was chosen one of the examiners in chemistry of the University of London. He presented a remarkable instance of a man overcoming great natural defects, so as to be able to lecture to large audiences.

MATTIOLI, LUIGI, Italian engraver, was born at Crevalcore in 1662. He studied painting under C. Cignani; but his pictures not succeeding, whilst his pen-drawings of landscapes found a ready sale, his thoughts were turned towards engraving, and he took lessons of G. Crespi. As an engraver he was industrious and successful. Nearly two hundred of his plates have been catalogued, but many are very slight. Perhaps the most esteemed is an Annunciation after L. Carracci. Several others of his prints are after the same master, A. Carracci, Guido, &c., and many are from his own designs. He died at Bologna in 1747.

MATTIOLI, PIETRO ANDREA, botanist, was born at Sienna, March 23, 1500. His youth was passed in Venice, where he learned Greek and Latin, and he then went to the University of Padua to study law, but preferred medicine. Having obtained his degree of doctor of medicine, he practised at Sienna, and soon realized a fortune. For some years he lived at Rome, but owing to war he withdrew to a place near Trent, and remained there from 1527 to 1540. From 1540 to 1552 he lived at Göriz, and was soon after appointed the principal physician to the Emperor Maximilian II. He resigned this post in 1562, and retired to Trent, where he died in 1577.

Mattioli is best known for his 'Commentarii in libros sex P. Dioscoridis de Materia Medica, &c.' folio, Venice, 1544, which was repeatedly reprinted, re-edited, and translated into various languages. For a long time it was the great text-book on materia medica. The most valued edition is that of 1565, which contains upwards of 1000 excellent wood-engravings. J. Bauhin brought out a new edition of it in 1598, and raised the number of woodcuts to 1400. Mattioli also wrote a 'Compendium de Plantis omnibus,' 4to, Venice, 1571. This work has also been translated into various languages. Most of his other works have been collected in 'Opera quæ extant omnia: hoc est, Commentarii in vi. libros P. Dioscoridis; De ratione distillandi aquis ex omnibus plantis; Apologia in Amatium Lusitanum; Epistolarum Medicinalium; Dialogus de Morbo Gallico,' folio, Frankfurt, 1598.

MATURIN, CHARLES ROBERT, a poet, novelist, and divine, the descendant of a French Huguenot family, who had been driven from their country by the revocation of the Edict of Nantes, was born at Dublin, in the year 1782, and received his education at Trinity College in that city. Immediately after the completion, with considerable distinction, of his academical course, he married; and, having taken orders, was admitted to the curacy of St. Peter's, Dublin. In order to increase his income, which had been seriously curtailed by the misfortunes of his father, he set up a boarding-school; and, when he was obliged to sell this to meet the demands of the creditors of a

BIOG. DIV.—SUP.

friend for whom he had become security, he sought to compensate himself by the proceeds of his literary activity. His works, which, in common with his general character and demeanour, exhibited abundant marks of genius, wildness, and eccentricity, achieved various degrees of popularity, but his pulpit eloquence is said to have been of an extremely high order. His controversial sermons, 'Five Sermons on the Errors of the Roman Catholic Church,' 8vo, Dublin, 1824, second edition, 12mo, Dublin, 1826, attracted greater crowds to the parish church during their delivery, which was in Lent, 1824, than had been seen there from the time of Dean Kirwan; and they alone constitute a sufficient monument on which to rest his reputation. Some years before the delivery of these polemical discourses, he had published a volume of 'Sermons,' 8vo, London, 1819, second edition, 1821; but all his talent and eloquence did not avail against the extravagances of an ill-balanced mind to procure him further professional advancement than that with which he entered upon clerical duty. After a protracted illness, he died, curate of St. Peter's, at his house in York Street, Dublin, on the 30th of October, 1824.

His principal dramatic work is 'Bertram: or, the Castle of St. Aldobrand. A Tragedy in Five Acts [and in verse],' 8vo, London, first five editions, 1816, and published in vol. iii., 8vo, London, 1844, of 'The British Drama,' French translation, by MM. Taylor and C. Nodier, 'Bertram: ou, le Château de St. Aldobrand. Tragédie en cinq Actes, traduite librement,' &c., 8vo, Paris, 1821, and with the English text, in No. V. of 'Glashin and Robertson's English Theatre,' 12mo, Paris, 1830 (7). 'Bertram,' which was highly commended by Sir Walter Scott, and which had been rejected by the Dublin managers, was brought out, through the influence of Lord Byron, at Drury Lane, with complete success, to which the acting of Edmund Kean greatly contributed. To 'Bertram' succeeded an unsuccessful tragedy, entitled, 'Manuel,' 8vo, London, first two editions, 1817, which Lord Byron characterised as the "absurd work of a clever man;" and 'Fredolfo. A Tragedy in five Acts [and in verse],' 8vo, London, 1819, the extravagances and want of decorum of which confounded the critics who considered it as the production of a clergyman. Mr. Maturin's other works include 'Fatal Revenge: or, the Family of Montorio. A Romance,' 3 vols., 12mo, London, 1807; 'The Wild Irish Boy. A Novel,' 3 vols., 12mo, 1808; and 'The Milesian Chief. A Romance,' 4 vols., 12mo, 1811, all of which works, apparently devoted to the task of outdoing Mrs. Radcliffe or Monk Lewis in horror and grotesquerie, were published under the pseudonym of Dennis Jasper Murphy; 'Woman: or, Pour et Contre. A Novel,' 3 vols., 12mo, Edinburgh, 1818; 'Melmoth, the Wanderer. A Novel,' 4 vols., 12mo, 1820; and 'The Universe. A Poem,' 8vo, London, 1821. His son,

* EDWARD MATURIN, has been for a number of years a resident in New York. He is the author of 'Montezuma, the Last of the Aztecs. A Romance,' 2 vols., 12mo, New York; 'Benjamin, the Jew of Granada. A Romance,' 12mo; 'Eva: or, the Isles of Life and Death,' 2 vols., 12mo, 1848; 'Lyrics of Spain and Erin,' 12mo, Boston (U.S.), 1850; and 'Bianca. A Tale of Erin and Italy,' 12mo, New York, 1852.

MAUREPAS, JEAN FREDÉRIC PHÉLYPEAUX, COMTE DE, a French minister, was born at Versailles, July 9th, 1701. His father was secretary of the Maison du Roi to Louis XIV., and at the same time secretary of state for the Marine; and young Maurepas succeeded him nominally in the first of these two posts when in his fifteenth year, and formally in 1718, when he was declared of age for that purpose. In 1723 he became secretary of the marine also. As a minister of state he sat at Cabinet Councils, where his characteristics came into full play. Marmontel pictured him as being superficial, indolent, ill-instructed, gay, frivolous, selfish; nevertheless, he retained his influence by quickness of perception, suppleness, an insinuating manner, fertility in devising means and expedients, and persuasive powers of conversation. It was to his credit that he worked well at the Marine or Admiralty. He attached geometers and astronomers to that department of the government; employed Maupertius, Clairaut, Bouguer, Godin, &c., in scientific investigations; sent out two geodetical expeditions to measure an arc of the meridian; made himself personally familiar with the chief ports and arsenals; encouraged improvements in naval construction; established a naval school at Paris; sent surveying expeditions along the coast of France; and caused new and improved charts to be drawn and engraved. Maurepas's fall was sudden and complete. In 1740 a witty but licentious lampoon on Madame de Pompadour, the reigning favourite at

court, was traced to the pen of Maurepas. Louis XV. at once disgraced him, and never again gave him honour or office during the remaining twenty-five years of his reign. Maurepas was exiled first to Bourges, then to Pontchartrain. He had become a sort of oracle, a model to be copied, a brilliant courtier to be imitated; and he seems to have borne his banishment from court with a light heart. When Louis XV. died, and Louis XVI. ascended the throne, in 1774, Maurepas was again summoned to court. The young king intended to have given him a secondary post in the ministry; but the count, by a mixture of address and audacity, obtained the offices of minister of state and president of the council of finance—becoming, in fact, chief minister. The young king was not without good or, at any rate, honest well-intentioned advisers; Turgot, Malesherbes, and Necker being among his financial ministers. The first two, in conjunction, drew up many schemes of reform, especially in concerns of national income and expenditure; but Maurepas, frivolous and selfish, and jealous of the influence they had acquired or might acquire, thwarted their intentions; and he found the clergy and the nobility only too ready to aid him in discouraging the reform schemes. He re-established the ancient parliaments of France, but too late, and with too little power, to avert the Revolution which was gradually approaching. But Maurepas had no real desire for popular institutions: his one purpose was by any means to maintain himself in power; and as he had acted towards Turgot and Malesherbes, so at a later date he acted towards Necker in embarrassing his proceedings and discouraging his plans of financial improvement. His weak, trifling, and selfish conduct rather hastened than arrested the catastrophe of the French monarchy; but Maurepas escaped from experiencing in his own person the effect of the Revolution he had done much to render inevitable. He died in the palace of Versailles on the 21st of November, 1781.

MAURER, CHRISTOPH, sometimes written MURER, Swiss painter and engraver, was born at Zurich in 1558. The son of Josias Maurer, a favourite painter on glass and poet (born 1530, died 1580), he was early instructed in the principles of design by his father, but later studied under Tobias Stimmer, of Schaffhausen, whose manner he adopted. He painted in fresco, in distemper, and on glass, etched on copper, and engraved on wood. His best prints are a set of Hunting Scenes from the drawings of Stimmer, published in 1605; a series of woodcuts of scriptural designs, which, however, though designed, were certainly not all engraved by him; a set of 20 plates and 20 etchings of Miscellaneous Emblems, published posthumously, in 1622, by J. H. Bordorf, and several portraits. Maurer's prints are now very rare, and much prized. He seems to have been a prosperous man, and held in esteem by his fellow-citizens, as he was member of the great council of Bern, and charged with the administration of the state expenditure at Winterthur, where he died in 1614.

MAURO, FRA, a celebrated Italian geographer, who died October 20, 1459, but about whom little is known, beyond his being a monk resident in the monastery of San Michele de Murano, near Venice, and a great authority upon geographical matters amongst his contemporaries. He executed a map of the world, which still exists in manuscript in the library of his monastery. Its date is supposed to be about 1457. It is a little over six feet each way, and is in itself a fine specimen of penmanship. Although, judged by the present state of science, it abounds in errors, and is faulty as regards the proportions and forms of the continents, still it was far superior to any map previously drawn in its approach to accuracy and the range of countries delineated; and indeed surpassed many of the maps of posterior date. In other and older maps the northern portions of Europe and Asia and the south of Africa were unknown regions, but in his they are drawn in something like their true form and position. This map has been copied and published by numerous persons, as by Fraser in 1804, Zurla in 1806, and MacCarthy in 1846.

* MAURY, LOUIS FERDINAND ALFRED, French archaeologist, was born at Meaux (Seine-et-Marne), on the 23rd of March, 1817. He was educated with a view to the profession of an engineer, but, displaying a marked preference for literature, he obtained an appointment in 1836 in the Bibliothèque Royale, where, however, he only remained two years. He then studied the ancient languages and literature, medicine, and law, and was admitted as avocat; but was recalled to the Bibliothèque in 1838. In 1842 he translated Boissier's 'Monuments d'Architecture des Bords du Rhin,' large folio, Munich; and was shortly after elected sub-librarian of the Institute. In 1843

he published an 'Essai sur les Légendes pieuses du Moyen Âge,' a work of great learning and acumen; and 'Les Fées du Moyen Âge,' 12mo, Paris, 1843, 2nd edition, 1855. The subjects treated in these works have been further developed by him in memoirs in various archaeological journals, and in the article 'Fée' in the 'Encyclopédie Moderne,' whilst correlative matters were treated in 'De l'Hallucination envisagée au point de vue philosophique et historique,' 8vo, Paris, 1845; 'Considérations pathologico-historiques sur les Hallucinations,' 8vo, 1846; 'La Magie et Astrologie dans l'Antiquité et au Moyen Âge,' 8vo, Paris, 1860; 'Le Sommeil et les Rêves: Études psychologiques,' 1861; and 'Croyance et Légendes de l'Antiquité,' 1863. Meanwhile his attention had been directed to a very different subject, which he illustrated in a work of great research, entitled 'Histoire des Forêts de la Gaule et de l'ancienne France, procédée de Recherches sur l'Histoire des Forêts de l'Angleterre, de l'Allemagne et de l'Italie, et de considérations sur les caractères des Forêts des diverses parties du Globe,' 8vo, Paris, 1850; and in an elaborate memoir in the 'Recueil' of the Académie des Inscriptions, 1854, for which he was awarded a gold medal at the Concours des Antiquités nationales in the same year. In 1856 he was nominated knight of the Legion of Honour; in 1857 elected member of the Institute; in 1860 appointed librarian of the Tuileries, and in 1862 professor of history at the Collège de France. Besides the works already mentioned, M. Maury has written a résumé of recent additions to geographical knowledge, under the title of 'La Terre et l'Homme,' 12mo, Paris, 1856; and 'Les Académies d'Autrefois,' 1864; numerous memoirs in archaeological and literary journals; assisted M. Guignaut in the last two volumes of 'Religions de l'Antiquité,' M. É. Pelletan in his 'Histoire du Brahmanisme,' and M. de Clarac in the 'Manuel de l'Histoire de l'Art chez les Anciens,' besides completing, with the assistance of M. de Clarac's MSS., the 'Musée de Sculpture Antique et Moderne,' and editing, as Secretary-General, the 'Bulletin' of the Geographical Society of Paris. M. Maury's most important independent work, however, remains to be mentioned—his 'Histoire des Religions de la Grèce Antique,' 3 vols. 8vo, 1857—60, a work almost exhaustive in its learning, and equally valuable for its general soundness of judgment.

MAURY, MATTHEW FONTAINE, LL.D. [E. C. vol. vi. col. 1012.]

MAXIMILIAN, FERDINAND JOSEPH, Emperor of Mexico, known in his earlier life as the Archduke Ferdinand, brother of the Emperor Francis Joseph of Austria, and second son of the Archduke Francis Charles, was born at Vienna, on the 6th of July, 1832. After careful preparatory study, he entered the Austrian navy, and having made several cruises, and held various subordinate commands, was made rear-admiral, and placed at the head of the Austrian marine. In 1855, he visited Greece, Syria, and Egypt; and in the following year, having visited Paris and the principal naval stations of France, he met, at Brussels, the Princess Charlotte, daughter of Leopold, late King of the Belgians, to whom he was married, on the 27th of July, 1857, whilst holding the position of governor-general of the Lombardo-Venetian territory. He ruled judiciously within the limits of his prerogative, devoting much care and attention to the development of various industrial pursuits and enterprises, and quitted his government in 1859, in the winter of which year he visited Madeira, in the company of his wife, and subsequently made a voyage, for scientific purposes, to Brazil. On his return, he fixed his residence at Miramar, near Trieste, where, on the 3rd of October, 1863, he received a deputation of Mexican notables, who had been commissioned, in virtue of a decree made on the 10th of July previous, to offer him the crown of their country. The ardour and romance of his disposition incited him to a prompt acceptance, contingent only on the will of his imperial brother, and the ratification of the choice by a national vote of the people of Mexico. At length, all obstacles having been overcome, and having especially renounced any possible future claim to the throne of Austria, he solemnly accepted the title offered to him, on the 10th of April, 1864, and, four days after, embarked at Civita Vecchia, in an Austrian frigate, for the scene of his dominion. He arrived at Vera Cruz on the 28th of May, and having landed on the following day, proceeded to make a tour, in the course of which he was well received, especially by the Indian population, entering the city of Mexico on the 12th of June. The popularity of which he and the empress were at this time the objects was testified by various manifestations of joy, both civic and literary, and recorded in various publications, as, for instance, 'Advenimiento de SS. MM. II. Maximiliano y

Carlota al Trono de Mexico. Documentos relativos y Narracion del Viaje de nuestros Soberanos de Miramar á Veracruz, y del Recibimiento que se les Hizo en este ultimo Puerto y en las Ciudades de Cordova, Orizava, Puebla, y Mexico,' 8vo, Mexico, 1864; 'Breve Noticia del Recibimiento y Permanencia de SS. MM. II. en la Ciudad de Puebla,' 4to, Puebla, 1864; 'Coleccion de las Composiciones poeticas inscritas en los Arcos y Arrojadadas al Paso de SS. MM. en su solemne Entrada á la Capital del Imperio,' 8vo, Mexico, 1864; and 'Inscripciones, Poesias y otras Piezas literarias, colocadas, en el Instituto Literario de Toluca, el 28 de Octubre de 1864, en que se dignó visitarlo S. M. I. Maximiliano I,' 12mo, Toluca, 1864. The new emperor devoted himself with great energy to the consolidation and development of his dominions, through a great proportion of which he made a successful progress. He granted an amnesty to political offenders, and instituted the plan of public audiences, where every Sunday he considered the grievances of complainants, and the projects of persons who submitted novel plans for the improvement of the country. In 1865, he proclaimed the Roman Catholic religion to be that of the state, whilst granting toleration to every other kind of faith and worship; and took large measures to ensure the prevalence and excellence of primary education. All the liberalism and paternal solicitude of his legislation was, however, insufficient to conciliate the Republican party, or to compel a general acquiescence in the form and personality of a government which was forced upon Mexico by the French; and the clergy became alienated by the refusal of the emperor to restore to them the enjoyment of the secularised property of the Church. Disappointed with the results of a policy under which the empire was the scene of incessant conflicts between the partisans of President Juarez and the combined French and Imperial troops, and yielding to the advice of the French commander, Maximilian at length adopted measures of mingled feebleness and severity, placing in a state of siege all those provinces in which national resistance had either continued or had been renewed, and issuing a decree, October 3rd, 1865, for the shooting of the members of the Juarist bands, and of those who assisted them. These measures for a time appeared to be effective; but again opposition and conspiracies spread throughout the country, and spies and traitors penetrated the imperial court, and infected even the imperial cabinet. Complications and misfortunes now thickened around Maximilian; jealousies and misunderstandings with Bazaine, and the impending withdrawal of the French troops, which was demanded at once by French opinion at home, and by the representations of the government at Washington, which had from the first resented the Napoleonic idea of giving predominance to the Latin race by the establishment of a monarchy on the continent of North America. A mission, undertaken by the Empress Charlotte to the Emperor Napoleon and to the Pope, was without any more exhilarating effect than loss of reason on the part of the imperial suppliant; and upon the final withdrawal of the French troops, in 1866, Maximilian, who had retired to Orizaba, having put the question of his stay in Mexico to the national vote, complied with the prayer of a convention of notables, who invited him to endeavour to maintain the empire. He was, notwithstanding, driven by the misfortunes of his arms, and the pressure of an almost universal rising amongst his subjects, to shut himself up in Queretaro, which for some time he defended with courage and success. Being at length taken prisoner, he was tried by a military council, on the order of Juarez, and condemned to be shot—a sentence which, in spite of the efforts of the representatives of the various European powers, was carried out on the 18th of June, 1867, when Miranon and another faithful follower shared his execution. The body of the emperor was finally surrendered to Austria, and his funeral was celebrated with great pomp in the Cathedral of Vienna, on the 18th of January, 1868.

A man of refined tastes and cultivated intellect, Maximilian was himself an author in various departments of literature; and his talent and activity in this respect are represented by a volume of Travels in Greece, entitled, *My First Excursion*, &c., 'Mein erster Ausflug. Wanderungen in Griechenland von Maximilian I., Ferdinand Maximilian, Erzherzog von Oesterreich,' 8vo, Leipzig, 1868; and by a book, also of posthumous publication, containing Sketches of Travel, Aphorisms, and Poems, entitled, 'Aus meinem Leben. Reisekizzen, Aphorismen, Gedichte,' 4 vols., 8vo, Leipzig, 1867, English translation, 'Recollections of my Life,' &c., 3 vols., 8vo, London, 1868.

The picturesque and pathetic tragedy of his fate, and that of the empress, has naturally called forth a voluminous literature

in most of the languages of Europe, almost approaching the dimensions of a library. From the works conversant about his career, may be selected for mention, 'Mejico y el Archiduque Ferdinand Maximiliano. Por Don J. M. Gutierrez de Estrada,' 8vo, Paris, 1862; *An Attempt at an Historical Sketch of Mexico*, by M. J. Gaijinans, 'Maximilian en Juarez. Proeve eener geschiedkundige Schets van Mexico,' 8vo, Arnhem, 1867; 'Maximilien et la Monarchie du Mexique,' 8vo, Paris, 1867; 'Maximilien, &c. Détails biographiques,' 8vo, Paris and Lille, 1867, by M. A. de la Poste; 'Révélations sur la Vie intime de Maximilien,' 12mo, Paris, 1867, by Adrien Marx; 'Kaiser Maximilian von Mexiko,' 8vo, Brünn, 1867, by Dr. St., who on his title-page speaks of Maximilian as the last knight of the 19th century, 'der letzte Ritter des 19 Jahrhunderts,' 'Maximilien, Empereur du Mexique: sa Vie, sa Mort, son Procès, Détails intimes et inédits,' 24mo, Paris, 1867; 'With Maximilian in Mexico: from the Note-book of a Mexican Officer. By Max, Baron von Alvensleben, late Lieutenant of the Imperial Mexican Army,' 8vo, London, 1867; 'My Diary in Mexico in 1867. Including the last Days of the Emperor Maximilian, with Leaves from the Diary of the Prince Salm Salm, &c. By Felix Salm Salm, General, first Aide-de-camp, and Chief of the Household to his late Majesty,' &c., 2 vols., 8vo, London, 1868, which called forth a protest entitled, 'Maximiliano y los últimos Sucesos del Imperio en Queretaro y Mexico. Opúsculo en que se refutan las Memorias redactadas por F. de Salm Salm. Escrito por Ignacio de la Peza y Agustin Pradillo,' &c., 12mo, Mexico, 1870; 'Mexico under Maximilian,' 8vo, Philadelphia, Boston, Richmond, &c., 1867; 'Life, &c., with a Sketch of the Empress Carlota,' 12mo, New York, 1868, by Frederic Hall, "one of his Majesty's legal advisers;" 'Kaiser Maximilian,' &c., 8vo, Dresden and Leipzig, 1868, by Adolf Stern; 'Mexiko und Kaiser Maximilian,' &c., 12mo, Reutlingen, 1868; an illustrated volume of memorial verses, entitled, 'Immortellen aus einer Kaisergruft. Dichtungen des hochseligen Kaisers Maximilian von Mexico. Mit Illustrationen von Hermine Stilke,' 4to, Leipzig, 1868; 'Maximilian. A Tragedy [in three Acts and in verse], 8vo, Dublin, 1868; 'Maximilian von Habsburg, Kaiser von Mexiko. Ballade,' 4to, Trieste, 1868; 'Maximilien et le Mexique. Histoire des derniers Mois de l'Empire Mexicain,' 12mo, Paris, 1869, by Charles D. d'Héricault; and a comprehensive sketch of his career and works, together with an Epitome of the History of Mexico, by Friedrich von Hellewald, entitled, 'Maximilian I., Kaiser von Mexico. Sein Leben, Wirken, und sein Tod, nebst einem Abriss der Geschichte Mexico's,' 2 vols., 8vo, Vienna, 1869.

* MAY, SIR THOMAS ERSKINE, K.C.B., was born in 1815, and educated at Bedford Grammar School. At the age of sixteen he was appointed assistant librarian of the House of Commons. The hours unoccupied by his official duties he gave to the study of the law, and he was called to the bar of the Inner Temple in 1838. In 1846 he was made examiner of petitions for private bills in the House of Commons. The following year he was made taxing-master; in 1856 he was called to the table of the House as clerk-assistant, which office he held till the retirement of Sir Denis Le Marchant in 1870, when he was made chief clerk. As assistant clerk he has long been regarded as the highest authority in all questions referring to the constitution of the House, parliamentary law, and the like; and his advice and assistance have been found of the greatest value by members. The importance of his public services has been recognised by his nomination, in 1860, to the companionship of the Bath, and his promotion, in 1866 to be knight-commander. Sir Thomas Erskine May has published several works of standard value: 'A Treatise on the Law, Privileges, Proceedings, and Usages of Parliament,' 8vo, 1844, is the accepted text-book on all parliamentary questions; whilst the 'Constitutional History of England since the Accession of George III., 1760—1860,' taking up the history where it was left by Hallam, is admittedly of equal authority with that classic work, and much more agreeable in style, without being less profound: it has been translated into German and French, and reprinted in the United States. Sir T. E. May is also the author of 'Remarks and Suggestions with a view to facilitate the Despatch of Public Business in Parliament,' 1849, and of a pamphlet 'On the Consolidation of the Election Laws,' 1850. He has contributed to the Edinburgh and other reviews; and for the 'Penny Cyclopædia' he wrote many valuable articles on Parliament and parliamentary law, political economy, and biography, which have been embodied in the 'English Cyclopædia.'

MAYER, JOHANN ERNST, German sculptor, was born at

Ludwigsburg in 1776. He studied in the Munich Academy, and afterwards at Rome under Thorwaldsen. On his return to Munich he was elected into the Academy, and afterwards nominated professor of sculpture. He was greatly esteemed in Munich, and found constant employment in executing the sculptural decorations of the royal palace, the Glyptothek, the Library, and other of the many new churches and public buildings in that city. He died January 22, 1844.

MAYER, JULIUS ROBERT, was born at Heilbronn, 25th November, 1814. He was educated for the medical profession, and went on a voyage to Java as surgeon in a Dutch ship. He noticed that the venous blood of a feverish patient in the tropics was redder than in more northern latitudes. Professor Tyndall remarks in his 'Treatise on Heat considered as a Mode of Motion,' London, 1863:—"Starting from this fact, while engaged in the duties of a laborious profession, and apparently without a single kindred spirit to support and animate him, Mayer raised his mind to the level indicated by the references made to his works throughout this book. In 1842 he published his first memoir, 'On the Forces of Inorganic Nature,' in 1845 his 'Organic Motion' was published; and in 1848 his 'Celestial Dynamics' appeared. After this, his overtasked brain gave way, and a cloud settled on the intellect which had accomplished so much." It is stated in Poggendorff's 'Biog. Liter. Handwörterbuch,' that Mayer died in an asylum before 1858; but in the Appendix to that work the correction is made that in 1862 he was still alive. The claims of Mayer to be considered as the discoverer of the mechanical equivalent of heat, in opposition to Joule, are stated with elaborate emphasis in the above work by Professor Tyndall.

MAYERNE, THEODORE TURQUET DE, born near Geneva, September 28th, 1573, was the son of Louis Turquet de Mayerne (born 1550, died 1618), author of the 'Histoire générale d'Espagne,' folio, 1587, and 'La Monarchie aristodémocratique,' and godson of Theodore Beza. Theodore de Mayerne studied successively at Geneva, Heidelberg, and Montpellier, at which last he took his doctorate in medicine, February, 1597. He settled in Paris, and practised with so much success as to receive an appointment at the court, and be invited to accompany the Duc de Rohan in 1600 on his mission in Germany and Italy. On his return, he gave lectures on anatomy and pharmacy to students in medicine; but this procedure, coupled with the innovation of practising chemistry and prescribing various chemical preparations instead of the simple substances then in use, gave great offence to the older practitioners, who published, December, 1603, a decree condemning his practice, and forbidding orthodox members of the faculty from consulting with him. Mayerne defended himself in a tract, 'Apologia in qua videre est, involutis Hippocratis et Galeni legibus, remedia chimice preparata tuto usurari posse,' which met, of course, with an orthodox response. His quarrel with the faculty did not interfere with his popularity. His practice increased, and he was nominated physician to the king; but the ratification of the appointment was prevented by the queen, Marie de' Medici, at the instigation of the Jesuits, who feared his Huguenot opinions. These professional and ecclesiastical intrigues, however, at length decided him to accept, in 1611, an invitation from James I. to settle in London, with the appointment of first physician to the king. He remained in favour till the death of James, when he was continued in office and favour by Charles I. The civil war interfered little with his good fortune; but he retired about 1637 to a house he had built for himself at Chelsea, where he died, March 15, 1655, in the 82nd year of his age, leaving a large fortune to his only daughter, who married the Marquis de Montpoullan, and died at the Hague in 1661. De Mayerne was perhaps the most accomplished physician of his time, and holds a high place in the history of chemistry (Brande, 'Manual of Chemistry,' p. 23). His medical and chemical writings, which were highly valued by his contemporaries and immediate successors, were collected and published by Dr. Joseph Browne in 1700, in a thick folio volume—'Operum Mayernii,' in two books: (i.) 'Consilia, Epistolae, et Observationes;' (ii.) 'Pharmacopœam, variasque Medicamentorum formulas.' But of more permanent value, perhaps, is a work of a very different kind. De Mayerne was fond of painting, and he made many experiments on the preparation of colours, freely communicating the results to his friends, Rubens, Vandyck, Petitot, and other artists, who, in return, explained their respective technical methods. From De Mayerne's processes Petitot is said to have obtained the principal colours he employed in his enamels and the means of vitrifying them. De Mayerne

made a careful record of his investigations and of what he learned from painters, and the original manuscript, entitled 'Pictoria, Sculptoria, Tinctoria, et quæ subalternarum Artium spectantia in Lingua Latina, Gallica, Italica, Germanica conscripta, a Petro Paulo Rubens, Van Dyke, Somers, Greenberry, Jansen, &c., A.D. 1620,' is now in the British Museum. (Sloane MSS., No. 2052). It is of exceeding interest for the light it throws on the methods of Flemish painting at the most brilliant period of its history. (Eastlake, 'Materials for a Hist. of Oil Painting,' p. 545, &c.) A fine portrait of De Mayerne, from the painting by Rubens, forms the frontispiece to his works. De Mayerne was created Baron D'Aulbonne in 1621.

MAYOW, JOHN, was born in Cornwall in 1645, and died in September, 1679, at the early age of thirty-four, at the house of an apothecary in York Street, Covent Garden. His powers as an experimental inquirer were of the highest order, but the scientific mind was not prepared for the bold statements made by him, which, if accepted, would have overthrown some existing theories. He is the first chemist who published anything of value on the subject of combustion and respiration; while his remarks on affinity are characterized by great shrewdness. In fact, Dr. Beddoes, and more recently Dr. Yeats ('Observations on the Claims of the Moderns to some Discoveries in Chemistry, &c.,' London, 1798), have, we think successfully, made out his title to several of the discoveries claimed by later chemists. He showed, for example, that one part only of the atmosphere is capable of supporting life and combustion, and that the part which maintained combustion by absorption into the blood was in some way connected with animal heat; he showed that there was more air in arterial than in venous blood, and that there was an analogy between the respiration of animals and plants. Mayow also produced hydrogen gas and nitrous gas, and had some clear notions respecting "the mutual action of salts of contrary kinds." His views of affinity were admirable, considering the absurd mass of error in which the subject was invested at the time. Newton recognised their value, and adopted them in his sketch of a theory of chemical attraction attached to the third book of his Opticks. Mayow was a student of Wadham College, Oxford, and afterwards a probationer Fellow of All Souls. Before applying himself to the study of medicine, he obtained a degree in Civil Law. After leaving college, his chief place of residence was Bath. His celebrated treatise, 'De Sale Nitro et Spiritu Nitro aëreo,' was published at Oxford in 1674, and at the Hague in 1681: in this there is clear proof that Mayow was aware of the existence of what was afterwards called oxygen, and that metals gain in weight by calcination. His early death is to be deplored: had he lived longer, his very remarkable discoveries would doubtless have been pushed farther, and by dint of repeated demonstration have made an impression on the scientific men of the time which it required at least another century to effect.

MAZOIS, CHARLES FRANÇOIS, French architect and archæologist, was born at Lorient, October 12th, 1783. He was a pupil of Percier; then went to Rome, where he distinguished himself; and was invited to Naples by Murat, for whom, amongst other things, he restored the Palace of Portici. He was thus led to examine the ruins of Pompeii, to which he eventually devoted himself with untiring assiduity during the years 1809-11, carefully drawing and measuring every building and object of interest. He published the first two volumes of 'Les Ruines de Pompéi,' folio, in 1812-15; but political and other changes prevented the immediate continuance of this magnificent work—the standard authority on the buried city, and the architectural and archæological subjects associated with it. M. Mazois did not, however, discontinue his labours; and before his death he had prepared most of the remaining plates and much of the text. The two concluding volumes were published under the care of M. Gau, in 1838. M. Mazois also wrote a popular description of a Roman house—'Le Palais de Scæurus,' 4to, with twelve plates, 1819, a second edition, 1822, third, 1861. He wrote likewise some lives of architects in the 'Galerie Française,' and a few professional memoirs. His architectural labours are not very important: he built several houses, and restored the church of St. Remi at Rheims. In 1819 he was appointed one of the four inspectors of civil buildings. He was created a knight of the Legion of Honour in 1823; and died at Paris, December 31st, 1826.

* MEADE, GEORGE GORDON, an American general, was born in 1816, at Cadiz (or at Barcelona, according to some authorities), in Spain, where his father was American consul. His father belonged to a Pennsylvania family; but his mother

was a Catalonian lady. He received his education in the United States, where he entered the West Point Military Academy in 1831; and quitted it in 1835, with the grade of second lieutenant of the second regiment of artillery. He withdrew from military service in 1836, but re-entered it in 1842 with the rank of second lieutenant of Topographical Engineers. He served with his corps in the Mexican war in 1846; distinguished himself at Palo Alto; was promoted to be first lieutenant for his bravery at Monterey; was made captain in 1856; and major in 1860. When the civil war broke out in 1861 he was appointed brigadier general of volunteers, in the Pennsylvania reserve corps, under General M'Call. Very shortly he was transferred to the army of the Potomac, under General M'Dowell, and served in the first corps of that army in Virginia. He fought in the battles of Mechanicsville and Gaines Mill towards the close of June, 1862, and in the "Seven Days" battle before Richmond; was wounded at Newmarket Road, and received the rank of lieutenant-colonel in the regular army. In the severe battle of Antietam between Lee and M'Clennan, in September, Meade succeeded Hooker (who was wounded) in command of the ninth corps. When General Burnside, who had superseded M'Clennan, headed another advance on Richmond, he was ably seconded by Meade; but the attack was disastrously defeated by Lee at the battle of Fredericksburg on the 13th. On the 15th Meade was made major-general, and superseded Butterfield in command of the fifth corps. During the winter he assisted in re-organising the Federal forces. In May, 1863, Hooker, who had succeeded Burnside in command of the army of the Potomac, crossed the Rappahannock, and, with Meade as commander of his right wing, fought the battle of Chancellorsville, May 2-4. This sanguinary action was won by Lee and Stonewall Jackson; and the Federals were again forced to withdraw from Virginia. When Lee carried the war into Maryland in June, Meade succeeded Hooker in command of the army of the Potomac; he justified the promotion by defeating Longstreet at the battle of Gettysburg, July 1-3. This so far frustrated Lee's plan as to induce the Confederates to withdraw from Maryland to Virginia; Meade was unable, nevertheless, to effect much against the Confederates on their own side of the Potomac. In April, 1864, another change was made: General Grant was appointed commander-in-chief of the United States forces, and he organised a series of operations covering a vast area. Meade still commanded the army of the Potomac, but under the personal supervision of Grant. While covering Washington, he advanced upon Richmond; began his Virginia campaign in May, and fought the severe battles of the Wilderness, Spottsylvania Court House, Jericho's Ford, North Anna, and Cold Harbour. In most of these actions Meade was outmanoeuvred by Lee, with terrible losses on both sides. Throughout the remainder of the war General Meade witnessed a good deal of hard service; but the operations by which the Federals gradually gained a complete advantage over the Confederates, such as those under Sherman and Sheridan, were mostly headed by armies with which he was not personally connected. He was more closely concerned with the persistent and at length successful investment and capture of Richmond.

MECHEL, CHRISTIAN VON, Swiss engraver, was born at Basel in 1737; studied under Heumann and Preissler at Nürnberg, and J. G. Wille at Paris, and settled at Basel as an engraver and printseller. He used the graver with facility and neatness; engraved and published several good contemporary portraits and subject-pieces; the works of Holbein, 4to, 1780, with descriptions; the medals of Hedlinger, with illustrative text, folio, 1776; the Düsseldorf Gallery, 2 vols. folio, 1778; views on the Rhine, &c. He died at Basel in 1817.

MECKEL JOHANN FRIEDRICH, anatomist, was born at Wetzlar, July 31, 1714. At first he was intended for the legal profession, but by the advice of his grandfather, Dr. Möller, he was induced to study medicine. For this purpose he proceeded to Göttingen and Berlin, and received his doctorate from the Göttingen University in 1748. After serving as a demonstrator in one of the schools at Berlin, he was appointed, in 1751, professor of anatomy in the university of that city. In 1773 he resigned this post on being nominated surgeon to the King of Prussia. He died at Berlin, September 8, 1774. He made numerous discoveries in the structure of the human body, and wrote many papers on the nerves, the brain, and on disease of the heart. His son, PHILIP FRIEDRICH THEODOR MECKEL, born April 30, 1756, died March 28, 1803, was also an anatomist and professor. His grandson, having the same name as himself, is noticed in the following article.

MECKEL, JOHANN FRIEDRICH, anatomist, was born at Halle, October 17, 1781. His education was received at Halle, Göttingen, Würzburg, and Vienna. In 1806 he was elected the professor of surgery at Halle, but was afterwards transferred to the chair of anatomy and physiology. His grandfather, who was one of the most eminent anatomists of his day, established a museum, which was added to by his father and by himself, and which became the richest and best arranged of its kind in Germany. His own taste for comparative anatomy was mainly fostered by his familiarity with this museum in childhood, and by his desire to improve and enrich it. After his death, on October 31, 1833, it was sold to the University of Halle. His works indicate much laborious research, and abound in general views on subjects of comparative anatomy and physiology beyond those of almost any contemporary or precedent writer. His work on human monsters—'De duplicitate monstrosa commentarius,' fol., Halle and Berlin, 1815, is one of the best on the subject. His most philosophical production is the 'System der vergleichende Anatomie,' 8vo, Halle, 1821—1833, which remained unfinished when he died. He also wrote a translation of Cuvier's lectures on comparative anatomy, 'Anatomisch-physiologische Beobachtungen und Untersuchungen,' 8vo, Halle, 1822; 'Beiträge zur vergleichende Anatomie,' 8vo, Leipzig, 1808—1812; 'Handbuch der pathologischen Anatomie,' 2 vols., 8vo, Leipzig, 1812—1816; 'Tabula anatomico-pathologica,' fol., Leipzig, 1817—1826, and a few others. He devoted a large portion of his time to editing the 'Archiv für Anatomie und Physiologie,' 1826—1833, and the periodical of which it was virtually the continuation, 'Deutsches Archiv für die Physiologie,' 1815—1823, in one or other of which most of his fifty-five scientific papers appeared.

MEDINA, SIR JOHN BAPTIST, portrait-painter, was born in 1660, at Brussels, where his father, Don Medina de l'Asturias, was resident. He learned painting of Du Chalet; but formed his style by the study of Rubens. He married young, and came to England in 1686. He found a warm patron in the Earl of Leven, who invited him to settle in Scotland, and insured him commissions to the extent of 500*l*. Medina settled in Edinburgh, where, with the exception of a brief removal to London, he continued to reside till his death, in 1711. He painted the portraits of most of the nobility and principal gentry of Scotland, executed a few historical pieces and one or two landscapes; but he had twenty children, says Walpole, and he did not grow rich. His portrait, painted by himself, is in the gallery of painters' portraits, Florence; another is in the hall of the College of Surgeons, Edinburgh, where are also several portraits of professors by him. Half-a-dozen of his portraits (his own amongst them) were in the Second Special Exhibition of National Portraits, 1867. Walpole says, that when he went to Scotland he carried with him "a large number of bodies and postures, to which he painted heads;" but the portraits we have seen do not sustain the imputation. The positions are varied and characteristic, and the heads evidently belong to the bodies, and are not adroitly managed additions. His works have a certain largeness of style, and the countenances are intelligent and expressive; but his coarse facility of handling often degenerates into carelessness. Medina was knighted by the Duke of Queensberry, the lord high commissioner, and was the last knight made in Scotland before the Union.

MÉHUL, ÉTIENNE HENRI, a French musical composer, was born at Givet, in the Ardennes, June 24th, 1763. He received his first music-lessons from a poor blind organist, and then became a pupil of Hauser, organist at the convent of Laval Dieu—a player of much celebrity at that time. Young Méhul went to Paris in 1778, and, although only in his sixteenth year, began to teach music as a means of support, whilst studying composition under Edelmann. Paris was at that time engrossed by the violent feud between the Gluckists and the Piccinists. Méhul obtained the aid and advice of Gluck, and this was a step towards his advancement in life. In 1782 appeared Méhul's first composition, a sacred ode, to words by Rousseau. Turning his attention to opera, he composed three operas before he was twenty years of age, 'Psyche,' 'Anacréon,' and 'Lydie;' but these, under the advice of Gluck, were rather for practice than for public presentation. His 'Euphrosyne et Coradin' in 1790, and his 'Alfonzo et Cora' in 1791, contained a sufficient amount of good music to draw attention favourably towards him. A few of the airs which he composed in 1792 for a one-act historical drama, called 'Stratonice,' lived long after the drama itself had been forgotten. His compositions then appeared in rapid succession: 'La Jeune Sage et le Vieux Fou,' in 1793; 'Horatius Cocles,' and 'Phrosine et Mélidor,' in 1794; the overture

and chorus to a tragedy called 'Timoléon,' and a series of national songs, the 'Chant du Départ,' 'Chant du Victoire,' and 'Chant du Retour.' These songs were written and composed to celebrate the fourth anniversary of the taking of the Bastille; and the first of them, the 'Chant du Départ,' was the only companion to the celebrated 'Marseillaise' in maintaining a permanent hold as a national song. In 1795 he produced his opera, 'La Caverne,' in the same year he was elected a member of the Académie des Beaux-Arts, and appointed one of the five professors at the newly established Conservatoire de Musique. In 1797 his 'Jeune Henri' experienced a fate somewhat similar to that of Kreutzer's 'Lodoiska': nothing lives of it except the overture. 'Adrien,' and a successful comic opera called 'Ariodant,' appeared in 1799; 'Bion,' and (in conjunction with Cherubini) 'Épicure,' in 1800. Various minor works were produced by him during the later years of the century, including 'Le Jugement de Paris,' a ballet; 'Doria,' 'Le Pont de Lodi,' 'La Toupie et la Papillon,' and 'La Dansomanie,' a ballet. In 1801 he was incited to adopt, or to imitate, the graceful melodies which had rendered the Italian music of Cimarosa and Paisiello popular in Paris; he composed 'L'Irato' with this intent, but, though successful, the opera was felt to be wanting in the lightness of the Italian style. Three new operas and musical dramas in 1802, 'Le Trésor Supposé,' 'Joanna,' and 'L'Heureux Malgré Lui,' and two in 1803, 'Une Folie' and 'Hélène,' testified to the activity of his pen. In the last-named year he also participated with Kreutzer, Boieldieu, and Nicolo in composing the music to 'Le Bauer et la Quitance.' Méhul showed a generous appreciation of the merits of Cherubini when the office of maître de chapelle was vacant: Napoleon offered it to Méhul, who suggested Cherubini as a more worthy recipient; but Napoleon, having a prejudice against Cherubini, refused, and a less accomplished musician than either was chosen. Méhul's next productions were 'Les Hussites,' a melodrama, in 1804; 'Gabrielle d'Estrée,' in 1805; 'Les Deux Aveugles de Tolède,' and 'Uthal,' founded on an Ossianic subject, in 1806; and 'Joseph,' a religious opera, in 1807. This last contains some of Méhul's finest music. In 1811 appeared 'Les Amazones,' in the same year, 'Persée et Andromède,' in 1813, 'Le Prince Troubadour,' in 1814 (in conjunction with Bertin, Kreutzer, and Paër), 'L'Oriflamme,' a cantata to celebrate the restoration of the Bourbons; and in 1816, 'La Journée aux Aventures.' Several other operas by him still remain in MS. Méhul also composed numerous hymns, cantatas, symphonies, pianoforte sonatas, and solfeggio lessons. He contributed two papers to the Institute—'Sur l'État futur de la Musique en France,' and 'Sur les Travaux des Éléves du Conservatoire à Rome.' He died at Paris, October 18, 1817.

MELBOURNE, WILLIAM LAMB, VISCOUNT, an English statesman, second son of Sir Peniston Lamb, first Viscount Melbourne, was born in London, on the 15th of March, 1779, and was educated successively at Eton and at Trinity College, Cambridge. Afterwards he studied politics and jurisprudence under Professor Millar, at the University of Glasgow; and in November, 1804, was called to the bar by the Society of Lincoln's Inn, of which he had become a member in July, 1797. His practice as a barrister was limited to a single attendance at the Lancashire sessions, where, through the influence of Mr. Scarlett, afterwards Lord Abinger, he received his first and only brief. By the death of his elder brother, in 1805, he became heir to the family honours, and was returned to Parliament as member for Leominster. In the same year he married Lady Caroline Ponsonby, daughter of the Earl of Besborough, and afterwards celebrated as Lady Caroline Lamb, as the correspondent of Lord Byron, as an active politician, and as the author of various novels and fugitive poetical pieces. She died in 1828. Immediately upon his entry into the House of Commons, Mr. Lamb attached himself to the Whig party, under the leadership of Charles James Fox; and was chosen, under the Grenville administration, to move the address to the crown in answer to the royal speech on the opening of the new Parliament in December, 1806, in which he had obtained a seat for the Scottish royal burgh of Lauder, in Berwickshire. In the general election in the summer of 1807 he was returned for Portarlington, which he continued to represent until 1816, when he was elected for Peterborough, for which he was again returned in 1818. In the following year he became one of the representatives for the county of Hertford, and was re-elected in 1820. During the administration of Mr. Perceval and Lord Liverpool, Mr. Lamb continued in a course of moderate opposition, not unfrequently giving them his support; and from the retirement of the Whigs, in 1807, on their

refusal to compromise the Catholic question, till 1829, he supported on every occasion the measure of Catholic emancipation. In April, 1827, he assumed office under the composite administration of Mr. Canning, as Chief Secretary for Ireland, and retained it under the government of Lord Goderich, afterwards Earl of Ripon, retiring only on the appointment of Lord Francis Leveson Gower, under the administration formed by the Duke of Wellington on the 25th of January, 1828. By the death of his father, on the 22nd of July following, Mr. Lamb was called to the House of Peers, where, as Viscount Melbourne, he gave his cordial support to the Catholic Relief Bill of 1829, and distinguished himself as an advocate of parliamentary reform. He became Secretary of State for the Home Department in November, 1830, in the cabinet of Earl Grey; and upon the retirement of the latter, on the 9th of July, 1834, was called upon to succeed him as First Lord of the Treasury. His first tenure of the premiership was of short duration; and in November following he was dismissed by the king, who, choosing to consider the removal of Lord Althorp, the Chancellor of the Exchequer, to the Upper House as the breaking up of the administration, dismissed Lord Melbourne, and summoned Sir Robert Peel to undertake the duties of prime minister. The new cabinet, which, in the absence of Sir Robert Peel in Italy, was, for a short time, conducted provisionally by the Duke of Wellington, fell, in April, 1835, speedily before the adverse attitude of the House of Commons, and Lord Melbourne became once more First Lord of the Treasury. The accession of Queen Victoria, in 1837, increased the influence of Melbourne and the strength of his government; and it devolved upon him to instruct the youthful sovereign in the exercise of her duties and position, a task which he fulfilled in a manner calculated to attract the gratitude of the queen and the confidence of her subjects. On the 9th of April, 1839, Mr. Labouchere introduced a bill for suspending the constitution of the Island of Jamaica, the second reading of which was allowed to pass *pro forma*; but on the motion that the Speaker do leave the chair, a long and warm debate arose, which terminated, on the 6th of May, in a division of 294 to 289 in favour of the motion, giving the ministers a majority of five. Next day they announced their resignation; and Sir Robert Peel attempted to form a cabinet, but failed in consequence of a difference with the queen on the subject of the appointments of the ladies of the household. Lord Melbourne immediately returned to office, in which he continued until the 30th of August, 1841; when a vote of want of confidence having been carried by Sir Robert Peel in the House of Commons, on the 4th of June, by a majority of one, and ratified by a majority of ninety-one in a new Parliament, which assembled on the 19th of August, he and his colleagues tendered their resignation. He was succeeded by Sir Robert Peel, and soon afterwards, sinking into confirmed ill-health, he ceased to take a prominent part in public affairs. The disease, which was at length fatal to him, was of about six weeks' duration; and he died on the evening of Friday, October 24th, 1848, at his seat, Brocket Hall, Hertfordshire.

In public life Viscount Melbourne exhibited no considerable degree of oratorical power; but he secured the reputation of being honest and well-intentioned. He was courageous, dispassionate, and unprejudiced; skilled in the arts of accommodation, and knowing how to conceal seriousness of purpose under a gay and sometimes flippant exterior. His social qualities were remarkable for their charm and attractiveness.

MELDOLA, or MELDOLA, ANDREA, Italian engraver. A large number of engravings, chiefly after the designs of Parmigiano, and executed about 1540—1570, bear the signature of A. M., or Andrea Meldola. Formerly they were attributed to Andrea Schiavone, whose family name was Medola; but Zani, who investigated the subject very carefully, believed that he had proved the engraver, A. Meldola, to be a different person from the painter, A. Medola. Bartsch, Nagler, and other authorities adopted his view, and the point was pretty generally conceded. More recently, however, Harzen ('Kunstblatt,' 1853, p. 327) and Passavant ('Peintre-Gravure,' 1860—1864, i. 366, iv. 175) have sought to rehabilitate the old opinion, chiefly on the authority of a document dated 1563, discovered at Venice, and printed in the Florentine edition of Vasari, 1856, but which, in fact, merely proves, what was not denied, that Schiavone was called Medola ("Andreas Sclabonus dictus Medola") [SCHIAVONE, ANDREA, E. C. vol. v. col. 316]. Passavant himself points out the curious fact that the prints known to be by Schiavone are all etchings, whilst those which have the signature of Meldola, or the monogram "A. M.," are executed with the graver and dry

point. As nothing is known of the engraver apart from the prints, it is difficult to arrive at a definite conclusion. But the difference in the character of the prints, and the improbability that a painter like Schiavone would have engraved so many plates with the burin after another painter, seem to support the opinion that the painter and the engraver were two different persons. The most celebrated of Meldola's prints is the *Heliodorus of Raffaele* from a drawing by Parmigiano. Meldola is by some thought to have engraved on pewter. There are full lists of Meldola's prints in Bartsch (tom. xvi.), and by Messrs. Smith in Stanley's edition of Bryan (pp. 458-464), the latter increasing the entire number to 110.

MELONE, ALTOBELLO, Italian painter, seems to have painted between the years 1497 and 1518. Nothing is known of his life. According to Vasari, he painted in fresco a series of scenes from the life of Christ, in the Cathedral of Cremona, in competition with Boccacino Boccacci: they were very beautiful, he adds, and worthy of all commendation. But Melone's oil-paintings were considered more successful than his frescoes. One of these is in the National Gallery (No. 753), 'Christ and the Disciples going to Emmaus.' The figures, nearly life-size, are in a well-painted landscape. It was formerly in the Carmelite church of San Bartolommè, at Cremona.

MELLONI, MACEDOINE, was born at Parma in 1801. We have no particulars respecting the education of this remarkable man; but we know that his affections were divided between love of country and scientific research, and that the stupid despotism which so long oppressed Italy entailed on him much suffering, both as a patriot and a philosopher. He occupied the chair of physics in his native town, when in 1831 he was compelled to seek refuge in a foreign land from his political persecutors. He resided nearly a year in Geneva, where he conducted some of those experiments on radiant heat which served to lay the foundation of an entirely new branch of science. He then fixed his residence at Paris, where his discoveries excited the admiration and respect of the civilised world. He had already assisted his friend and countryman, Nobili, in perfecting the idea of a highly sensitive thermometric instrument, based on the thermo-electric pile, and recording its indications by means of a galvanometer. By means of this instrument and his own marvellous experimental skill, it was proved that rays of heat present phenomena as complex as those of light. We must refer to another division of this work for an account of these researches, which led De la Rive to apply to their author the complimentary title of "the Newton of heat."

Although his residence in Paris was made gratifying to Melloni by the love and respect of numerous scientific men, yet he pined for his native land; so much so, that Arago and Humboldt made a strong appeal to Prince Metternich to allow him to return. In March, 1839, he obtained the post of director of the Conservatory of Arts and Manufactures at Naples, and professor of physics at the Bureau of Meteorology. Here, in the autumn of 1846, he conducted his researches on the nocturnal cooling of bodies. His memoirs on this subject were read before the Royal Academy of Naples, in February and March, 1847. Mr. Tomlinson, in giving an account of these experiments, says:—"The most curious point connected with this inquiry is its origin. It will hardly be believed that the Austrian and Bourbon governments, in their dread of novelty, would not allow the true theory of dew to be taught. Melloni, in order to show that the laws of terrestrial radiation are the same in Italy as in countries where there is more political liberty, undertook these researches."

The events of 1848 led to the loss of Melloni's appointments. He retired to Portici, and hoped that, by leading a retired life, he might escape the suspicions of the government. He was, however, watched and sometimes visited by the police. "You are a man of European reputation," they would remark. "Anything you say has weight and influence; it is necessary, therefore, that we should watch your conduct." It was in this way that they justified their persecutions. But Melloni busied himself only in the kingdom of science, where despotism cannot exist. He examined some deep water in a grotto near Naples, by which he explained the colour of limpid and deep waters. He also demonstrated the existence of a calorific power in lunar light; and a month before his death, which took place from a sudden attack of cholera, 11th of August, 1853, he communicated to his friend De la Rive some interesting researches on electrical induction. Melloni was a corresponding member of the Academy of Sciences at Paris, and a chevalier of the Legion of Honour.

MELVILLE, HERMAN, an American author, descended

from an ancient Scottish family, and grandson of one of the "Boston Tea Party," was born at New York, on the 1st of August, 1819. At the close of a boyhood passed chiefly in Albany and Lansingburg, New York, and Berkshire county, Massachusetts, he was seized with a passion for the sea; and, in his eighteenth year, made a voyage before the mast from New York to Liverpool, after his return from which he embarked, on the 1st of January, 1841, on a whaling voyage to the Pacific. After a cruise of about eighteen months, he took an opportunity, whilst his ship was at Nukahiva, one of the Marquesas Islands, to escape, with a comrade, from the tyranny of the captain. Falling by mishap into the hands of a warlike race who inhabited the Typee Valley, he was detained amongst them as a prisoner, but without unkindness, for four months, when he was unexpectedly rescued by the crew of a Sidney whaler, in which he proceeded to Tahiti. After some time spent in the Society and the Sandwich Islands, he embarked, in 1843, on board of an American frigate, at Honolulu, and landed at Boston (U.S.) in October, 1844, after an absence of nearly four years. As the literary first-fruits of his observation of the peculiar phases of nature and of society which he had encountered during his wanderings, he published 'Typee, Narrative of a Four Months' Residence among the Natives of a Valley of the Marquesas Islands: or, a Peep at Polynesian Life,' 12mo, New York, 1846, &c., which passed through several editions, and was translated into various European languages, and of which an English edition appeared as No. xxx. of 'Murray's Home and Colonial Library,' 8vo, London, 1843, &c. 'Typee' was valued for its remarkable freshness, as having been the first account published of a residence among the natives of the Polynesian Islands, by a person who had lived with them in their own manner, and, so far as was possible, on terms of social equality. It was followed by 'Omoo: a Narrative of Adventures in the South Seas,' 8vo, New York, first three editions, 1847, and others, 16mo, London, 1847, and in Nos. xliii. and xlv. of 'Murray's Home and Colonial Library,' a work which, without being so popular as its predecessor, brought down upon the author the attacks of certain critics for the presumed unfairness of his animadversions on the Protestant mission in Tahiti. In 1847, Mr. Melville married a daughter of Chief Justice Shaw, of Massachusetts, and resided for a few years in New York; after which, in 1850, he removed to Pittsfield, Massachusetts, where he divided his time between the pursuits of agriculture and literature, varying both by a circumnavigatory episode in a whaling-vessel, about ten years after his removal to Massachusetts.

Mr. Melville, whose gifts of graphic delineation entitle him to a high place amongst the contemporary authors of America, from which only his own wilful eccentricities can bar him, has been a frequent contributor to periodical literature; and some of the works which are still to be mentioned have had their original publication in the pages of magazines, &c. They include 'Mardi: and a Voyage thither,' 2 vols., 12mo, New York, 1849, English edition, 3 vols., 12mo, London, 1849; 'Redburn: his First Voyage. Being the Sailor-Boy Confessions and Reminiscences of the Son of a Gentleman in the Merchant-service,' 12mo, New York, 1849, 2 vols., 12mo, London, 1849, a work partially autobiographical, in which many of the faults of 'Mardi' were corrected or modified; 'White Jacket: or, the World in a Man-of-War,' 12mo, New York, 1850, English edition, 2 vols., 12mo, London, 1850; 'Moby Dick: or, the Whale,' 12mo, New York, 1851, English edition, 3 vols., 12mo, London, 1851; 'Pierre: or, the Ambiguities,' 12mo, New York, 1852, the mystical transcendentalism of which has not been attractive enough to secure its publication in England; 'Israel Potter: his Fifty Years of Exile,' 12mo, New York, 1855, English edition, 12mo, London, 1855, which is a reproduction, with alterations, of a true story, entitled, 'The Life and Adventures of Israel R. Potter,' published in 1824, and written by Henry Trumbull, from Potter's dictation; 'The Piazza Tales,' 8vo, New York, 1856, a volume of stories which had originally appeared in 'Putnam's Monthly Magazine,' and consisting of 'The Piazza,' 'Bartleby,' 'Benito Cereno,' 'The Lightning-rod Man,' 'The Encantadas or Enchanted Islands,' and 'The Bell-Tower'; 'The Confidence-Man: his Masquerade,' 8vo, New York, 1857, English edition, 8vo, London, 1857; 'The Refugee,' 8vo, Philadelphia, 1865 (?); and a volume of poems, entitled, 'Battle Pieces and Aspects of War,' 8vo, New York, 1866.

MENDIZABEL, JUAN ALVAREZ Y, a Spanish financier and statesman, was born in 1790, at Cadiz, where his father, a Jew, named Mendez, carried on trade in humble life. When the French commenced hostilities in Spain in 1808, young

Mendizabel obtained a situation in the Spanish commissariat, which he held for several years. After the war, he was for a time with a banker at Madrid. When the Liberal party was formed in Spain, in 1819, to enforce a restoration of the constitution of 1812, he joined Galiano, Mina, and Isturitz, and aided in raising money for the revolutionary army. They succeeded in 1820; when Spain witnessed the restoration of the constitution, a general amnesty, the assembly of the Cortes, the formation of a Liberal ministry, the abolition of the monastic orders, and the abrogation of the laws of entail. But the king and the clergy, aided by the French under Louis XVIII., gradually overcame the Constitutionalists; and Mendizabel was, in 1823, forced to take refuge in England. Here he was for a time imprisoned for debt, arising out of the loan raised for the Constitutionalists. On his liberation, he engaged in commerce in London with considerable success. During business visits which he paid to Portugal, he formed a connection with the agents of Don Pedro, for whom he negotiated a loan. In 1833, when Isabella, a child of three years old, succeeded her father, Ferdinand, on the Spanish throne, Mendizabel acted as financial agent in England for the regent Christina, and this led to his appointment as Finance Minister of Spain in 1835, under the government of Count de Toreno. He soon supplanted the count, and became president of the Council of Ministers. The Cortes gave him willing assistance, and it was expected that he would crush the Carlist insurrection in a few months; but failing in this, and surrounded by enemies, he resigned in May, 1836. Five months later he was appointed Minister of Finance by the new premier, Calatrava; but this was against the wish of Christina, and, as many of his supporters fell away, he resigned in August, 1837. After sitting three years as a somewhat violent member of the opposition party in the Cortes, representing the province of Madrid, he was once more appointed Minister of Finance, under the regency of Espartero, in 1841. When Espartero yielded to the rising influence of Narvaez, Mendizabel went again into exile to England, and remained away from his native country for many years. He returned to Spain after the events of 1848, and aided with the Liberal party till his death, which took place at Madrid, November 3, 1853.

MERCADANTE, SAVERIO, Italian musical composer, was born at Altamura, in the kingdom of Naples, in 1798. In his twelfth year he entered the Royal College of Music of St. Sebastian, Naples, where he studied composition under Zingarelli, learned the flute and violin, and composed pieces for those instruments. During some years he was chief violinist at the Conservatorio. When quite a young man he began composing operas, and continued his compositions for nearly forty years. A cantata, for the Fondo at Naples, appeared in 1818; and in the same year his first opera, 'L'Apoteosi d'Ercolo,' at the Theatre of San Carlos. Six other operas appeared in rapid succession within the next four years; but one only, 'Elisa e Claudio,' produced at Milan, was received with much favour. For a time there was a belief among his countrymen that he would be the leading Italian composer of the age; but Rossini, Bellini, and Donizetti attained a European reputation which Mercadante never reached. His next operas varied much in popularity; they were 'Andronico Didone,' 'La Nitocri,' 'La Donna Caritea,' 'Rappresaglia,' and 'Zaira,' some of them were brought out in Madrid and Cadiz, where he resided in 1827 and 1828. His 'I Briganti,' which had great success when produced in Naples, failed to please the Parisians when presented at the Théâtre Italien in 1836, although supported by the four most renowned singers of that time—Grisi, Rubini, Tamburini, and Lablache. In 1833 he was appointed maestro di capello at Novara Cathedral. In 1837 he produced his best opera, 'Il Giuramento,' founded on Victor Hugo's 'Angelo, the Tyrant of Padua.' In 1839 he produced an opera which remained long in favour with the Italians, 'Due Illustri Rivali'; and in the following year was appointed director of the Conservatorio at Naples. 'La Vestale,' produced in 1842, fell flat among the Italians, but has had more success in Germany and France. Since then have appeared, at various intervals, 'Statira,' 'La Violetta,' 'Il Bravo,' 'Il Vascello di Gama,' 'Leonora,' 'Il Pelagio,' 'Gli Orazi ed i Curazi,' 'Il Proscritto,' 'Il Regente,' 'Il Signore in Viaggio,' 'La Solitaria delle Asturie,' and other operas. His 'Giuramento' was performed in London in 1858, and two or three of his operas have occasionally been heard here. He also composed ecclesiastical music, such as motetts, masses, &c. In truth, Mercadante composed too rapidly and too much. His music comprises many graceful and melodious pieces, while there are materials in 'Il Giuramento' and a few others of his operas for grand orchestral

and choral stage effects; but he was wanting in originality, depth, and science. In 1856 he was elected foreign member of the French Institute; and in 1868 King Victor Emmanuel decorated him with the Civil Order of Merit. Mercadante died at Naples, December 17th, 1870.

MERCK, JOHANN HEINRICH, a German scholar and author, was born on the 11th of April, 1741, at Darmstadt; and having completed his university studies, and subsequently accompanied a certain Herr von Bibra on his travels, settled at his native town, where, in 1767, he became secretary of the Privy Chancery. He was afterwards appointed paymaster-general of the army and a war-councillor. About the year 1770, he accompanied the Landgrave of Hesse-Darmstadt upon a journey to St. Petersburg; and, in 1790, was despatched to Paris on a state-mission. The latter part of his life was clouded by domestic and pecuniary misfortunes, which led him to commit suicide by shooting himself on the 27th of June, 1791.

Merck was a man of wide sympathy and of great cultivation, so that whether at home at Darmstadt, or sojourning at Giessen, Frankfurt, and other centres of intellectual activity, he found himself an important and influential member of literary and æsthetic circles. He is chiefly remembered at present, however, for his friendship with Goethe, Herder, Wieland, and others, whose letters to him were published, under the editorship of Dr. Karl Wagner, as 'Briefe an Merck, von Goethe, Herder, Wieland, &c.,' 8vo, Darmstadt, 1835; whilst another edition of his correspondence, including both letters received and written by him, appeared under the care of the same editor, with the title of 'Briefe an und von Johann Heinrich Merck. Eine selbständige Folge der im Jahre 1835 erschienenen Briefe an J. H. M. Aus den Handschriften herausgegeben, &c. Mit Facsimilien der Handschrift von Goethe, Herder, Wieland, Karl August und Amalia von Weimar,' &c., 8vo, Darmstadt, 1838; which was further supplemented by a third volume, also edited by Dr. Karl Wagner, entitled, 'Briefe aus dem Freundeskreise von Goethe, Herder, Hopfner, und Merck. Eine selbständige Folge der beiden in den Jahren 1835 und 1838 erschienenen Merckischen Briefsammlungen. Aus den Handschriften herausgegeben,' &c., 8vo, Leipzig, 1847. Besides translating several English works into his own language, especially Addison's 'Cato,' and co-operating with Lavater in his work on Physiognomy, Merck was intimately concerned in various periodical and other literary enterprises. He wrote a 'Lettre à M. de Cruse, sur les Os fossils d'Éléphants et de Rhinocéros qui se trouvent dans le Pays de Hesse-Darmstadt,' 4to, Darmstadt, 1782; and a selection from his writings on Art and Belles-Lettres was published, under the editorship of A. Stahr, as 'Ausgewählte Schriften zur schönen Literatur und Kunst. Ein Denkmal, herausgegeben,' &c., 8vo, Oldenburg, 1840.

MÉRIMÉE, PROSPER, a French senator and man of letters, son of Jean François Léonore MÉRIMÉE, a painter and chemist, was born at Paris on the 28th of September, 1803; and, after having received his earlier education at the Collège Charlemagne, and gone through a course of legal study, was admitted as an advocate. His attachment to literature diverted him from the serious practice of his profession; and in his twenty-second year he contributed, under the pseudonym of Joseph Lestrangé, to the dramatic and romantic literature of France a work, which, although really original, was professedly a translation from the Spanish, entitled, 'Théâtre de Clara Gazul, Comédienne espagnole. Avec une Notice sur l'Auteur,' &c., 8vo, Paris, 1825, new edition, 12mo, Paris, 1842, which contains eight comedies in prose, with annotations, and which was followed by another pseudonymous work, ostensibly collected and translated, but really original, entitled, 'La Guzla: ou, Choix de Poésies illyriques, recueillies dans la Dalmatie, la Bosnie, la Croatie, et l'Herzégowine,' 18mo, Strasburg and Paris, 1827; a drama, "par l'Auteur du Théâtre de Clara Gazul," entitled, 'La Jacquerie. Scènes féodales: suivies de la Famille de Carvajal,' 8vo, Paris, 1828, new edition, incorporated with the 'Théâtre,' &c., 8vo, Paris and Corbeil, 1857, and 12mo, Paris, 1865; and a collection of Tales and Romances, entitled, 'Mosaïque,' &c., 8vo, Paris, 1833. After the Revolution of July, 1830, MÉRIMÉE was appointed secretary to the Count d'Argout, and afterwards to the Ministers of Commerce and Marine. In 1831, he became inspector of the historical and archaeological monuments of France; and, during his long tenure of this office, he travelled much in various parts of the country, extending his investigations, in 1840, as far as Spain, where he became acquainted with the family of the lady who was afterwards the Empress Eugénie. By the provisional government of 1848, he was selected to act on the com-

mission which was constituted to decide upon the extent and value of the property of the Orleans family; and some time after was condemned to fifteen days' imprisonment for the boldness with which, in two letters contributed to the *'Revue des Deux Mondes,'* he called in question the justice of the condemnation which had been passed upon his friend, M. Libri. He was raised to the rank of senator in 1853, and on the 12th of April, 1860, and the 14th of August, 1866, respectively, was promoted to be commander and grand officer of the Legion of Honour. His other appointments comprised the perpetual secretaryship of the *École royale des Beaux-Arts*; an assistant-membership of the *Société d'Encouragement*; a membership of the *Académie Française*, in which he succeeded M. Ch. Nodier, in 1844; and a free membership of the *Académie des Inscriptions et Belles-Lettres*.

The works of M. Mérimée, which vary as dramatic, romantic, historical, and antiquarian, include, *'Notes d'un Voyage dans l'Ouest de la France: Extrait d'un Rapport adressé à M. le Ministre de l'Intérieur,'* 8vo, Paris, 1836; *'Notes d'un Voyage en Corse,'* &c., 8vo, Paris, 1840; *'Essai sur la Guerre sociale,'* 8vo, Paris, 1841; *'Colomba,'* 8vo, Paris, 1841, originally published in the *'Revue des Deux Mondes,'* and several times reissued with other works of the author, especially as *'Colomba: suivi de la Mosaïque et autres Contes et Nouvelles. Nouvelles éditions corrigées,'* 12mo, Paris, 1858 and 1865, English translations, *'Colomba: a Corsican Story. Translated by A. R. Scoble,'* 8vo, London, 1853, and *'Colomba. A Novel. With a Preface, by E. Brette, C. Cassal, and T. Karcher,'* 16mo, London, 1867; *'Études sur l'Histoire romaine,'* 2 vols., 8vo, Paris, 1844, and 12mo, 1853: vol. i., *'Guerre sociale,'* ii., *'Conjuration de Catilina,'* *'Histoire de Don Pedro 1^{er}, Roi de Castille,'* new editions, 8vo, Paris, 1848, and 12mo, Paris, 1865, English translation, *'The History of Peter the Cruel,'* 2 vols., 8vo, London, 1844, German translation, *'Geschichte Peter's des Grausamen,'* 8vo, Leipzig, 1852, forming vol. xxv. of the *'Hausbibliothek historische,'* *'Chronique du Règne de Charles IX. Suivre de la Double Méprise, et de la Guzla,'* second edition, 8vo, Paris, 1832, the first edition of the *'Chronique'* having been published in 1820, with the title of *'1572. Chronique du Temps,'* &c., "nouvelles éditions, revues et corrigées," 12mo, Paris, 1847, and 12mo, Paris, 1865, English translation, by A. R. Scoble, *'A Chronicle of the Reign of Charles IX.,'* 8vo, London, 1853; *'Carmen,'* 8vo, Paris, 1846; *'Nouvelles,'* 12mo, Paris, 1852; *'Épisode de l'Histoire de Russie. Les faux Démétrius,'* 12mo, Paris, 1853; English translation, by A. R. Scoble, *'Demetrius the Impostor,'* &c., 12mo, London, 1853, German translation, by W. E. Drugulin, *'Der falsche Demetrius. Episode aus der Geschichte Russlands,'* 8vo, Leipzig, 1853, forming vol. iv. of the *'Geschichtschreiber moderne,'* *'Mélanges historiques et littéraires,'* 12mo, Paris, 1855; *'Monte Vreto: Contes et Poèmes de la Grèce moderne, précédés d'une Introduction,'* 16mo, Paris, 1855; and *'Les Cosaques d'Autrefois,'* 12mo, Paris and Saint-Germain, 1865, forming part of the *'Bibliothèque Contemporaine.'*

MERLE D'AUBIGNE, J. H. [D'AUBIGNE, J. H. MERLE, E. C. vol. ii. col. 516.]

METCALFE, CHARLES THEOPHILUS, BARON, a distinguished Anglo-Indian statesman and colonial governor, was born at Fern Hill, Berkshire, January 30, 1786. His father, who was a baronet, and a director of the East India Company, trained him for the civil service of the Company; and the youth was sent out to India as a writer in 1800. His natural abilities, and the family influence used in his behalf, opened to young Metcalfe a rapid succession of official appointments. In 1801 he commenced as assistant to Lord Cowley, at that time British Resident with the Marhatta prince, Dowlut Rao Scindia, at Gwalior. In 1802 he was appointed assistant in the Chief-Secretary's office; in 1803, assistant in the Governor-General's office; in 1806, after a brief service in the commander-in-chief's office, assistant to the British Resident at the Mogul's court, Delhi. His first assumption of responsibility, as the chief of a mission or enterprise, was in 1808; when, at the early age of twenty-three, he was appointed by Lord Minto British Resident at Lahore, supported by a column of troops under Colonel Ochterlony. It was at a time when Runjeet Singh threatened the independence of all the minor Sikh states. Mr. Metcalfe's duty was difficult and delicate; but he succeeded in making a treaty whereby the river Sutlej was declared the boundary between the two powers; and so well were the terms of this treaty observed on both sides, that during the remaining thirty years of the reign of that remarkable man, Runjeet Singh was never once at war with the British. After occupying many other official posts, Mr. Metcalfe

BIOG. DIV.—SUP.

was in 1819 appointed secretary of the Secret and Political Department at Calcutta, specially concerned in the relations between the East India Company and the native princes; and at the same time private secretary to the Governor-General. In 1820 he went to Hyderabad, as British Resident at the court of the Nizam. In 1825, as Sir Charles Metcalfe (he having succeeded to the baronetcy in 1822), he filled a similar post at Delhi. During seven years his duties next kept him at Calcutta—as member of the Supreme Council in 1827, president of the Board of Revenue in 1828, and vice-president and deputy-governor of Fort William (Calcutta) from 1830 to 1834. In the last-named year he went to Agra as president of the North-west Provinces. In 1835, when Lord William Bentinck resigned, Sir Charles exercised the functions of Governor-General of India until the arrival of Lord Auckland from England. During thirteen months' occupancy of this post, he made improvements in some of the laws or regulations affecting the natives, established a uniformity of coinage, and sanctioned increased liberty to the press. This last proceeding gave great dissatisfaction to the directors in London. When, in 1836, the governorship of the Madras Presidency became vacant, the general voice of opinion in India, both English and native, was in favour of Sir Charles Metcalfe as the new occupant of the post; but the directors showed their resentment by ignoring his claim. Sir Charles, who had returned to his office at Agra, would not consent to remain in the service of the Company under a ban of disfavour; he announced the fact publicly in 1837, and quitted India in 1838, after thirty-eight years of uninterrupted service. His conduct was approved by the English government as well as by public opinion: he had given offence only to the Board of Directors. In 1839 the Colonial Office appointed him successor to Sir Lionel Smith as Governor of Jamaica, at a time when negro emancipation required both firmness and conciliation in the management of the island. Injured in health by the climate, he resigned in 1842; but was speedily selected by Sir Robert Peel as Governor-General of Canada. The troubles between Upper and Lower Canada, and the discontent of large numbers of the colonists, rendered this office a difficult one; but he filled it to the satisfaction of the home government. Returning to England with shattered health in 1845, he was rewarded with a peerage and other honours; but did not live long to enjoy them. Lord Metcalfe died at Fern Hill, September 12, 1846. He was childless, and the peerage title died with him; but the baronetcy descended to his brother. The general relation which Lord Metcalfe's Indian official life bore to that of others in the Company's service has been treated by Mr. J. W. Kaye, in *'The Administration of the East India Company, a History of Indian Progress,'* 8vo, London, 1853; and more fully in *'The Life and Correspondence of Charles Lord Metcalfe, from Unpublished Letters and Journals,'* 8vo, London, 1854, second edition, 1858; as also in the same author's *'Selections from the Papers of Lord Metcalfe,'* 8vo, London, 1855.

METTERNICH, CLEMENT WENCESLAS, PRINCE [E. C. vol. iv. col. 212.] This celebrated diplomatist died at Vienna, on the 11th of June, 1859, at the age of 86.

* METZGER, EDUARD, German architect and writer on architecture, was born at Pappenheim in 1807. He studied architecture in Munich art-academy under Von Gaertner and Von Klenze, and then (1831) repaired to Greece to examine the remains of Grecian art. On his return he was nominated professor in the Munich polytechnic school. Herr Metzger has erected several buildings in Munich and other towns of Bavaria; completed the Siegesthor, &c., commenced by Von Gaertner; made the designs for a monument to Francis I. of Austria; laid out a new street in Prague, &c. He has written a treatise on the *'Influence of the Principles of Construction on the Forms of Buildings,'* 1837, illustrating his views chiefly by an examination of the Greek temple; an elaborate work on Greek elevations (1839), and several professional memoirs.

MEULEMEESTER, JOSEPH CHARLES DE, Belgian engraver, was born 28th of April, 1771, at Bruges, and learned engraving of Bervic. In 1806 he went to Rome, and made an elaborate copy in water-colours of Raffaele's fresco of the *'Finding of Moses,'* which was so much admired that he was induced to copy the series of fifty-two Bible-pictures by Raffaele, on the ceilings of the Loggia of the Vatican. On this undertaking he was engaged twelve years, almost every day being spent on the lofty ladders, by which alone he could gain proper access to the pictures. In 1819 he returned to Antwerp, was nominated engraver to the king, and entered zealously upon the other part of his great task, the engraving of the pictures he had spent so

many years in copying. The first part of 'Les Loges de Raphaël,' containing four coloured plates, appeared in 1825. After the Belgian revolution he removed to Paris, hoping to carry on his work there with less interruption. He died, during a visit to Antwerp, November 5th, 1836. Meulemeester's Loggie prints are remarkably faithful renderings of the originals: unfortunately he only lived long enough to complete nine parts (thirty-six plates) in colours; of the uncoloured series much fewer were issued. The completion was undertaken by a Brussels publisher. Meulemeester finished comparatively few other plates; the chief are a 'St. Cecilia,' by Raffaele, and a portrait of Rubens.

MEUNG, MEUN, or MEHUN, JEAN DE, a French poet and scholar, who, on account of his lameness, was also known by the sobriquet of CLOPINEL, was born about 1279 or 1280, at Meun, a small town on the Loire, in the neighbourhood of Orleans. He was carefully educated, and became skilled in all the studies and accomplishments of the age—theology, rhetoric, philosophy, chemistry, and mathematics; but devoted himself to the cultivation of poetry. Little is known of his personal history, and the question of his condition, whether ecclesiastic or layman, has not been determined. It has been held, on the one hand, that he was a doctor in law; and on the other, that he was a doctor in theology, and a member of the Dominican order—a theory against which the freedom of his satirical attacks upon the various orders of the regular clergy is pertinently arraigned. A member of a considerable if not of a noble family, he early entered into the service of the greatest personages in France, and by his poetical talents and the vivacity of his parts rendered himself a favourite at the court of Philippe le Bel, to whom he dedicated his French translation of the 'De Consolatione Philosophiæ' of Boethius. Before the translation of this treatise, he had translated or compiled, as he himself announces in the dedication just alluded to, the work of Vegetius Rhenanus on Chivalry, 'L'Art de Chevalerie selon Vegece,' &c., folio, Paris, 1488, new edition, with the modified title of 'L'Arbre des Batailles et Fleur de Chevalerie selon Vegece,' &c., 8vo, Paris, 1527; the 'Livre des Merveilles de Hirlande'; the 'Livre des Épitres de Pierre Abeillard et Héloïse sa Femme'; and the 'Livre de Aelred de spirituelle Amitié.' He appears to have freely exercised his talent for satire upon the ladies of the court; and on one occasion the latter became so irritated against him, that a party of them seized him, and resolved to give him a severe flogging. His ready wit, however, came to the rescue, and he eluded the threatened punishment by desiring the most unchaste amongst his fair enemies to commence the castigation. He is supposed to have died about the year 1320.

Besides the translations already mentioned, Meung is the author of 'Le Miroir d'Alquimie de Jehan de Meun, Philosophe très-excellent, avec la Table d'Émeraude d'Hermès Trismegiste, et le Commentaire de l'Ortolain sur la dite Table,' &c., 8vo, Paris, 1612; a poetical paraphrase of the Creed, entitled 'Les sept Articles de la Foy: et Proverbes dorés, selon Maître Jhean de Meung,' 8vo, Paris, 1503, a beautifully illuminated volume, printed on vellum, of which an edition was incorporated with some of the later issues of the 'Roman de la Rose'; 'La Destruction de Troye la Grande: le Ravissement d'Heleine fait par Paris Alexandre, composée en Rithme Françoisse, par Maître Jehan de Meun, premier Inventeur de Réthorique Françoisse. Avec les Prouesses, Noblesses, et Vertus du preux Hector, la damnable Trahison commise par les Grecs, la Description de Fortune mutable et instable. A la Vérité nouvellement revue et corrigée, et très-diligemment reduite en la vraye Langue Françoisse, Historiée d'Histoires nouvelles contenantent entièrement les Faits des Troyans et Gregeois,' folio, Lyons, 1544, the authorship of which has sometimes been claimed for J. Millet; 'Le Dodechedron de Fortune. Livre non moins plaisant et récréatif que subtil et ingénieux entre tous les Jeux et Passetemps de Fortune. Autresfois composé par feu M. Jan de Meun, pour le Roy Charles le Quint, et nouvellement mis en Lumière. Par F. G. L. [François Gruget], 4to, Paris, 1556, reprinted as 'Le Plaisant Jeu du Dodechedron de Fortune,' &c., 4to, Paris, 1560, 8vo, Lyons, 1576, 1581, &c., English translation, by Sir W. B. Knight, 'The Dodechedron of Fortune: or, the Exercise of a quick Wit. A Book so rarely and strangely composed that it giveth (after the most admirable manner) a pleasant and ingenious Answer to every Demand,' &c., 4to, London, 1613. But the principal work of Jean de Meung was his continuation of the 'Roman de la Rose,' commenced by Guillaume de Lorris, whose passion for a certain fair lady incited

him to outlive Ovid in his exposition of the Art of Love. Forty years after the death of Lorris, Meung undertook the completion of his work, and the additions which he made to it constitute more than three-fourths of the whole. The popularity of this celebrated 'Roman' has been immense, and edition after edition has ever and anon been issuing from the press since its first publication in the later years of the 15th century. Of these may be selected for mention, 'Le Roman de la Rose (commencé par Guillaume de Lorris et achevé par Jean de Meung,' folio, without date or place, but probably printed at Lyons, about 1485, and in other years between 1480 and 1490; 'Le Romant de la Rose (Jean du Pré), folio, Paris, about 1496; 'Le Rommant de la Rose, nouvellement imprimé à Paris, pour Jehan Petit,' folio, Paris, without date; 'Le Rommant,' &c., 4to, Paris, 1509, another edition, 1519; 'Sensuyt de Rommant de la Rose,' &c., 4to, Paris, 1526, which contains the genuine text, not Marot's recension; 'Cy est le Romât de la Roze,' &c., folio, Paris, 1526, an edition generally known as that of Galliot du Pré, whose name appears in the privilege and in most of the copies at the foot of the title-page, instead of that of Jehan Petit, the publisher of a later edition, 'Cy est le Rommant de la Roze,' &c., folio, Paris, 1531; 'Le Rommant de la Rose, nouvellement revu et corrigé outre les précédentes Impressions,' 2 vols. 8vo, Paris, 1529, other editions, 3 vols. 12mo, 1735, and 3 vols. 12mo, Amsterdam, 1735, 5 vols. 8vo, Paris, 1799, &c., &c.; 'Le Roman,' &c., "nouvelle édition, corrigée par M. Méon," 4 vols. 8vo, Paris, 1814; and 'Le Roman de la Rose, par Guillaume de Lorris et Jean de Meung. Nouvelle édition, revue et corrigée par Francisque Michel, Correspondant de l'Institut de France, &c., &c., 2 vols. 12mo, Paris, 1864. Modernised editions have also been issued, as well as a German translation, 'Das Gedichte von der Rose. Aus dem Altfranzösischen, &c., übersetzt von H. Fahrman. Mit einem Vorwort eingeführt von F. H. von der Hagen,' 8vo, Berlin, 1839.

MEYEN, FRANZ JULIUS FERDINAND, botanist, was born at Tilsit, East Prussia, June 28, 1804. He was sent to the gymnasium of his native town, and early manifested the future tendency of his thoughts. In 1819 he was articulated to an apothecary at Munich, with the intention of his being educated for the medical profession. In 1821 his elder brother took him to Berlin, and in 1822 he commenced a course of scientific study at the Royal Military Medical Institute. In October, 1826, he received his degree of M.D., on which occasion he wrote a thesis in which he noticed the spontaneous movements of the pollen-granules of plants. It was published under the title of 'De primis vitæ phenomenis in fluidis formationis et de circulatione sanguinis in parenchymate,' 4to, Berlin, 1826. This was followed by a series of papers on the *Alga*, the circulation of the sap in plants, and the freshwater *Hydra*; by 'Untersuchungen über die Natur parasitischer Geschwülste in menschlichen Körper insbesondere über den Mark- und Blut-schwamm,' 8vo, Berlin, 1828; and by a work on phytotomy in 1830. In September, 1830, he sailed from Hamburg on a journey round the world, which occupied him till far on in the year 1832. On his return he wrote his description of the expedition, under the title of 'Reise um die Erde,' 4to, Berlin, 1834-5, a description which manifested the variety and depth of his knowledge and his extraordinary powers of observation. His merit was soon recognised. The King of Prussia presented him with a gold medal, and numerous European societies hastened to elect him a member of their respective bodies. His journey supplied him with materials for various books and papers, which relate chiefly to botany; but zoology occupied a considerable share of his attention. Thus, his 'Beiträge zur Zoologie,' collected during this journey, occupy 245 pages of the 16th volume of the 'Nova Acta physico-medica Academiæ Caes. Leopoldino-Carolinæ Naturæ Curiosorum,' (1832), and relate to the *Salpa*, the *Mammalia*, the Birds, the natives of Peru and the Philippine Islands, and the phosphorescence of the sea; while in subsequent volumes he contributed to the reports on the Lichens and Amphibia. The other more important works written by him are, 'Grundriss der Pflanzengeographie,' etc., 8vo, Berlin, 1836; 'Neues System der Pflanzenphysiologie,' 3 vols. 8vo, Berlin, 1837-39; 'Ueber die Secretions Organe der Pflanzen,' 4to, 1837; and 'Noch einige Worte über die Befruchtungsakt und die Polyembryonie bei den höheren Pflanzen,' 8vo, Berlin, 1840. While, amongst the papers, his 'Jahresberichte über die Resultate der Arbeiten im Felde der physiologischen Botanik,' for the years 1834-39, may be mentioned. They are published in Wiegmann's 'Archiv für Naturgeschichte,' for the years 1835-1840, and comprise in the aggregate nearly 900 pages. In 1840 he became the general

secretary of the Royal Horticultural Society; but died soon afterwards. He was the first to discover (in 1827) the remarkable concretions of cellulose and carbonate of lime, known as *cystoliths*, which are so prevalent in the nettle group; but he erroneously considered them to be formed of gum. His works on the physiology of plants are held in high esteem by his countrymen.

MEYER, CONRAD, Swiss painter and engraver, was born at Zurich, in 1618. He was the son and scholar of Dietrich Meyer (born at Eglisau, in 1572, died in 1658,—a painter and engraver of some repute), and studied also under Matthew Merian the younger. Conrad Meyer painted historical subjects and portraits; but is best known by his engravings, which number in all about a thousand. They include a set of 122 subjects from the New Testament; 24 of the Precepts of Christ; 60 of the Dance of Death, and 16 of the Christian Mirror (both from designs by his elder brother, Rudolf Meyer); 69 Portraits of the Burgomasters and Pastors, and 64 of the illustrious Preachers of Zurich; besides various series and separate plates of sports of children, landscapes, religious pieces, &c. He died at Zurich, in 1689.

MEYER, HERMANN ERICH CHRISTIAN VON, palæontologist, was born at Frankfurt-am-Main, September 3, 1801. In 1822 he went to Heidelberg for the purpose of studying governmental law and chemistry. In 1834 he enjoyed a high position in the municipal administration of his native town, and in 1837 he became one of the directors of the treasury of the Germanic Confederation. His official life was, however, of comparatively little importance as compared with his scientific career. His first paper was published in 1824, and, like several others which followed it, the subject matter was geological or mineralogical. After a while, the finding of the perfect fossil skull of an ox and of several other fossil bones led him to study comparative anatomy in order that he might ascertain their nature; and, by degrees, he devoted himself more and more exclusively to the investigation of the fossil remains of vertebrate creatures, more especially those belonging to the reptilian and mammalian classes. Finding that the figures of fossil bones were frequently wanting in accuracy, at a time when he himself was devoid of any skill as a draughtsman, he resolved to learn drawing, and after a while he became the most skilful delineator of such objects. His papers, which are very numerous, are for the most part profusely illustrated with excellent lithographs executed by himself. These lithographs, which form some hundreds of plates, constitute one of the principal features of his works. The text by which they are accompanied abounds in descriptive details, which must have cost an immense expenditure of labour and time. But he did not confine himself to detail; for sometimes, when opportunity offered, he showed a deep vein of original thought and comprehensive generalization. His most important works consist of '*Palæologica*,' 8vo, Frankfurt, 1832; '*Zur Fauna von Vorwelt*,' 1845—1860; and the memoirs contributed to '*Palæontographica*,' of which he and Dunker were the editors. In the last two works mentioned are several monographs, which are the most complete of their kind; such as, for example, those on the carboniferous *Amphibia*, on the Saurians of the Muschelkalk, and on the reptiles of the lithographic slates of the Jurassic period. He also wrote or contributed to several other works of considerable note, such as the '*Beiträge zur Palæontologie Württembergs, enthaltend die fossilen Wirbelthierreste aus den Triasgebilden mit besonderer Rücksicht auf die Labyrinthodonten des Keupers*,' 4to, Stuttgart, 1844. He was the discoverer and first describer of a large number of extinct genera and species. He died April 2, 1869.

* MEYER, JAN LODEWIJK HENDRIK, a celebrated Dutch marine painter, was born at Amsterdam, in 1809. A scholar of W. J. Pienemann, he commenced with painting history, then tried landscapes, but ultimately found his true vocation in painting ships at sea. The Stanfield of the Hague, Louis Meyer, is familiar with every phase of the ocean, and learned in all maritime matters; and he renders with a firm and masterly hand what he so thoroughly understands. '*A Ship on Fire*,' '*A Wreck*,' '*Sunrise at Sea*,' '*A Fleet making for the English Coast*,' '*Dutch Ships of War off Flushing*,' are the titles of a few of his most admired pictures, and will serve to show his range of subjects.

* MEYER, JOHANN GEORG, German painter, known as MEYER OF BREMEN, was born at Bremen, October 28th, 1813. A pupil of Schadow, in the Düsseldorf Academy, his earlier pictures were mostly scriptural—'*The Prophet Elijah*,' '*Christ Weeping over Jerusalem*,' '*Hagar and Ishmael*,' &c. He acquired some celebrity in this line; but he gradually turned to more

secular and every-day subjects, and has long been famous as the painter of children. He seizes the characteristics of juvenile life and manners with singular skill and taste; and in such pictures as '*Children playing at Blindman's Buff*,' '*Girls listening to a Story*,' '*Mother and Children*,' '*The Little Brother*,' and the like, produces very charming and popular compositions. Herr Meyer has resided at Berlin since 1852.

MEYERBEER, GIACOMO [E. C. vol. iv. col. 216]. In the spring of 1859 a new opera by Meyerbeer, '*Le Pardon de Ploermel*,' was brought out at Paris with decided success. It was repeated shortly after at the Royal Italian Opera, London, in an Italian version with recitatives, the rehearsal of which the composer came over to direct—the title being changed to '*Dinorah*.' It was received with enthusiasm, and takes high rank among Meyerbeer's operas. He was growing old, but still kept up his habit of composition, little, however, being given to the public beyond a march for the coronation of Wilhelm of Prussia in 1861, and an overture for the opening of the International Exhibition, London, 1862, at the performance of which he was present. He had for many years kept in his portfolio an opera, '*L'Africaine*,' upon which he occasionally touched, but which he refused to allow to be performed, not finding a singer whom he considered competent to take the principal part. At length, deeming the circumstances more satisfactory, he went to Paris to make arrangements for its production, when he was seized with a fatal illness, and died there, May the 2nd, 1864, in the 70th year of his age. His remains were carried to Berlin, and interred with great solemnity. '*L'Africaine*' was performed at Paris in 1865, and has since been played at nearly all the principal opera-houses of Europe.

MICHAUD, JOSEPH FRANÇOIS, a French historian, poet, and publicist, was born on the 19th of June, 1767, at Albens, in Savoy, where his family had been honourably settled for several generations. His father, who was a notary, removing to Bourg-en-Bresse, Joseph completed his education at the Collège of that town. In 1786 he left home, in order to assist in a library at Lyons; and the revolutionary horrors which he witnessed in that city so deeply affected him as ever after to fix and intensify his natural tendency to monarchy and conservatism. He arrived in Paris early in 1791, and made his first literary venture by the publication of a small volume, in verse and prose, entitled, '*Voyage littéraire au Mont-Blanc et dans quelques Lieux pittoresques de la Savoie, en 1787*,' 8vo, Paris, 1791; which was followed almost immediately by an Eastern story, entitled, '*Origine poétique des Mines d'Or et d'Argent. Conte oriental*,' 8vo, Paris. After having been concerned with Cerisier in editing the '*Gazette Universelle*,' and with Esménard in the conduct of the '*Postillon de la Guerre*,' in which he attacked the enemies of the monarchy, he founded, in September, 1792, jointly with MM. Rippert and Riche, a daily journal called '*La Quotidienne*.' The conservative tone of the articles in this paper was naturally offensive to the party of revolution; and Michaud was arrested at Chartres, and, having been brought to Paris, was condemned to death, on the 5th Brumaire, An IV. (27th of October, 1795), by the military commission established at the Théâtre Français, for having constantly incited to revolt and to the re-establishment of royalty. By the efforts of his friend, M. Giguët, he was saved from the impending guillotine, and execution was done only on his effigy, in the Place de Grève. He has left a touching memorial of this episode in his career, in the shape of a volume, entitled '*Printemps d'un Proscrit. Poème en IV. Chants, précédé d'une Dissertation sur la Poésie descriptive, et de trois Lettres à M. Delille, sur le Sentiment de la Pitié*,' &c., 12mo, Paris, 1803, eighth edition, 8vo, Paris, 1827. In 1796, shortly after the establishment of the Directory, Michaud resumed the issue of '*La Quotidienne*,' but he was frequently harassed by interruptions and imprisonments, and was finally obliged to take refuge from the proscription—dated 18 Fructidor (September 4th, 1797)—of "*journalistes complices dans la conjuration royale*," amongst the Jura mountains, where he produced the '*Printemps*,' &c. After two years of exile, he returned in November, 1799, to Paris, where the Directory had been succeeded by the Consulate. The following year Michaud had to undergo an imprisonment of some months' duration in the Temple, on account of two powerful pamphlets, anonymously published, and entitled respectively '*Les Adieux à Bonaparte*,' 8vo, Paris, 1800, which went through many editions, and was translated into English as '*France after the Revolution of Bonaparte*, on the 8th of November, 1799,' &c., 8vo, 1800; and '*Les derniers Adieux à Bonaparte victorieux*,' 8vo, Paris, 1800, and frequently reprinted.

Again in the enjoyment of freedom, Michaud devoted himself to the production of his first historical work, 'Histoire des Progrès et de la Chute de l'Empire de Mysore, sous les Règnes d'Hyder-Aly et Tippoo-Saib,' 2 vols., 8vo, Paris, 1801. In 1806, Michaud was associated with his brother, Louis Gabriel, and two others, in the production of the 'Biographie Moderne: ou, Dictionnaire des Hommes qui se sont fait un Nom en Europe depuis 1789,' 4 vols., 8vo, Leipzig [really at Paris], 1806, which was the first published series of the biography of contemporaries, and which developed into the later and more elaborate work published in 1811, with the title of 'Biographie Universelle.' His royalist opinions began to yield to the force of circumstances, and he addressed an allegorical poem to the emperor, congratulating him upon his marriage, in the spring of 1810, with the Archduchess Maria Louisa, and entitled 'Le Treizième Chant de l'Énéide: ou, le Mariage d'Énée et de Lavinie,' which, on the birth of a son, as the issue of the marriage, March 20th, 1811, he followed up with 'Stances sur la Naissance du Roi de Rome.' These poems were afterwards grouped together in a reprint, under the title of 'L'Hymen et la Naissance.' Michaud now commenced the publication of the great work of his life, 'Histoire des Croisades,' &c., 7 vols., 8vo, Paris, 1812-22, "cinquième édition, revue, corrigée, et augmentée, d'après le Voyage de l'Auteur en Orient," 6 vols., 8vo, Paris, 1838, "sixième édition [the first posthumous one], faite d'après les derniers Travaux et les dernières Intentions de l'Auteur, et précédée d'une Vie de Michaud, par M. Poujoulat," 6 vols., 8vo, Paris, 1841, "nouvelle édition, augmentée d'un Appendice par M. Huillard Bréholles," 4 vols., 8vo, Paris, 1857, English translation, by W. Robson, 3 vols., 8vo, London, 1852, Danish translation, 'Korsfarerne og Korstogene. Historiske Skildringer af Kampen for det hellige Land. Hovedsagelig efter Michaud,' 8vo, Copenhagen, 1861. An epitome of Michaud's great work was made by himself and his friend and pupil, Jean Joseph François Poujoulat, and published as 'Histoire, &c., abrégée à l'Usage de la Jeunesse,' 2 vols., 12mo, Paris, 1838, 8vo, Tours, 1863, and again 8vo, Tours, 1867, forming part of the 'Bibliothèque de la Jeunesse Chrétienne,' German translation, by Gottfried Hertel, 'Geschichte der Kreuzzüge. Für die reifere Jugend und Gebildeten im Volke,' 12mo, Leipzig, 1846. In further illustration of his subject, Michaud published a valuable work on the bibliography of the crusades, 'Bibliothèque des Croisades,' 4 vols., 8vo, Paris, 1829, which is an analysis of both Eastern and Western records of the Crusades, the fourth volume, which contains the extracts from the Arabic chronicles, being the production of M. Reinaud. Another work, which should be mentioned in this connection, is a record of Michaud's extensive travels, made between May, 1830, and August, 1831, in company with M. Poujoulat, through those parts of the East traversed by the Crusaders, and is entitled, 'Correspondance d'Orient, 1830-31, par M. Michaud et M. Poujoulat,' 7 vols., 8vo, Paris, 1833-35. In 1813 M. Michaud succeeded M. Cailhava as one of the Forty of the Académie Française; his nomination having been ratified by the emperor on the battle-field of Leipzig. In May, 1814, on the 3rd of which month, the empire having been overthrown, Louis XVIII. made his public entry into Paris, Michaud re-established 'La Quotidienne'; but found it expedient to take refuge in the Département de l'Ain during the Cent Jours, of which, after the second restoration, he published an account, entitled, 'Histoire des quinze Semaines; ou, le dernier Règne de Bonaparte,' 8vo, Paris, first twenty editions, 1815, and, although of the slightest historical value, many times reprinted afterwards. Under the monarchy, M. Michaud held several posts of honour and emolument: he was censor-general of the press, reader to Louis XVIII. and Charles X., a free member of the Académie des Inscriptions et Belles-Lettres, and a member of the Chamber of Deputies for the Département de l'Ain, which he had come to regard as his native province. From the year 1833, he established himself at Passy, a cheerful retreat near Paris, where, in association with M. Poujoulat, he devoted himself to such literary activity as his failing health permitted. He died at Passy, on the 30th of September, 1839.

Besides the works already enumerated, Michaud produced 'Ermenonville: ou, le Tombeau de Jean-Jacques Rousseau,' 8vo, Paris, 1794; 'L'Immortalité de l'Âme. Poème,' about 1794; 'Petite Dispute entre deux grands Hommes [Chénier et Louvet], 8vo, Paris, An V. (1796); 'Notice sur Jeanne d'Arc surnommée la Pucelle d'Orléans,' 8vo, Paris, 1837, &c., in which he was assisted by M. Poujoulat, with whom he was likewise concerned in the compilation of his 'Nouvelle Collection des Mémoires pour servir à l'Histoire de France depuis le XIII^e Siècle jusqu'à

la Fin du XVIII^e: précédés de Notices pour caractériser chaque Auteur des Mémoires et son Époque: suivis de l'Analyse des Documents historiques qui s'y rapportent,' three series, 32 vols., 8vo, Paris, 1836-39.

*MICHEL, FRANCISQUE XAVIER, a French philologist and archæologist, who has devoted himself especially to the exposition of the life and literature of the Middle Ages, was born at Lyons, on the 18th of February, 1809, and was educated successively at Lyons and at the Collège Charlemagne, Paris. He contributed articles to the 'Cabinet de Lecture,' and to various periodicals, and published two historical novels in illustration of the Middle Ages, 'Mœurs du Moyen Âge. Job: ou, les Pastoraux,' 1251. Audefrois le Bâtard, 1272,' 8vo, Paris, 1832. In 1833, he was commissioned by M. Guizot, at that time Minister of Public Instruction, to visit England for the purpose of making researches in the libraries of this country, amongst the documents calculated to throw light on the history and literature of France; and in 1837 was entrusted by M. de Salvandy with the further prosecution of his task, especially in Scotland. He became, in 1838, a member of the Legion of Honour; and in the following year was appointed professor of foreign literature in the faculty of letters, at Bordeaux. On the 3rd of May, 1846, M. Michel was admitted Docteur-es-Lettres, on which occasion he produced, as his thesis, a work afterwards published as 'Histoire des Races maudites de la France et de l'Espagne,' 2 vols., 8vo, Paris, 1847; and has since become a member of various learned societies, having been named a correspondant de l'Institut (Académie des Inscriptions et Belles-Lettres), a member of the Committee of Historical Monuments (of France), a member of the Academies of Turin and Vienna, and of the Society of Antiquaries of France and England; and he is at present (July, 1871) residing in the last-named country, having just completed, for the Roxburghe Club, an edition of 'Le Mystère de Saint Louis, Roi de France, publié pour la première fois d'après un Manuscrit du XV^e Siècle,' &c., 4to, Westminster, 1871.

M. Michel, who is a valued contributor to the 'Athenæum' and to 'Notes and Queries,' has edited an immense number of works, many of which he has been the first to introduce to the public, produced in various languages between the 11th and the 14th century. Of these may be mentioned, 'Hugues de Lincoln: Recueil de Ballades Anglo-Normandes et Écossaises relatives au Meurtre de cet Enfant commis par les Juifs en 1255. Publié avec Introduction et des Notes,' &c., 8vo, Paris, 1834; 'Le Roman d'Eustache Lemoine,' 8vo, 1834; a collection of poems, published with the name of their author for its title, 'Tristan,' 2 vols., 12mo, London, 1835; Extracts and Documents relating to the History of England and Normandy, 'Chroniques Anglo-Normandes. Recueil d'Extraits et d'Écrits relatifs à l'Histoire de Normandie et d'Angleterre pendant les XI^e et XII^e Siècles, publié pour la première fois d'après les Manuscrits de Londres, de Cambridge, de Douai, de Bruxelles, et de Paris,' &c., 3 vols., 8vo, Rouen, 1836-1840; 'Lais inédits des XII^e et XIII^e Siècles,' 8vo, 1836; the Trouvère Benoit's 'Chronique des Ducs de Normandie,' 4to, 1837-44; 'Roman du Roi Flore et de la Reine Jeanne,' 8vo, 1838; 'Théâtre Français au Moyen Âge,' 8vo, 1839, edited by M. Michel jointly with M. L. J. N. Monmerqué; 'Chronique des Abbés de Saint-Ouen de Rouen, publiée pour la première fois d'après un Manuscrit du XIV^e Siècle de la Bibliothèque du Roi,' &c., 8vo, Rouen, 1841; 'Le Roman de Saint-Graal (en Vers), publié pour la première fois d'après un Manuscrit de la Bibliothèque royale,' &c., 12mo, Bordeaux, 1841; the Poems of 'Mellusine,' 8vo, 1854, and of 'Gerard de Rosillon. Chanson de Geste ancienne, publiée en Provençal et en Français, d'après les Manuscrits de Paris et de Londres,' &c., 16mo, Paris, 1856; and the 'Roman de la Rose' of Guillaume Lorris and Jean de Meung, 2 vols., 8vo, Paris, 1864.

M. Michel has produced French translations of several English standard authors, as for instance, 'Œuvres choisies de Shakespeare,' 3 vols., 8vo, 1866; 'Œuvres choisies de Goldsmith,' 8vo, Paris, 1838; Sterne's 'Sentimental Journey,' 'Voyage sentimental en France,' forming vol. xxviii. of a collection of 'Voyages imaginaires, Songes, &c.,' 8vo, Paris, 1787, &c.; and of Tennyson's 'Elaine,' folio, 1867; 'Viviane,' folio, 1868; 'Genievre,' folio, 1868; and 'Enide,' folio, 1869.

Of works of which M. Michel is more distinctively the author may be mentioned, 'Rabelais analysé: ou, Explication de 76 Figures gravées pour ses Œuvres par les meilleurs Artistes du Siècle dernier, augmentée de l'ancienne Clef et de celle de Le Motteux,' 8vo, Paris, 1830; 'Rapports à M. le Ministre de l'Instruction publique sur les anciens Monuments de l'Histoire et de la Littérature de la France qui se trouvent dans les Bi-

ibliothèques de l'Angleterre et de l'Écosse,' 4to, Paris, 1848; 'Livre d'Or des Métiers. Histoire des Hôtelleries, Cabarets, Hôtels garnis, Restaurants et Cafés, et des anciennes Communautés et Confréries d'Hôteliers, de Marchands de Vin, de Restaurateurs, de Limonadiers,' &c., 2 vols. 8vo, Paris, 1851—54, produced in conjunction with M. Ed. Fournier; 'Recherches sur le Commerce, la Fabrication, et l'Usage des Étoffes de Soie, d'Or et d'Argent et autres Tissus précieux en Occident, principalement en France, pendant le Moyen Âge,' 2 vols. 4to, Paris, 1852—54, a treatise which obtained the prize of the Institute; 'Étude de Philologie comparée sur l'Argot et sur les Idiomes analogues parlés en Europe et en Asie. Développement d'un Mémoire couronné par l'Institut de France,' 8vo, Paris, 1856; 'Le Pays Basque: sa Population, sa Langue, ses Mœurs, sa Littérature, et sa Musique,' 8vo, Paris, 1857; 'Les Écossais en France et les Français en Écosse,' 2 vols. 8vo, London, 1862; and a work to which the Gobert prize was allotted in 1868, entitled 'Histoire du Commerce et de la Navigation à Bordeaux, principalement sous l'Administration Anglaise,' 8vo, first volume, 1867.

MICHEL, JEAN BAPTISTE, French engraver, was born at Paris in 1748. He was a scholar of Pierre Chenu; went to London, where he resided many years, and acquired a high reputation; but returned to Paris before the Revolution, and died there in 1804. He engraved numerous plates for Boydell, including nineteen in the collection of pictures belonging to the Empress Catherine II. Among his most celebrated plates are, 'Moses striking the Rock,' after Poussin; 'The Three Graces,' and 'Faith, Hope, and Charity,' after Rubens; 'The Prodigal Son,' after S. Rosa; 'Alfred dividing his Last Loaf with a Pilgrim,' and two or three others, after West, &c.

MICHEL, PIETRO ANTONIO, botanist, was born at Florence, December 11, 1679. He was the son of poor parents. Desiring to know something about a particular plant, he consulted the works of Matthioli, and this led to his exploring the district around Florence for the purpose of collecting plants, and to his acquiring, without the assistance of a master, a knowledge of the Latin language. An account of some of the rarer plants found by himself attracted attention; he was allowed the free use of most of the best private libraries in Florence, and was made an assistant to Tili, the professor of botany at Pisa. Soon after he was furnished with the means of travelling in most parts of Europe. He formed large collections of natural-history objects, and made the most minute study of plants on the spots where they grew; but he was so diffident that he published very little. His earliest important work was 'Nova plantarum genera juxta Tournefortii methodum disposita,' 4to, Florence, 1729; it comprises 108 plates, and in it about 1400 new species are described. Micheli first made out the structure of the flower in grasses, and was the discoverer of the sporidia in Fungi and other cryptogams. He also wrote accounts of the principal gardens at Florence, some of which, as a 'Catalogus plantarum Horti Cæsarei Florentini,' fol. 1748, were published after his death, which took place January 2, 1737. His unpublished manuscript writings are very voluminous. He also left a large collection of plants, minerals, shells, fishes, and other zoological specimens. Linnæus held him in high esteem, and frequently sought his advice.

MIDDIMAN, SAMUEL, English landscape-engraver, was born in 1746. A pupil of Woollett, he in his best plates displayed a vigour, taste, and intelligence, and an adroit management of the graver, that would have done no discredit to his master. He engraved several of the pictures of Gainsborough, Barret, and Zuccarelli, as well as one or two of Berghem's, and some prints in Boydell's Shakespeare. Of a smaller size he published a series of 'Select Views of English Scenery,' which are in their way very excellent. He died in 1818.

* MIGNÉ, ABBÉ JACQUES PAUL, French priest and publisher, was born on the 26th of October, 1800; studied theology at Orleans; was made professor at the college of Châteaudun; was ordained priest in 1824, and served as curate at Puiseaux (Loiret). A difference with his bishop having caused him to resign his cure, he repaired to Paris, where he engaged in literary occupation, and founded, 1833, the violent ultramontanist journal, 'l'Univers.' In 1836 he quitted the journal in order to found the Imprimerie Catholique, which in the course of the next thirty years grew to be one of the most remarkable industrial establishments in Paris. The Abbé Migné's purpose was to provide a complete library for Catholics, whether laymen or ecclesiastics, and whatever might be their degree of culture. The books issued comprised a 'Collection

des Orateurs sacrés,' in 100 volumes (1846—1868); 'Patrologia Cursus completus,' of which 390 volumes were published; 'Encyclopédie Théologique: ou, Série de Dictionnaires sur toutes les parties de la Science religieuse,' large 4to, 1845, &c., of which 171 volumes were published, leaving only two or three to complete the work, when M. Migné's establishment was destroyed by a fire, February, 1868, and almost the whole of the vast stock was consumed, as well as the manuscripts, presses, type, and stereotype plates. Nor was this all. For M. Migné, far from confining his attention to literature, had gradually extended his operations till he produced on his premises church utensils, organs, statuary, pictures, ornaments, and almost all the paraphernalia of the Roman Catholic ecclesiastical system, and of these the stock in hand was also consumed. In the various branches of his establishment, which is said to have presented a model of organization, several hundred workpeople were constantly employed on the premises, besides a large literary and artistic staff.

MIGNON, ABRAHAM, a celebrated fruit and flower painter, born at Frankfurt in 1639, was a scholar of Jacob Moreels, and afterwards of J. D. de Heem, of whose manner he was an imitator. Mignon is usually classed with Jan van Huysum and De Heem as one of the three great masters, in this branch of art; but Mignon is inferior to both the others in composition and general effect. Nothing can, however, well surpass the almost microscopic accuracy and finish of the several parts of his pictures—whether principals or accessories, fruit or flowers, insects or dew-drops, birds, fish, plate, or porcelain. His pictures were eagerly purchased at high prices during his lifetime, and they have always maintained their value. He was a very industrious painter, and his works are found in most large collections; but genuine examples now seldom reach the public market. He died at Wetzlar in 1679.

MILLER, PATRICK, one of the inventors of steam navigation, was born about 1730, at Dalswinton, Dumfriesshire. A gentleman of ample means, but fond of mechanical invention, he spent a large portion of his time in making experiments and in fostering the inventions of others. One of his favourite subjects was the improvement of artillery; he was the main introducer of the short iron guns called carronades, held in great favour by artillerymen as a means of throwing shell and heavy shot at short ranges. But he is chiefly remembered for the part he took in improving ship-construction and propulsion. In 1785 he made experiments, on a loch near his estate at Dalswinton, on various new modes of propulsion; and published 'Elevations, Sections, Plans, and Views of a Triple Vessel, with Wheels; with Explanations . . . and an Account of the Properties and Advantages of the Invention,' folio, Edinburgh, 1786. This was a triple boat, with two water-spaces between, and paddle-wheels dipping into the water; the paddle-wheels were worked by men, through the medium of capstans. He also described a plan for propelling the same vessel with sails. One passage in his pamphlet attracted attention in later years, in controversies relating to priority of invention in steam navigation: "I have also reason to believe that the power of the steam engine may be applied to work the wheels, so as to give them a quicker motion, and consequently to increase that of the ship. In the course of this summer I intend to make the experiment; and the result, if favourable, shall be communicated to the public." Whether this idea first suggested itself to his own mind, or whether it was suggested to him by Mr. James Taylor, is a disputed point. Mr. Taylor went to reside at Dalswinton in 1785, as tutor to two sons of Mr. Miller; and he assisted him in his experiments on hand-worked boats in that and the two following years. On December 5th, 1787, Miller wrote to the Royal Society, describing the trial of a boat on the loch three days previously: the boat was 60 feet long, 14½ feet broad, and had one paddle-wheel; five men, at a capstan, turned the wheel, and propelled the boat about five miles an hour. With whomsoever the idea originated, Miller and Taylor worked together in substituting steam for manual power in working the paddles. Mr. Miller employed William Symington, a friend and school-fellow of Taylor, and at that time mechanical engineer at the Wanlockhead Lead Mines, to make the steam-engine. In October, 1788, a new double boat was launched on the loch, with a one-horse steam-engine on one side, a boiler on the other, and a paddle-wheel in the middle; it travelled at the rate of five miles an hour, although the cylinder was only four inches diameter. In 1789 a larger steamer was built, with an engine of 12-horse power, mounted on a frame on the deck; it was tried on the Forth and Clyde Canal. Mr. Miller was dissatisfied with the working of the engine, which communicated motion from

the piston to the paddle-wheels by means of chains, pulleys, and ratchet-wheels, producing much shaking and jerking. He appears to have tired of mechanical experimenting, on which he had, first and last, spent £30,000. The remainder of his life was chiefly passed in agricultural pursuits. He died at Dalswinton on the 9th of December, 1815, at the advanced age of eighty-five. For three years, 1788 to 1791, Robert Burns was a tenant of his, at Ellisland Farm.

Some years after Mr. Miller's death, the House of Commons appointed a committee to inquire into the facts relating to the invention of steam navigation. Immediately a host of claimants appeared, among them the representatives of the families of Miller, Taylor, and Symington. A controversy was begun, which has continued to this day. The known facts are narrated in the chief works on steam navigation; while special claims are discussed in the following:—'Memorial by the late Mr. James Taylor, of Cumnock, Ayrshire; presented to the Select Committee of the Honourable the House of Commons on Steam-boats,' 1824. 'A Concise History of the Origin of Steam Navigation; comprising its Invention by Mr. James Taylor, and Experiments by him, in conjunction with the late Patrick Miller, of Dalswinton, Esq. Compiled from authentic documents,' 1842. 'A Brief Account of the Rise and Early Progress of Steam Navigation, intended to demonstrate that it originated in the suggestions and experiments of the late Mr. John Taylor, of Cumnock, in connexion with the late Mr. Miller, of Dalswinton,' 1844. 'A Brief Narrative, proving the right of the late William Symington, Civil Engineer, to be considered the Inventor of Steam Land-carriage Locomotion, and also the Inventor of Steam Navigation,' by Robert Bowie, 1853. 'Biography of William Symington, C.E., Inventor of Steam Locomotion by Sea and Land; also a brief History of Steam Navigation, with Drawings, by J. and W. R. Rankine, Engineers,' 1862. 'A Letter to Bennet Woodcroft, Esq., F.R.S., vindicating the right of Patrick Miller, Esq. of Dalswinton, to be regarded as the First Inventor of Practical Steam Navigation, by Major-General Miller, C.B., late of the Madras Artillery,' 1862. The major-general discusses the claims put forth for Taylor and Symington, adduces facts on the other side, and ends with the declaration, "I claim the absolute right and title to the honour of being the true discoverer and originator of practical steam navigation for Patrick Miller, of Dalswinton." The final verdict will probably be that the credit of introducing steam navigation cannot be limited to *one* inventor only.

MILLER, WILLIAM ALLEN [E. C. vol. iv. col. 246]. The position of a scientific man in full work entails a large amount of exertion both of mind and body. Dr. Miller died on the 30th of September, 1870, at the early age of 53. At the time of his death he was professor of chemistry at King's College, London, and, as the oldest professor, he was naturally much consulted respecting the work of the college and the promotion of its interests. As assayer to the Mint and the Bank of England, his duties were heavy. As treasurer of the Royal Society and vice-president, his time was much occupied, not only in the Council and representing the President in his absence, but also on various scientific committees originating in, or connected more or less intimately with, the society; as, for instance, he was on the Government Grant Committee, the Melbourne Telescope Committee, on the committee of the Meteorological Department of the Board of Trade, and on Marine Meteorology; on the Library Committee of the Royal Society; on the Scientific Relief Committee; on the committee on Plans for a new House for the Society; on the committee on Deep-sea Researches; he was also a member of the Commission on Scientific Education; he was on the Kew Committee, and some others. He was also a member of the Council of the London University, and for some years one of the examiners. He was on the council of the British Association: he was one of the scientific advisers of government. In addition to all this, every item of which represents a large amount of hard work, he was frequently consulted by manufacturers on patent processes, and had to appear in courts of justice as an expert. He also had to prepare new editions of his large work on Chemistry, one or other of the three volumes of which was nearly always in hand for a new edition; and at the time of his death he had just completed the manuscript of an elementary work on Chemistry, which, in his last illness, he requested that his friend Mr. Tomlinson would revise and see through the press. And, as if all this mental work was not enough, he engaged in original researches on the photographic spectra of bodies, of which an elaborate memoir appeared in the 'Philosophical Transactions' for 1862. A

lecture which he had prepared on 'Spectrum Analysis,' and delivered at one of the evening meetings of the British Association at Manchester, was repeated at the Pharmaceutical Society, 15th January, 1862; after which his friend and neighbour, Dr. Huggins, returning home with him, proposed that they should unite in experiments on the spectra of the heavenly bodies. This led to more work, and, what is more trying, work carried on through the night, after the labours of the day; and when the result of this investigation had been published in the pages of the 'Philosophical Transactions,' there were claims upon him for a course of lectures at the Royal Institution on the 'Spectra of the Heavenly Bodies,' while at the meeting of the British Association at Exeter in 1869 he gave a lecture on the same subject to working men. Nor must it be supposed that these labours were light even to so experienced a lecturer as Dr. Miller; for he was so conscientious in the performance of his duties, that these lectures were all written out and carefully considered. They were afterwards published—the one in the 'Chemical News,' the other in the 'Popular Science Review.' He also gave the Rede Lecture at the University of Cambridge, in May, 1869, which on that occasion was on the 'Coal Tar Colours.' And still we do not exhaust the list of demands made upon him; for he was requested to prepare a paper on the relations between the Bible and science for the Church Congress at Wolverhampton, and the writer knows with how much care and thought this paper was prepared.

If the result of this vast amount of mental labour was fatal to the active brain that undertook it, we can only say that those laws which he studied and expounded with so much effect were not suspended in his case; but that he had to pay the penalty which accompanies their infringement. Those who knew him best, felt this by the side of his grave in Norwood Cemetery, on Wednesday, October 5th, 1870, where he was laid to rest in the tomb of his gentle, affectionate, and simple-minded wife, whom he survived one year.

Perhaps no man since Faraday (whom he greatly resembled in character) will be so much mourned and regretted. In a notice of his life, prepared by Mr. Tomlinson for the Chemical Society (over which he more than once presided), it is said:—"Although removed at the early age of fifty-three, he had passed a life which, measured by its results, cannot be called a short one. If we were asked to name in one word the most marked feature in Miller's character, we should say it was *sagacity*. Well acquainted with the scientific tendencies of the day, cautious in forming as well as expressing opinions, just in his dealings with others, his advice and assistance were sought by persons in various stations, from that of the cabinet minister down to the humble inventor and patentee. . . . He was one of the original founders of the Chemical Society, and has frequently occupied this chair, as well as a place at our council board. He has on several occasions contributed to our 'Journal,' but he was not often heard in debate. Indeed, he had a dislike to impromptu utterances, from a feeling that in the heat of debate rash things are often said, and the cause of truth and fair dealing endangered. The caution of his character is here again conspicuous, together with his love of truth. These were based on a deep religious belief which formed the mainspring of his whole life."

Dr. Miller bore his honours lightly, but it may be mentioned that he received the degree of D.C.L. at the University of Oxford in June, 1868, and that of LL.D. at the University of Cambridge in May, 1869. He also received the Gold Medal of the Astronomical Society, in conjunction with his friend and fellow-worker Dr. Huggins.

MILMAN, the VERY REV. HENRY HART, D.D., Dean of St. Paul's Cathedral. [E. C. vol. iv. col. 250.] Dean Milman published the concluding volumes of his 'History of Latin Christianity, including that of the Popes to the Pontificate of Nicholas V.,' 6 vols. 8vo, in 1856. Unlike his 'History of the Jews,' its ecclesiastical breadth provoked no serious censure, whilst its learning, candour, and literary excellence met with general acknowledgment, and the author lived to see a fourth edition of it published. A translation in verse of the Agamemnon of Æschylus, the Bacchæ of Euripides, and other Greek poems, was published by him in 1856, but many of the verses were the production of his early manhood. He also printed a sermon on Hebrew prophecy, preached before the University of Oxford in 1865, and prefixed a graceful biographical notice of the historian to the posthumous volumes of Macaulay's 'History of England.' But the work which occupied his chief attention during his last years, and which was looked forward to with

much interest, was his 'Annals of St. Paul's Cathedral,' but which, though he had the satisfaction to see it completed, he did not live long enough to carry through the press. He died at the Queen's Lodge, Ascot, on the 24th of September, 1868, and was interred in the cathedral over which he had for nearly twenty years presided. In his later years few men enjoyed a more honoured position than Dean Milnes. In private life he was universally esteemed; in the church his influence was great and worthily exercised; and in literature his reputation appeared to be to the last steadily on the increase.

MILNE-EDWARDS [EDWARDS, HENRI MILNE, E. C. vol. vi. col. 993].

MILNES, RIGHT HON. RICHARD MONCKTON, BARON HOUGHTON. [E. C. vol. iv. col. 253.] Mr. Milnes was raised to the peerage, with the title of Baron Houghton, August 20th, 1863.

*MINGHETTI, MARCO, an Italian statesman and publicist, member of a family who had attained considerable wealth in commerce, was born on the 8th of November, 1818, at Bologna. The premature death of his father devolved the responsibility of his education upon his mother, who proved herself fully equal to the occasion. After the completion of his studies, in the course of which he devoted himself first to physics and mathematics, and subsequently to the moral and social sciences, Minghetti traversed Italy, and made the tour of Germany, France, and England, occupying himself, especially in the last-named country, in the investigation of their various political, social, and economical institutions. One of his earliest public labours, after his return to Italy, was to deliver a lecture, March 1st, 1846, before the Società Agraria di Bologna, in which he advocated the principles of free trade, and which was published in the 'Transactions' of the society; and he followed up this first step by an energetic advocacy of the commercial principles of Mr. Cobden. In 1854 he delivered a discourse at the Accademia di Belle Arti of Bologna, in which he examined the reasons of the decay of the moderns in true æsthetic principles, as compared with the ancients, and found them in the decline of will and mental vigour; pressing upon the young artists the advice of Alfieri, "volere, fortemente volere, fortissimamente volere." Some years previous to the publication of the last-named lecture, Minghetti had made his début in public life, soon after the accession of Pius IX. to the papal throne, June 16th, 1846, by the establishment and direction, jointly with Antonio Montanari and Rodolfo Audinot, of a journal of liberal tendencies, entitled 'Felsineo,' which was distinguished at once for its firmness, moderation, and good sense; and had interested himself in the institution of agricultural conferences and other agencies having for their object the material and moral welfare of the country. Towards the end of 1847 he was called to Rome, where he became an influential member of the Consulta della Finanze; and was appointed Minister of Public Works in the administration formed on the 10th of March, 1848, of which Cardinal Antonelli was President and Minister of Foreign Affairs. Minghetti continued in office only till the 29th of April following, when, having learned to despair of the progress of Italian unity under the papal régime, he, in company with his colleagues, sent in his resignation; and, repairing to the camp of Charles Albert in Lombardy, in whom he believed to centre the last hope of Italian re-organization, was well received by the king, and appointed a staff-captain. He made the campaign of 1848; and after the battle of Goito, May 30th, in which an Italian force of 15,000 repulsed and completely routed an army of 50,000 Austrians, was promoted to a majority, whilst for his gallant conduct in the more disastrous engagement of Custoza, July 23rd, he received from the king the cross of the order of St. Maurice. On the conclusion of the war by the peace of Milan, Minghetti returned to Bologna, where he resumed his scientific pursuits; occupying himself with agriculture and political economy, and paying occasional visits to Turin, where he established confidential relations with Count Cavour, which endured till the death of the latter, and which were especially signalised in 1856, when Cavour consulted Minghetti upon the terms of the famous note or protest which impressed upon the representatives of the powers of Europe at the Peace Congress of Paris the necessity of providing efficaciously for the welfare of Italy, if the future tranquillity of Europe were to be ensured. In 1859 Minghetti was appointed by Count Cavour to be secretary-general to the Ministry of Foreign Affairs, and held this office until the peace of Villafranca, July 11th; after which he repaired to Bologna, where he was instrumental, in the fulfilment of various offices, in preparing the way for the accomplishment of Italian unity.

In October, 1860, at which time he represented the city of Bologna in the national Parliament of Italy, he became Minister of the Interior in the last administration of Count Cavour, after whose death he still continued to keep his portfolio in the cabinet of Ricasoli. Retiring from his office, he was elected vice-president of the Parliament for the session of 1861; and, after the fall of the Ratazzi ministry, assumed the presidency of the Council in association with the Ministry of Finance, in March, 1863. He held these offices until 1866; and in July, 1866, was appointed ambassador at the court of St. James's, returning to Italy to undertake the post of Minister of Agriculture, in the Menabrea administration of May, 1869. He has received various marks of honour and esteem from the King of Italy; and in February, 1864, was elected correspondent of the French Institute, and named grand officer of the Legion of Honour at the conclusion of the treaty of commerce between France and Italy.

Minghetti, though not gifted with the commanding oratory of Cavour, has delivered many important and influential speeches in the Parliament of Italy, upon the internal economy of that country; and several of these have been published in a substantive form. His most important works are, 'Della Economia pubblica e delle sue Attinenze colla Morale e col Diritto,' &c., 8vo, Florence, 1859, French translation, by M. Saint-Germain Leduc, with an Introduction by M. H. Passy, 'Les Rapports de l'Economie publique avec la Morale et le Droit,' 8vo, and 12mo, Paris, 1863, forming part of the 'Bibliothèque des Sciences morales et politiques,' the fundamental idea of which is the propriety of subordinating political economy to ethical principles; 'Statistica amministrativa del Regno d'Italia. Edita a Cura del Ministro dell' Interno, Marco Minghetti,' 4to, Turin, 1861; 'Ordinamento amministrativo del Regno d'Italia. Proposte di Legge rassegnate al Parlamento dal Ministro dell' Interno,' &c., 4to, Turin, 1861, French translation, 'De l'Organisation administrative du Royaume d'Italie,' 8vo, Paris, 1862; 'Discorso sulle Condizioni delle Finanze del Regno d'Italia detto alla Camera dei Deputati il Di 14 Febbraio, 1863,' 8vo, Turin, 1863; 'Discorso detto alla Camera dei Deputati nella Discussione sul Bilancio del Regno per l'Anno 1864,' 8vo, Turin, 1863, French translation, 'Royaume d'Italie. Discours prononcé à la Chambre des Députés,' &c., 8vo, Turin, 1863; 'Saggio di Provvedimenti di Finanza,' 8vo, Florence, 1866; and 'Chiesa e Finanza: Lettere,' &c., 12mo, Florence, 1866.

MINTO, GILBERT ELLIOT, second EARL OF [E. C. vol. iv. col. 259], died on the 31st of July, 1859, and was succeeded in the title by his eldest son, William Hugh Elliot-Murray-Kynynmound, born 1814.

MITCHEL, ORMSBY MACKNIGHT, American astronomer, was born on the 28th of August, 1810, in Union county, Kentucky. Receiving his early education at Lebanon, Ohio, he became a clerk in a store at Miami in his twelfth year. In 1825 he entered as a cadet in the Military Academy at West Point, where he graduated in 1829. For the next two years he was professor of mathematics at West Point. He then studied the law, was admitted to the bar, and practised at Cincinnati. In 1834 he was elected professor of mathematics, philosophy, and astronomy at Cincinnati College. In 1845, after much activity in collecting the requisite funds, he paid a visit to Europe, and purchased astronomical instruments in London, Paris, and Munich; with these he fitted up an observatory at Cincinnati, of which he was appointed director. In 1859 another observatory was placed under his direction at Albany. Apart from observatory duties, he was a popular lecturer on astronomy. When the civil war broke out in 1861, he threw in his lot with the North, laid aside his scientific pursuits, and joined the army as brigadier-general of volunteers in Ohio. He made a forced march southward, seized the Corinth and Chattanooga Railway, broke the Confederate line of communication, and captured several important positions in northern Alabama. He was raised to the rank of major-general for these services. In September, 1862, he was made commander of the department of the South; but, while making preparations for a vigorous campaign, was attacked with yellow fever at Beaufort, South Carolina, and died on the 30th of October in the same year. Mitchel took honourable rank among the defenders of the Union as a general; but his services to astronomy are associated with his lengthened occupancy of the posts of professor and director. He introduced an electro-magnetic recorder, for measuring right ascensions and declinations with a degree of minute accuracy never before attained. Among the works which he published were the following:—'A Course of Six Lectures on Astronomy,'

1848; 'The Orbs of Heaven; or, the Planetary and Stellar Worlds,' 1851; 'An Address delivered at the Dedication of the Observatory at Hamilton,' 1856. Later works, published in America and in England, under the title of 'The Planetary and Stellar Worlds' and 'Popular Astronomy,' appear to have been revised or adapted editions of his 'Orbs of Heaven.' Scientific papers by him in 'Silliman's Journal,' the 'Proceedings of the American Association,' and 'Gould's Astronomical Journal,' relate to observations on a Transit of Mercury; his new method of observing and recording Right Ascensions and Declinations; experiments on the Velocity of Electrical Waves or Currents; and on the Longitude of the Cincinnati Observatory, as determined by telegraphic operations in connection with the United States Coast Survey. A memoir of Mitchell, by Phineas Camp Headley, was published at New York in 1865.

MITELLI, AGOSTINO, an eminent painter of the Bolognese school, was born at Battidizzo, near Bologna, March 16th, 1609. He was a scholar of Dentone, and painted, like him, architectural interiors, elevations, buildings in ruins, &c.; but added a softness, variety, and grace which were seldom found in the works of his master; and he drew the figure with skill—an attainment he is said to have acquired in the school of the Carracci. Mitelli formed a warm friendship with Colonna; and as their styles blended well together, they worked in concert; and their paintings became universally popular as decorations of the public apartments of palaces, &c. They painted together, at Bologna, the chapel of Rosario, the hall of the Villa Caprara, the Bentavogli and Pepoli palaces, &c.; and elsewhere the archiepiscopal palace at Ravenna, and palaces and convents at Parma, Florence, Rome, Modena, and Genoa. By Philip IV. they were invited to Madrid, where they decorated a magnificent hall and three saloons. They remained at Madrid two years, and then Mitelli was taken ill and died, August 2nd, 1660.

MITELLI, GIUSEPPE MARIA, son and scholar of Agostino Mitelli, was born at Bologna in 1634. He painted the figures in some of his father's decorative works, and executed several frescoes in Bologna; but his reputation was never very high as a painter. As an engraver he was more esteemed. His prints are, however, slight, feeble, and often inaccurate. Among them are twenty plates of the History of Æneas, after the Carracci; the Cries of Bologna, in twenty plates, after An. Carracci; the Twenty-four Hours of Human Happiness, twenty-six plates, from his own designs; and various separate prints—in all nearly two hundred. He died in 1718.

MITSCHERLICH, EILHARD [E. C. vol. iv. col. 276]. This great observer in natural science first became so while a philological student; and, being anxious to visit Persia, he determined to study medicine, under the idea that, with his limited means, he might, in the character of a physician, be able to gain access to that country. But, in studying the introductory sciences at Göttingen, he became so fascinated with chemistry, that he gave up philology and the desire to travel. In 1818 he visited Berlin in order to get a license to lecture, and was allowed by Link to work in the laboratory of the University. Here he confirmed Berzelius's statement that phosphoric and arsenic acids contain each five equivalents of oxygen, while phosphorous and arsenious acids contain three equivalents; but he noticed that the similarly constituted phosphates and arseniates crystallize in similar forms. Feeling that he was on the eve of a great discovery, he studied the laws of crystallography, learned how to measure the angles of crystals, and soon became satisfied that the phosphates and arseniates are not merely similar, but identical in form, and consequently that bodies of dissimilar composition exist under the same crystalline form, and that these bodies are compounds, containing respectively the same number of equivalents. He studied a number of artificial salts, which enabled him to extend and confirm the doctrine of *isomorphism*, as it was called; these observations he embodied in a memoir which was presented to the Berlin Academy in December, 1819. In the preceding August, Berzelius visited Berlin, and conceived so high an idea of Mitscherlich that he suggested him to the minister as a proper successor to Klaproth in the chair of chemistry in the University of Berlin. The suggestion was not then adopted; but the minister allowed Mitscherlich to work for some time under Berzelius in Stockholm. Here he continued and extended his researches, and published a memoir in the 'Transactions' of the Swedish Academy. Berzelius regarded isomorphism as of the highest importance to the theory of chemical equivalents, inasmuch as it explained the exceptions to the law of definite proportions in his mineral

system. It was found from the crystallization of the mixtures of the different sulphates, that isomorphous bodies combine in all proportions, and that they replace one another in indefinite proportions in the composition of minerals.

In November, 1821, on his return to Berlin, Mitscherlich was elected a member of the Academy of Sciences, and was appointed professor extraordinary in the University. In 1825 he became professor in ordinary. In the winter of 1823—24 he worked with Berthier in Paris, and found that, by fusing the mineral constituents together in proper proportions, diopside, idocrase, and garnet were produced.

Mitscherlich's extended researches in crystalline form led to the discovery that even an elementary body, such as sulphur, may take different forms under different conditions. He had already shown that the acid phosphate of soda and carbonate of lime had each the same property of crystallizing under two different forms, and it now appeared that this property of *dimorphism* belonged to simple substances as well as to their chemical combinations. The memoir on the 'Dimorphism of Sulphur' was presented to the Academy in July, 1826. He also found, on carefully measuring the angles of natural crystals, differences in the angle between the same pair of cleavages amounting to 20"—a difference which, though small, was too large to be attributed to errors of pointing or reading. The observations in the morning differed from those made in the afternoon, when the temperature was higher. Hence it was concluded that the variation of the angle could only be due to the unequal expansion of the crystal in different directions. This was shown by immersing crystals in heated mercury, and by a variety of observations taken under different conditions, as explained in his memoir of March, 1825. He also contrived a smaller and more convenient goniometer, manufactured by Oertling, and described in the 'Memoirs' of the Berlin Academy for 1843, after its value had been tested by long use. In 1827 he discovered selenic acid and the isomorphism of seleniate of potash with sulphate of potash, and of other seleniates with the corresponding sulphates. He prepared a large number of salts, determined the systems to which they belonged, measured some of the angles, and drew by hand the figures of some of their principal combinations; but in 1833 his crystallographic labours were interrupted by the publication of his Treatise on Chemistry, for which he had long been preparing, and which contained a large amount of original matter. The fifth edition of this work was commenced in 1855, but not finished. In this year the author began his researches on the density of the vapour of bromine and other bodies, and its relation to their chemical equivalents. He also made researches on the constitution of organic combinations in which compound radicals are assumed to exist; also on catalytic action. He also became interested in geology, and during some years made journeys in the Eifel, examining the extinct volcanoes of that district, with the view to a theory of volcanic action. He also visited other volcanic districts in Germany, France, and Italy. His views of volcanic phenomena, with the exception of a few pages, distributed among the audience who attended his lectures in the winter of 1838—39, were never published; but his leading idea was that the explosive action of volcanoes is caused by the vapour of water in the form of high pressure steam. In the autumn vacation of 1861 he made his last excursion in the Eifel, and in the following December began to suffer from disease of the heart. The complaint increased in severity in the summer of 1862, and it was with difficulty that he completed his lectures. In the autumn he stopped some time in the house of his son-in-law, Professor Busch, near Bonn, where his health seemed to revive, and on his return to Berlin he commenced his winter course; but he had to give it up a fortnight before Christmas. In the spring of 1863 he retired to a country house at Schöneberg, near Berlin, where, on the morning of the 28th of August, he died without pain. His memory will be cherished for his versatility, his remarkable talent for observing, and that severe mental discipline which controls those great powers. He was a member of probably every Academy in Europe. He was elected foreign member of the Royal Society in 1828, and in the following year the Royal Medal was awarded to him for his discoveries relating to the laws of crystallization and the properties of crystals. In 1852 he was elected foreign associate of the French Institute in the place of Oersted.

MOCETTO, GIROLAMO, early Italian engraver, was born at Verona, about 1454. He was a pupil of Giovanni Bellini, and painted in the manner of his master; but very few of his pictures remain. He is now chiefly known as an engraver.

Mocetto is the earliest Venetian engraver whose name is appended to a print. He engraved from the designs of Andrea Mantegna, and his master Bellini, with a certain rude vigour and facility. Among the best of his prints are a 'Virgin in Glory' and a 'Judith with the Head of Holofernes.' Lanzi says that he did not live to the sixteenth century; but four views of Nola were drawn and engraved by him for A. Leone's 'De Nola Opusculum,' &c., folio, Venice, 1513. In all 19 plates are with certainty ascribed to him. (Bartsch; Passavant; Wiegell; Maffei.)

* MOHL, HUGO VON, botanist, was born at Stuttgart about 1801. He was educated at Tübingen, and at that place he subsequently became professor of botany and director of the botanic garden. All his writings are more or less illustrative of the physiology and anatomy of plants, in which department of knowledge he holds a foremost rank. He was the first to make precise observations on the physical structure of chlorophyll, and his papers on the subject published in 1838 and 1855 are amongst the most important yet written. His papers on the epidermis and stomates are much valued, as also are those which he has drawn up bearing on the tissues of plants. His elaborate essay on the stem-structure of palms formed the introduction to the great work on this family by Martius, 1824. In it he enunciated his ideas on the interior organization of the monocotyledonous stem, ideas which were widely different from those previously held, but which have since met with general acceptance. His views as applied to other monocotyledons formed an introduction to the work by Martius on the Brazilian cryptogams. His fame, however, depends less upon these researches than upon the investigations which he has made and the theories which he has formed as to the structure, functions, and development of the vegetable cell. Amongst his separate works, we may cite his 'Beiträge zur Anatomie und Physiologie der Gewächse,' 4to, Bern, 1834; 'Grundzüge der Anatomie und Physiologie der vegetabilischen Zelle,' 8vo, Brunswick, 1851, a reprint from Wagner's 'Handwörterbuch,' and 'Vermischten Schriften botanischen Inhalts,' 4to, Tübingen, 1845. The majority of his numerous papers are inserted in the 'Annales des Sciences Naturelles,' or in the 'Botanische Zeitung,' of which last he is one of the editors. Amongst them may be mentioned those on the structure and forms of pollen-granules (1835); the symmetry of plants (1837); the anatomy of the porous cells of *Sphagnum* (1838); upon the latex and its development (1843); and on cells and tissues, published at intervals since 1830.

MOHS, FRIEDRICH, mineralogist, was born at Gernrode, in Anhalt, January 29, 1773. In 1811, he was appointed professor of mineralogy at the Johanneum in Grätz; soon after, he succeeded Werner at Freiberg; and ultimately took the chair of mineralogy at Vienna, in 1826. He died September 29, 1839. He holds an important place in the history of mineralogical science, although his ideas, as he developed them, have not been established. Mohs was the first to insist upon the necessity of classifying minerals according to a combination of physical characters, much in the same way as is done with plants. He brought out prominently the relative value of such characters in forming the species, and thus did immense service by reducing into something like order the multitude of varieties, sub-species, etc., which had been founded on the most trivial characters. He however, erred in excluding the chemical properties as aids in classifying, and in resorting to a clumsy method of nomenclature. He gave the highest classificatory value to density; and, subsidiary to this, crystalline form and hardness. In the best modern classifications, the pre-eminence is given to the chemical composition; while the crystallographic and the other physical characters are considered to be of subsidiary importance. Mohs endeavoured to reduce the physical properties to absolute measurement, and this led to his forming the scale of hardness in general use by mineralogists. His principal writings are, 'Der Herrn J. F. von der Null Mineralien Kabinet nach einem durchaus auf äussere Kennzeichen gegründeten Systeme geordnet,' 3 abth., 4to, Vienna, 1804; 'Die Charaktere der Klassen, Ordnungen, Geschlechter, und Arten der naturhistorischen Mineral-systems,' 8vo, Dresden, 1820, of which an English translation appeared at Edinburgh in the same year; 'Grundriss der Mineralogie,' 2 parts, 8vo, Dresden, 1822—1824, English translation by Haidinger, 3 vols. 8vo, Edinburgh, 1825; and the first part of 'Anfangsgründe der Naturgeschichte des Mineralreichs,' 8vo, Vienna, 1832, the second part being by Zippe.

* MOIGNÉ, FRANÇOIS NAPOLEON MARIE, ABBÉ, was born at Guéméné (Morbihan), April 20th, 1804. After studying at the College of Pontivy, and in a Jesuit college, he

BIOG. DIV.—SUP.

entered the Jesuit Seminary of Montrouge in 1822, where he evinced a decided predilection for science. In 1836, the Jesuits founded a chair of mathematics for him in Paris. Here he formed an intimacy with Dumas, Ampère, Arago, Thenard, and other distinguished physicists and mathematicians. About 1841, the Père Boulanger, superior of the Jesuits, directed him to suspend his scientific pursuits, in order to teach history and Hebrew at the Seminary of Laval. Moigno resisted this order; and after a discussion protracted for three years, he renounced his connexion with the Society, and has since been known as a voluminous writer on science. His chief works are:—'Leçons de Calcul différentiel et intégral,' Paris, 4 vols. 8vo, 1840, &c.; Scientific Letters, written from various parts of Europe, and inserted in 'L'Époque,' 1845, &c.; 'Traité de Télégraphie Électrique,' 1849; 'Répertoire d'Optique Moderne,' 4 vols. 8vo, 1850; Scientific Letters, written for 'La Presse' and 'Le Pays,' 1850, &c.; 'Cosmos,' an encyclopædic review, established 1852; 'Sur le Stéréoscope,' 1853; and 'Sur la Saccharimètre,' in the same year; translation of Grove's 'Correlation of the Physical Forces,' 1856, 2nd edition, 1867; 'Annuaire de Cosmos,' 1859 et seq.; 'La Cotonisation de Lin,' 1861; 'Les Mondes,' a weekly review of science, commenced in 1863; 'Cours de Science Vulgarisée,' 8 vols. 8vo, 1864—6; translation of Tyndall's 'Radiation,' 1865; translation, with additions, of Hofmann on the 'Force of Combination of Atoms,' 1866; translation of two Essays by Tyndall, with a Dissertation on the 'Essence of Matter,' and 'Leçons de Mécanique Analytique,' 1867; 'Les Eclairages Modernes,' 1868; 'Mélanges de Physique et de Chimie pures et appliquées,' and 'Sur la Saccharimètre Optique, Chimique, et Mélassimétrique,' 1869. In 1848, he was appointed joint almoner of the Lyceum of Louis le Grand; and, in 1864, was decorated with the Legion of Honour.

MOLBECH, CHRISTIAN. [E. C. vol. iv. col. 287.] This eminent Danish scholar died at Copenhagen on the 23rd of June, 1857.

* MOLESCHOTT, JAKOB, physiologist, was born, August 9, 1822, at Herzogenbusch, in the Netherlands. In 1841 he went to Heidelberg, where his principal teachers were Bischoff and Tiedemann. In 1845 was published 'Kritische Betrachtung von Liebig's Theorie der Pflanzenernährung,' Haarlem, which was singled out for distinction by the Academy of Haarlem. As soon as he had obtained his degree of M.D., he went to Utrecht to practise his profession; but in 1847 he returned to Heidelberg for the purpose of teaching physiological chemistry and anthropology. During his studies he had paid much attention to the doctrines of Hegel, Spinoza, and Feuerbach, and in his lectures he advocated advanced materialistic ideas, which brought numerous controversial adversaries against him, and he was ultimately compelled to resign his post. He denied the existence of force, as distinct from matter, and maintained that man is simply food more or less metamorphosed, or, as he expressed it in German by a phrase of double meaning, 'Das Mensch ist was er isst.' In 1854, he took the chair of physiology at Zurich, and, in 1861, removed to the same chair at Turin. His materialistic notions have acquired him some notoriety; but his claim to notice is on account of his researches on the chemical changes which food undergoes in the animal system, and on numerous physiological phenomena. His books include, 'De Malignantia pulmonum vesiculis,' 8vo, Heidelberg, 1845; 'Die Ernährung in ihrem Zusammenhange mit dem Volksgeist,' 8vo, 1847, which has been translated into English, under the title of 'The Chemistry of Food,' forming vol. 8 of Orr's 'Circle of the Sciences'; 'Physiologie der Nahrungsmittel,' 8vo, Darmstadt, 1860; 'Physiologie des Stoffwechsels in Pflanzen und Thierwelte,' 8vo, Erlangen, 1851; 'Georg Forster, der Naturforscher des Volkes,' 8vo, Frankfurt-am-Main, 1854; 'Licht und Leben,' 8vo, Frankfurt, 1854; 'Die Einheit der Lebens,' 8vo, Giessen, 1864; 'Pathologie und Physiologie,' 8vo, Giessen, 1866; 'Della causalità nelle Biologia,' 8vo, Turin, 1867. He has also written numerous articles, mostly relating to the fluids of the body, and to the action of the nerves on the movements of the heart. The majority of these, more especially of the later papers, are inserted in the 'Untersuchungen zur Naturlehre des Menschen und der Thiere,' a periodical which he started in 1857, and of which he has been the sole editor.

MOLLER, GEORG. [E. C. vol. iv. col. 293.] This distinguished architect died on the 13th of March, 1852, aged 68; he was born on the 21st January, 1784.

* MOLTKE, HELMUTH KARL BERNHARD, GRAF VON, a Prussian field-marshal, renowned as the first strategist of the age, descended from an ancient Danish family, which has

furnished many distinguished men to the public service, was born on the 26th of October, 1800, at Guewitz, in Mecklenburg. He entered at first into the Danish service, which he exchanged in 1822 for that of Prussia. In 1832, his professional knowledge and ability had procured for him an appointment on the staff; and in 1835, upon the occasion of his visiting the East, he was presented to the Sultan, Mahmud II., whom he was permitted by the military authorities of Prussia to instruct in the most recent improvements in the art of war, as well as to superintend the reform of the Turkish army, with which he made the Syrian campaign of 1839, against Mehemet Ali. Returning to Prussia, he resumed his connection with the staff, and in 1846 was appointed aide-de-camp to Prince Henry, who resided at Rome, and who died in the following year. Previous to this appointment, Moltke had produced, as the result of his sojourn in the East, a work entitled, '*Der russisch-türkische Feldzug in der europäischen Türkei, 1828 und 1829*,' 8vo, "mit Karten und Plänen," folio, Berlin, 1845, English translation, '*The Russians in Bulgaria and Rumelia in 1828 and 1829*,' 8vo, London, 1854, French translation, by A. Demmler, with an 'Atlas' in folio, '*Campagnes des Russes dans la Turquie d'Europe en 1828 et 1829*,' 2 vols. 8vo, Paris, 1854. He became aide-de-camp to Prince Frederick William in 1856; and in 1858 was appointed chief of the staff of the army, and soon after promoted to the rank of lieutenant-general. When Austria and Prussia for a moment merged their jealousies in a common attack on Denmark, which commenced in December, 1863, Moltke had a large share in deciding upon the plan of operations, in the course of which he was attached, as chief of the staff, to Prince Frederick Charles, who, in April, 1864, planted the victorious standard of Prussia on the walls of Düppel. In the midst of the peace which followed, Moltke already began to form plans for the deferred but inevitable war between Austria and Prussia—plans which, having been matured and approved by Count Bismarck and General Von Roon, were faithfully carried out in the campaign which commenced in June, 1866. On the 29th of that month, the first news of victory to the Prussian arms arrived at Berlin; and on the following day, Moltke, by this time a general, left Berlin in the suite of the king, with Bismarck and Von Roon. On the 3rd of July, the Austrians sustained the crushing and decisive defeat of Sadowa, where Moltke was in attendance upon the king, who had the titular command-in-chief of the expedition. In the final days of July the preliminaries were settled in Count Mensdorff's castle of Nicolsburg, resulting in the peace of Prague, which was probably facilitated by the attitude assumed by the Emperor of the French, who, in his speech to the Chambers, claimed to have arrested the conqueror at the gates of Vienna. The Prussian troops made their triumphal entry into Berlin, on the 20th of September, when General Von Moltke, as chief of the general staff, rode in one rank, immediately before the king, with General Von Roon, the war minister, Count Bismarck, and Generals Von Blumenthal and Von Voigts-Rhetz. For his distinguished services in this short and decisive campaign, Moltke was rewarded by the king with the order of the Black Eagle. An account of the "Seven Weeks' War," as it has been graphically named, was drawn up under the superintendence of Moltke, of which a French translation, by M. Furey Raynaud, was published, with the title of '*Histoire de la Campagne de 1866*,' rédigée par la Section historique du Corps Royal d'État-Major, sous la Direction de Général de Moltke, &c., 8vo, Paris, 1868, &c. In the course of the Franco-Prussian war, conducted on one side with unbroken success, and on the other supported with unrelieved disaster, the eyes of the world were fixed by the astonishing foresight, and the unflinching accuracy of the calculations of Von Moltke, in whose hands was its supreme direction. The splendour of his strategy, and the success of his combinations, were rewarded on the 17th June, 1871, the day of the triumphant march of the returned Prussian troops into Berlin, with the rank of Field-Marshal.

In addition to the works already mentioned, Count Von Moltke has produced a volume of Letters on the circumstances of Turkey in the period 1835—39, entitled '*Briefe über Zustände und Begebenheiten in der Türkei aus den Jahren 1835—39*,' 8vo, Berlin, &c., 1841, with an introduction by Carl Ritter; and has superintended an official account of the Italian campaign of 1859, '*Der Italienische Feldzug des Jahres 1859*,' &c., 8vo, Berlin, 1862, second edition, 1863, French translation, '*La Campagne d'Italie en 1859*,' Rédigée par la Division historique de l'État-Major de Prusse, 8vo, Berlin, 1862.

MOLZA, TARQUINIA, a learned Italian lady, daughter of

Camillo Molza, and granddaughter of Francesco Maria Molza, a poet and novelist of some distinction, and a member of a noble family of Modena, was born in that city on the 1st of November, 1542. Her parts were so extraordinary that her father determined to give her an education more severe and systematic than generally fell to her sex; and she was carefully instructed in the various branches of elegant literature, music, eloquence, and poetry; and also in logic, philosophy, astronomy, and the physical sciences, to which was added the study of Latin, Greek, and Hebrew. It was her distinction that her various learning did not detract from the graces and amiability of womanhood, which she exhibited during nearly twenty years of married life. Upon the death of her husband, Paulo Porriño, on the 30th of August, 1579, she, being a childless widow, applied herself with more exclusive devotion than ever to her favourite studies. She was a trusted friend of the most cultivated men of the age; and, at Ferrara, where she spent some time after her widowhood, she not only attached herself to the society of the learned ladies, Livia Preparata and Ursina Cavealleta, but inspired Tasso with so great a respect for her judgment, that he, as well as Guarini and others, submitted his works to her critical opinion. The eulogies of which she was the object by contemporary writers are very numerous, and several dedications were made to her, especially by Francesco Patrizi, who inscribed with her name the third volume of his '*Discussioni Peripatetiche*.' But the most extraordinary honour that she received, was that of being presented with the citizenship of Rome, by the senate and people of that city, in a patent reciting her singular merits, and conferring upon her the title of Unica. She died at Modena on the 8th of August, 1617, leaving behind her several poems in Latin and Italian, and translations from Plato and other classical writers, which were incorporated with the works of her grandfather, F. M. Molza, in the later editions:—'*Delle Poesie volgari e Latine di Francesco Maria Molza, correte, illustrate, ed accresciute. Colla Vita dell' Autore scritta da P. A. Sarassi. Volume terzo: Opuscoli inediti di Tarquinia Molza. Vita di T. Molza da D. Vandelli*,' 3 vols. 8vo, Bergamo, 1747—54.

* MOMMSEN, THEODOR, a distinguished historian, antiquary, jurist, and philologist, was born on the 30th of November, 1817, at Garding, in Schleswig; and having received his early education from his father, who was pastor of that place, prosecuted his studies successively at the Gymnasium of Altona and the University of Kiel, from which he returned to act as a private tutor at Altona. His reputation as a scholar, and particularly as an expert in epigraphy, or the art of deciphering the inscriptions on monuments and other records of antiquity, occasioned his being subsidized by the University of Berlin during a tour which he made for scientific purposes in France and Italy between the years 1844 and 1847. Shortly after his return, he connected himself with the '*Schleswig-Holstein'sche Zeitung*,' of which he became the principal contributor, and subsequently the editor. In the autumn of 1848 he was appointed extraordinary professor of jurisprudence at the University of Leipzig, but was dismissed from his office in 1850 on account of his participation in the political events of 1848 and 1849. After his deposition he repaired to Switzerland, where, in the spring of 1852, he was called to be ordinary Professor of Roman Law at the University of Zurich, from which he migrated in the same capacity to the University of Breslau in 1854, and in 1858 to that of Berlin. His academical lectures have procured for him a high rank among jurists, whilst his researches in classical archaeology and philology have placed him by the side of the most eminent German scholars in this department. He is a member of the several Academies of Berlin, Munich, Vienna, Turin, and St. Petersburg, and an associate member of the Institute of France.

The principal works of Professor Mommsen are his '*De Collegiis et Sodaliciis Romanorum*,' &c., 8vo, Kiel, 1843; the Roman Tribe, considered administratively, '*Die römischen Tribus in administrativer Beziehung*,' 8vo, Altona, 1844; Oscan Studies, '*Oskische Studien*,' 8vo, Berlin, 1845; Supplement, &c., '*Nachträge zu den Oskischen Studien*,' 8vo, Berlin, 1846; Dialects of Lower Italy, '*Die unteritalischen Dialekte*,' 4to, Leipzig, 1850; On the Monetary System of the Romans, '*Ueber das römische Münzwesen*,' 4to, Leipzig, 1850; '*Inscriptiones Regni Neapolitani Latine*,' folio, Leipzig, 1852; Municipal Institutions of Salpensa, &c., '*Die Stadtrechte der lateinischen Gemeinden Salpensa und Malaca in der Provinz Baetica. Mit Nachtrag*,' 4to, Leipzig, 1855; '*Die römische Chronologie bis auf Caesar*,' 8vo, Berlin, 1858, second edition, 1859; History of the Roman Monetary System, '*Geschichte des römischen Münzwesens*,' 8vo

Berlin, 1860, which received, in 1861, the prize of the Académie des Inscriptions, and of which a French translation, by the Duc de Blacas, appeared as 'Histoire de la Monnaie Romaine,' 8vo, Paris, 1866, &c. The great work, however, by which Professor Mommsen is most widely and favourably known is his History of Rome, 'Römische Geschichte,' 3 vols. 8vo, Berlin, 1854—1855, fourth edition, 1865—1866, English translation, 'The History of Rome. Translated, with additions, by W. P. Dickson. With a Preface by L. Schmitz,' 4 vols. 8vo, London, 1862—1866, new edition, 4 vols. 8vo, London, 1868—1870, French translation, by C. A. Alexandre, 'Histoire Romaine,' 8vo, Paris, 1863, &c. His younger brother,

* CARL JOHANN TYCHO MOMMSEN, who is favourably known as a critic and philologist, was born at Garding in 1819; and, having devoted himself to the study of the classical languages, made a tour in Italy and Greece which extended from the year 1846 to 1848. After filling various academical appointments, he became a professor in the Gymnasium of Oldenburg, and finally, in the latter part of 1863, director of the Gymnasium at Frankfurt-am-Main. He is a member of several learned societies, especially of the Greek Society of Oldenburg, to whom, "in dulcis et fidelis sodalicii memoriam," he dedicated his edition of Pindar, 'Pindari Carmina, ad Fidem optimorum Codicum recensuit integram Scripturæ Diversitatem subiecit Annotationem criticam addidit,' 8vo, Berlin, 1864, abridged edition, wanting the introductions and many of the notes, 'Pindari Carmina, edidit Tycho Mommsen,' 8vo, Berlin, 1866, a work for which he had prepared during many years of study and investigation in various libraries of the Continent. He had already, as his earliest contribution to philological literature, published a dissertation on Pindar, 'Pindaros. Zur Geschichte des Dichters und der Parteikämpfe, seiner Zeit,' 8vo, Kiel, 1845; which he followed by a metrical translation of the same poet, 'Des Pindaros Werke, in die Vermaasung des Originals übersetzt,' &c., 4to, Leipzig, 1846; and, after a long interval, by a letter to Professor Friederichs, of Berlin, entitled 'Einige Bemerkungen über Kritik, Exegese, und Versabtheilung bei Pindar,' 8vo, Oldenburg, 1863. He is also favourably known as a Shakespearian scholar and editor. His brother,

* AUGUST MOMMSEN, who is also distinguished as a philologist and classical archaeologist, was born in 1821, at Oldeoloe; and, after having filled various academical offices, became at length professor at the Gymnasium of Parchim. His principal works have reference to the calendar of the ancients, 'Römische Daten,' 8vo, Parchim, 1856; Contributions to Greek Chronology, 'Beiträge zur griechischen Zeitrechnung,' 8vo, Leipzig, 1856; Second Contribution, &c., 'Zweiter Beitrag zur Zeitrechnung der Griechen und Römer,' 8vo, Leipzig, 1859; Antiquarian Researches on the Public Feasts of the Athenians, which received the prize of the Royal Scientific Society of Göttingen, entitled 'Heortologie. Antiquarische Untersuchungen über die städtischen Feste der Athener,' 8vo, Leipzig, 1864; 'Athenæ Christianæ,' 8vo, Leipzig, 1868.

MONGEZ, MARIE-JOSEPHINE-ANGELIQUE (by birth, LEVOL), a French historical painter, was born in the neighbourhood of Paris, May 1st, 1775, and died in that city, February 20th, 1855. She was a pupil of Regnault and of David; obtained several medals, and took the highest rank among the female painters of France, when the academic manner of her master, David, was the vogue. Her earlier works, which were chiefly classic in subject, include a Mars and Venus; an Orpheus, with thirteen figures of life-size; the Death of Adonis; Death of Astyanax; and the like. Later she painted ecclesiastical subjects and some portraits, as Napoleon I., for the city of Avignon, and Louis XVIII., for Toulouse. Madame Mongez drew the figures, three hundred in number, for her husband Antoine Mongez's 'Dictionnaire d'Antiquités.'

MONK, JAMES HENRY, Bishop of Gloucester and Bristol [E. C. vol. vi. col. 1014].

MONTAGNA, BENEDETTO, a painter and engraver of Vincenza, who flourished in the early part of the 16th century. As a painter he imitated Giovanni Bellini, but he is better known by his engravings. He was among the earliest and best of the Lombardo-Venetian engravers. His prints, mostly from his own designs, are chiefly of scriptural or mythological subjects, the latter exhibiting rather freely the nude female form. Montagna copied some of the plates of Albert Dürer, and profited by so doing. About 60 plates by him are known, but many more are ascribed to him without sufficient authority. The date of his death is unknown; he was alive in 1533.

MONTAGNE, JEAN FRANÇOIS CAMILLE, cryptogamist, was born at Vaudoy (Seine-et-Marne), on February 15, 1784. His

father was a surgeon, and he himself was intended for the same profession; but, owing to the death of his parents, poverty compelled him to abandon his scholastic education, and to enter the navy in his 14th year. He served with the French expedition to Egypt for four years, and in 1802 returned to France. He at once studied medicine, qualified himself as surgeon, and as such he served in various capacities at Boulogne, in Italy, in Spain, and at Sedan. In 1814 he was appointed surgeon-in-chief of Murat's army. In 1832 he retired from the service. While in service, his duties required him to travel over most parts of France and Spain, and he took advantage of the occasions offered for collecting new and rare plants, more especially cryptogams. On settling down in Paris after his retirement, he found that this group had received comparatively little attention from his countrymen, and he resolved to make it the object of his special studies. He entered into correspondence with all the principal botanists of Europe and America. Materials were sent to him in abundance, and for twenty years he devoted the greater portion of almost every day to working them up. In 1853 his labours were in part rewarded by his being unanimously selected as the successor to Achille Richard as a member of the Académie des Sciences—an honour which he had vainly sought in 1837. He died at Vaudoy, January 6, 1866. He described a large number of new species, and made many observations on the structure and mode of reproduction of this group of plants. His writings consist mainly of articles contributed to scientific journals, and of contributions made to the reports of the principal French expeditions, such as those commanded by Dumont d'Urville and A. d'Orbigny, and to elaborate natural-history monographic works, such as the 'Phytographia Canariensis' of Webb and Berthelot; the 'Historia física de las islas de Cuba,' by Ramon de la Sagra; and the 'Historia física de Chile,' by Gay.

MONTALEMBERT, CHARLES-FORBES, COUNT DE [E. C., vol. iv. col. 307]. M. de Montalembert signalled the anti-imperialist opinions with which he was prominently identified, and the reputation for which had caused his defeat in his own department in the general elections of 1857, by publishing in 'Le Correspondant' of October 25th, 1858, an article entitled 'Un Débat sur l'Inde au Parlement Anglais,' 8vo, London, 1858, and 8vo, Brussels, 1858, English translation, 'Montalembert on Constitutional Liberty. A Picture of England painted by a Frenchman,' &c., 8vo, London, first fifteen editions, 1858, for which he was arraigned, November 24th, before the correctional tribunal, on the charge of having written the article in a systematic spirit of disparagement, which continually drew out the contrast between the institutions of France and England, to the prejudice of the former. The offences of which he was more particularly accused were, (1) exciting to hatred and contempt of the imperial government; (2) attacking the respect due to the laws; (3) attacking the rights and authority held by the emperor from the constitution and the principle of universal suffrage; and (4) having endeavoured to trouble the public peace by exciting the contempt or hatred of citizens against each other. Of all but the last he was convicted, and sentenced to six months' imprisonment and a fine of 3000 francs; whilst M. Douniol, the manager and publisher of 'Le Correspondant,' who was tried with Montalembert, and in whose favour extenuating circumstances were discovered, was sentenced to a month's imprisonment and a fine of 1000 francs. Various records of the trial were published, and, besides others, 'Procès de M. le Comte de Montalembert: avec les Discours de MM. Berryer et Dufaure, précédé de sa Vie,' &c., 8vo, London, 1858; and 'The late State Prosecution in France. The Trial,' &c., 8vo, London, first two editions, 1858. An appeal was lodged in the superior court, which was so far successful that, whilst the fine was maintained, the term of imprisonment was reduced to three months; and Montalembert was compelled, against his will, to accept from the emperor a remission of all the penalties. In October, 1859, he published a pamphlet entitled, 'Pie IX. et la France en 1849 et en 1859,' 8vo, Paris, 1859, &c., protesting against the emperor's policy towards Rome; and giving the signal to the numerous brochures, amounting to two or three hundred, which that question was the means of calling out. This pamphlet was seized throughout France, and another prosecution was commenced against the author, which, however, was not proceeded with. M. de Montalembert was remarkable for his love of England and his admiration of her institutions; and he conceived for Ireland, to which he paid several visits, a great affection. The defects of the English people, indeed, as appears from the remarkable Introduction to the third volume of his

'Monks of the West,' may be generally summed up in their Protestantism and their ingratitude to the Pope, from whose official ancestors M. de Montalembert assumed they had derived their Christianity. Montalembert, as may be inferred, combined a singular reverence for the papacy, spiritual and temporal, with the utmost zeal for constitutional freedom. He escaped the solution of the question of reconciling his liberalism with the doctrine of papal infallibility by his death on Sunday, the 13th of March, 1870, a short time after his production of a striking letter on the existing policy of the Ultramontane party. He had long suffered from a malady that left little hope of his recovery, and the first symptoms of which he referred to the harassing effect upon mind and body of the efforts he made to stem the revolutionary torrent of 1848.

The later works of M. de Montalembert include two letters to Count Cavour on the Roman Question, 'Lettre à M. le Comte de Cavour,' 8vo, Paris, 1860, and 'Deuxième Lettre,' &c., 8vo, Paris, second edition, 1861; 'Une Nation en Deuil. La Pologne en 1861,' 8vo, Paris, 1861, &c.; 'Le Père Lacordaire,' 8vo, Paris, 1862, second edition, 12mo, Paris, 1862, English translation, 8vo, London, 1863; an Introduction to Jean de Beaugué's 'Histoire de la Guerre d'Ecosse,' 8vo, Bordeaux, 1862, first published in 1556, and interesting to Montalembert as being a record of the exploits of his ancestor, André de Montalembert, Comte d'Essé, "Lieutenant-général pour le Roi, commandant ses Armées en Ecosse;" 'L'Eglise libre dans l'Etat libre. Discours prononcé au Congrès Catholique de Malines,' 8vo, Paris, 1863; 'L'Insurrection polonaise,' 8vo, Paris, 1863; English translation, 'The Insurrection in Poland,' 8vo, London, 1863; 'Le Pape et la Pologne,' 8vo, Paris, 1864; and 'Le Général de Lamoricière. (Extrait du "Correspondant" du 23 Septembre, 1865),' 8vo, Paris, 1865; besides which may be mentioned the publication of nine volumes of his 'Œuvres,' 8vo, Paris, 1861-68. But the great work of M. de Montalembert's life is one which he undertook at the suggestion of the Pope, in defence of the monastic orders, and which, after many years of assiduous labour, he published with the title of 'Les Moines d'Occident, depuis Saint Benoît jusqu'à Saint Bernard,' of which five volumes (out of the six to which it was expected to extend) were issued in 8vo and 12mo, Paris, 1860-67, English (authorized) translation, 'The Monks of the West, from St. Benedict to St. Bernard,' 5 vols, 8vo, Edinburgh and London, 1861-67, the last three volumes of which were also issued as 'The Conversion of England: being a sequel to the Monks of the West,' 3 vols, 8vo, Edinburgh and London, 1867; whilst an extract from the third volume was published with the title of 'Saint Columba: Apostle of Caledonia,' 8vo, Edinburgh and London, 1868.

MONTANELLI, GIUSEPPE, an Italian lawyer, poet, statesman, and historian, was born on the 5th of January, 1813, at Fucecchio, in Tuscany, and was at first designed by his father, who was an organist, to follow the profession of music, for which he had a strong predilection. At nine years of age he was diverted from this plan, and was placed at the Collegio di Santa Caterina at Pisa, of which his uncle, Canon Montanelli, was the rector. In due course he entered the university, and, having devoted himself to the study of law, took a doctorate in that faculty at eighteen years of age, slightly before which, under the stimulating influences of the French revolution of 1830, he had begun to contribute to the 'Nuovo Giornale de' Letterati,' published at Pisa, and to the 'Antologia: Giornale di Scienze, Lettere, e Arti,' published at Florence, under the conduct of G. P. Vieusseux. In 1836 he published at Florence a volume of poems, which attracted considerable attention, and the pathos of many of the pieces of which was directly traceable to his grief for the loss of his mother. Upon the completion of his studies shortly afterwards, 1837, he acceded to the wishes of his friends, and threw all his energies into his profession of advocate, which for three years he practised with growing reputation and success; so that he was chosen by the government, in November, 1840, to fill the newly instituted chair of Tuscan law and commercial law, an appointment which he justified by the publication of his 'Introduzione filosofica allo Studio del Diritto commerciale positivo,' 8vo, Pisa, 1847. He continued as a professor to enunciate the liberal principles and patriotic aspirations which he had adopted in 1830; and the famous petition of the inhabitants of Pisa against the Jesuits, in February, 1846, which was the signal for petitions of a like nature from various cities of Italy, was the production of Montanelli, who thereby drew upon himself the distrust and hatred of the clergy and their party. In 1847 he founded a journal entitled 'Italia,' the watchwords of which were "Reform and Nationality;" and in the following year

took his place as a volunteer in the academical legion, composed of professors and students, who left their studies to strike a blow for Italian independence. He was shot through the chest at the battle of Curtatone, May 29, 1848; and having been left on the field for dead, was taken by the Austrians, whose prisoner he remained until after the capitulation of Milan, on the 5th of August. Upon his return he was elected to the Parliament of Florence, of which he became a member on the 27th of September; and, towards the end of the following month, was entrusted by the Grand Duke with the formation of a new cabinet and the office of president of the council of ministers. On the 7th of February, 1849, the Grand Duke Leopold II. quitted Florence for Gaeta; and on the 8th a provisional government was formed, and a republican triumvirate, consisting of Montanelli, Guerrazzi, and Mazzoni, was established by the Chambers. Montanelli resigned his functions, however, in favour of the dictatorship of Guerrazzi, by whom he was sent, at his own request, on a mission to Paris, for the purpose of organizing an auxiliary legion of four thousand men for the furtherance of Italian unity and freedom. The success of the Austrian arms, and the triumph of the counter-revolution, which restored the grand duke to the throne of Tuscany, changed the French mission of Montanelli into an exile, which continued for several years, and which he lightened by his devotion to historical, dramatic, and general literature. The most important result of his activity in this direction is his 'Memorie sull'Italia, e specialmente sulla Toscana dal 1814 al 1850,' 2 vols, 8vo, Turin, first two editions, 1853, French translation, by M. Fr. Arnaud, with a biographical notice of the author by M. Jean Reynaud, 'Mémoires sur l'Italie,' 2 vols, 12mo, Paris, 1857. Besides undertaking a translation of the 'Divina Commedia,' and a series of studies on Dante which have not yet been published, and contributing a variety of articles to the 'Revue de Paris,' he produced an Italian version of Legouvé's tragedy of 'Médée,' which, having been refused by Mademoiselle Rachel, was triumphantly produced by Madame Ristori, at the Théâtre-Italien, and afterwards published, with the French text, as 'Médée: Tragedie en trois Actes et en Vers. Medea. Tragedia,' &c., 12mo, Paris, 1856. He also produced for Madama Ristori a tragedy entitled 'Camma: Tragedie en trois Actes' (Italian and French), 8vo, Paris, 1857. After the peace of Villafranca, July, 1859, Montanelli, who had again served in the preceding campaign as a volunteer, was elected to represent his native town of Fucecchio, in the assembly which decreed the dethronement of the grand duke, who, on the 21st of July, abdicated in favour of his son, Ferdinand IV., and in which Montanelli protested to the last moment against the annexation of Tuscany to Sardinia, which was, nevertheless, accomplished on the 22nd of March, 1860. He died on the 17th of June, 1862; and on the evening of the 21st of the same month, a discourse was delivered by Doctor Tommaso Paoli, at an extraordinary meeting of the Associazione democratica Emancipatrice di Lucca, which was afterwards published with the title of 'Elogio Funebre del Prof. Giuseppe Montanelli, dettato dal Dott. Tommaso Paoli,' 8vo, Florence, 1862. The same society charged itself with the task of collecting subscriptions for a worthy monument to Montanelli, in the shape of a bust to be erected in the Camposanto of Pisa. Amongst the works of Montanelli hitherto unmentioned may be named his 'Li Scrittori e i Revisori dopo la Legge Toscana del 6 Maggio 1847: Discorso,' 8vo, Pisa, 1847; 'Nel Processo politico contro il Ministero democratico Toscano schiarimenti,' 8vo, Florence, 1852; and 'L'Impero, il Papato, e la Democrazia in Italia: Studio politico,' 8vo, Florence, 1859.

MONTEAGLE, THOMAS SPRING RICE, LORD [E. C. vol. iv. col. 310], died, after a long illness, at his seat, Mount Trenchard, near Limerick, on the 7th of February, 1866, and was succeeded by his eldest son, Thomas Spring, as second Baron Monteaule of Brandon, in the county of Kerry, Ireland.

MONTELUPO, RAFFAELLE DA, Italian sculptor and architect, was born about the close of the 16th century. The son and scholar of Baccio da Montelupo, a sculptor of some repute in his day—born 1445, died about 1534—he early surpassed his father as a sculptor, and was much employed on the decorations of churches, &c., executing, among other things, a St. Domenico, a Prophet, and a Sibyl for Michelangelo. He was appointed architect to the castle of St. Angelo, by Cardinal Crispo, who also employed him to erect a palace at Bolsena. Montelupo's architectural masterpiece was a chapel at Sta. Maria, Orvieto, for which he sculptured a nude figure of Christ and a marble statue of St. Peter bearing his cross. He also designed the marble chapel of Pope Leo X., and carved the tomb of the pontiff, placed within the chapel, as well as a marble

statue of him in the church of the Minerva at Rome. Montelupo died in 1588, and was buried with great honour in the church of Sta. Maria.

MONTEREAU, PIERRE DE, one of the most eminent of French mediæval architects, flourished towards the middle of the 13th century. Little is known of his personal history. His works include the refectory, dormitory, chapter-house, and chapel of the Abbey of St. Germain-des-Près, and the chapel of Vincennes, &c.; but his masterpiece is the exquisite Ste. Chapelle, Paris, erected by him in 1245—48, to contain the relics brought from the Holy Land by St. Louis. Though but small—being only a fragment of a grand design which St. Louis was unable to carry out—the Ste. Chapelle is generally regarded as the standard example of French Gothic architecture when at its greatest perfection, and as being consequently the most refined and graceful building of its class extant. De Montereau died in March, 1266, and was buried on the 17th of that month, in the chapel he had built at St. Germain-des-Près, where his effigy is carved on a tomb, holding in his hand a rule and compass.

MONTGOLFIER, JOSEPH MICHEL, the elder of two inventors of balloons, was born at Vidalon-lès-Annonay in 1740. When a young man he went to St. Etienne, engaged in chemical experiments, produced some new pigments and salts, and obtained a sale for them. He next resided in Paris for a time, but returned home to assist in the business of his father, a paper-manufacturer. Joined by his brother, he established two paper-mills, one at Voiron and the other at Beaujeu. It is uncertain which of the brothers first conceived the idea of *aërostation* or *aéronautics*; but in 1782 they began to pay joint attention to the subject. They made a bag of taffeta, heated the air within by lighting a fire beneath an opening at the bottom, rendered the bag by this means buoyant, and saw it ascend. They next tried a larger bag, and a third larger still. In 1783, in presence of the notabilities of Annonay, they sent up a balloon made of linen covered with paper; it was 35 feet high, 110 feet circumference, and weighed 430 lbs. When the air within it had been warmed, the balloon was liberated; it ascended to a height of 1000 toises, and fell in a vineyard half a mile distant. Invited to Paris by the Académie des Sciences, the brothers made a balloon which ascended from Versailles in presence of Louis XVI. and Marie Antoinette; two or three animals, attached to the balloon in a cage, descended safely. [Engravings of the Montgolfiers' first and second balloons, together with a detailed account of the proceedings of the brothers in *aërostation*, are given in *BALLOON*, E. C., Arts. & Sci. Div., vol. i. col. 809.] After being honoured and decorated by the king, and received into the Académie, the brothers continued to make further experiments, until the exhaustion of their means led to an abandonment of such enterprises. Joseph was appointed by Bonaparte Administrator of the Conservatoire des Arts and Métiers, and then to a post connected with commerce in the Bureau of the Interior, or Home Office. In 1802 he bore a chief part in the establishment of the Société d'Encouragement pour l'Industrie Nationale. Besides *aërostation*, he made many improvements and inventions in hydraulic rams, calorimeters, hydraulic presses, distilling apparatus, and desiccating apparatus; memoirs on these subjects were published by him, sometimes as separate pamphlets, sometimes in scientific journals. He died of apoplexy at Balaruc, June 26th, 1810. His wife survived him no less than thirty-five years, dying at Paris in 1845, at the advanced age, as is asserted, of 111 years.

JACQUES ETIENNE MONTGOLFIER, brother of Joseph Michel, was born January 7th, 1745. He was educated at the College of St. Barbe, Paris, and was a man of more varied attainments than Joseph. When conducting the paper-mill at Beaujeu (above adverted to), he displayed great ability in the invention and application of new processes and apparatus to the manufacture. After his balloon enterprises with his brother, Etienne returned to his paper-mill, filled various offices in his native district, and suffered much in fortune and in mind during the French Revolution. He died of heart-disease at Annonay, August 2nd, 1799.

*MONVOISIN, RAYMOND AUGUSTE QUINSAC, French historical painter, was born at Bordeaux in 1793. A pupil first of Lacour, and then of Guérin, his earlier works were chiefly from classic history and mythology, and of the huge dimensions in which French painters so commonly delight; as, 'Telemachus and Eucharis,' 1827, ten feet by eight, which was engraved by Laurichon. Later he painted subjects from ecclesiastical and national history, chiefly commissions from the government or the municipality of Paris; as, 'St. Gilles surprised by the Goths,'

twelve feet by ten, for the church of St. Leu; 'The Duke of Orleans taking possession of the Palais Royal;' the 'Birth of the Virgin,' for the church of Notre-Dame-de-Lorette; the 'Bataille de Denain,' for the Museum of Versailles, &c.; some genre-pictures and portraits. M. Raymond Monvoisin was nominated knight of the Legion of Honour in 1837, and promoted in 1857. He visited Valparaiso in 1842, and remained there about ten years.

MOOR, KAREL VAN, an eminent Dutch painter, was born at Leyden, February 22nd, 1656, and studied successively under Gerard Dow, A. Van den Tempel, F. Van Mieris, and G. Schalken. He painted historical and domestic subjects, of large as well as of cabinet size. Of the former class is his 'Judgment of Brutus,' painted for the council-chamber of the States of Holland. He excelled especially in life-sized portraits, like those of the Trustees of the Leprosenhuis, Amsterdam, and was generally considered one of the best portrait-painters of his time. He etched a few portraits, including himself, G. Dow, Mieris, and other painters. Van Moor died February 16th, 1738.

MOORCROFT, WILLIAM, a veterinary surgeon, who, in endeavouring to carry out his object of securing a superior breed of horses for the cavalry service of India, made extensive journeys in the Himalayan provinces of India and in Independent Tartary, and through regions which had not previously been visited by an Englishman. He was a native of Lancashire, and commenced his studies at Liverpool, with a view to following the surgical profession. He was afterwards induced to take up the study of veterinary medicine, and, as there was no school in England, he went to Paris. He settled in London, in partnership with a Mr. Field, as a veterinary surgeon, and soon acquired a considerable fortune. Much of this was, however, lost in a speculation for manufacturing cast-iron horseshoes; and he gladly accepted the post offered to him by the East India Company, to superintend the stud formed by them in Bengal with a view to improving the breed of horses obtainable for Indian service. Moorcroft found the stud in a very unsatisfactory state, but soon succeeded in raising the condition of the horses. He further urged the importance of introducing the English or the Turkoman horse, in place of the Arab. The company did not encourage his proposition. However, he determined to make a journey to Bokhara at his own risk, and without the leave of the company. In May, 1812, he and Lieutenant Hearsay started from Bareilly, crossed the Himalayas by the Niti Pass, visited Daba, Ghartok, the lakes Manasarawa and Ravan, or Lang Cho, and returned to Calcutta in November. In 1819 he obtained the reluctant consent of the company to his going to Bokhara, who, however, would not recognise him in any official capacity, nor furnish him with any letters of introduction. But he obtained much assistance from various persons who approved of his project of opening up, if possible, a line of commercial intercourse between India and the regions north of the Himalayas. He started along with Mr. George Trebeck in October. The route followed was by Srinagar and Mundi to Lahore; then from Mundi to Le, through Kashmir and Cabul; and from Cabul by Kulm and Balkh to Bokhara. Here a great number of horses were purchased, and the homeward journey commenced; but Moorcroft died at Andkho, about twenty miles to the east of Balkh, on August 27, 1825. Mr. Trebeck died shortly after, and the horses and other property were appropriated by various natives. Most of his papers were, however, secured, and ultimately passed into the possession of the Asiatic Society of Calcutta. The geographical information was chiefly collected by Mr. Trebeck; but, although the route indicated between Cabul and Bokhara was new to Europeans, Moorcroft's work afforded little new information, most of the ground having been more carefully examined and reported on by Burnes and by Elphinstone in the interval between his visit and the publication of his and Trebeck's 'Travels in the Himalayan Provinces of Hindustan and the Punjab; in Ladakh and the Kashmir; in Peshawur, Kabul, Kunduz, and Bokhara, from 1819 to 1825,' 2 vols. 8vo, London, 1841. Moorcroft wrote a few papers, of which we may notice 'A Journey to Lake Manafaravara in Un-dés, a province of Little Thibet,' in 'Asiatic Researches,' xii. pp. 375—534 (1816); and 'On the Pürk Sheep of Ladakh, and some other animals, principally of the Sheep and Goat kind,' in 'Transactions of the Asiatic Society,' i. pp. 49—55 (1827).

MOQUIN-TANDON, HORACE BENEDICT ALFRED, naturalist, was born at Montpellier, May 7, 1804. He was educated at Montpellier, and after having received his degree of doctor of science in 1824, and that of doctor of medicine in 1828, went to Marseille as professor of zoology at the Athenæum.

In 1833 he became professor of botany at Toulouse, and in 1853 he succeeded Achille Richard as professor of medical natural history at Paris, at the same time assuming the direction of the Jardin des Plantes. In 1854 he was elected a member of the Academy of Sciences, in succession to Auguste St. Hilaire. He died in December, 1864. His writings are numerous, varied, and of high merit. His earliest work was a 'Mémoire sur l'Oologie,' in the 'Mémoires de la Société Linnéenne de Paris,' iii. pp. 38—73 (1825); iv. pp. 141—177 (1826). In 1826 also appeared his 'Essai sur les dédoublements ou multiplications d'organes dans les végétaux,' 'Bibliothèque Universelle,' xxxiv. pp. 214—234. In 1827 was published a 'Monographie de la famille des Hirudinées,' which was considerably enlarged in 1846. Most of the subjects to which his attention was first given were followed up in later life. Several of his papers relate to eggs; and, amongst those of later date, we have 'Considérations sur les œufs des oiseaux,' in the 'Revue et Magasin de Zoologie,' for 1859, 1860, and 1861. His researches on the abnormal forms of plants led to his drawing up his 'Éléments de Tératologie,' 8vo, Paris, 1841, in which the subject was for the first time treated in a scientific way. Another of his more important works is a 'Histoire naturelle des Mollusques terrestres et fluviatiles de la France,' 2 vols. 8vo, with an atlas of 64 plates, Paris, 1855. He also wrote numerous papers on the anatomy and physiology of molluscs, and on botany, such as monographs or memoirs on the *Chenopodaceae*, the *Polygale*, the *Capparidæ* (in all which he co-operated with Auguste St. Hilaire), and on *Ancylus fluviatilis*.

MORANDO, PAOLO, called CAVAZZOLO, an eminent Italian painter, was born at Verona about 1484, studied painting under Francesco Morone, and, says Vasari, knew a great deal more than his master. He painted, with great success, in the manner of Giorgione, but died young—Vasari and Lanzi say at the age of thirty-one, the former asserting that his death was accelerated by his labours—at Verona, August 13th, 1522. Many of his works are yet preserved at Verona; and our own National Gallery possesses two pictures painted by him—No. 735, 'St. Rock with the Angel,' painted in 1518, and No. 777, 'Madonna and Child, with St. John the Baptist and an Angel, in a landscape,' figures nearly life-size (Vasari, Lanzi, Wornum).

MORETTO, IL, the name assumed by ALESSANDRO BONVICINO, a distinguished Italian painter, who was born at Brescia, about 1490. Originally a pupil of F. Ferramola, he afterwards studied under Titian, whose method of colour and composition he adopted, but later in life endeavoured to combine with the more elevated and ideal manner of Raffaele, of whom he was a devoted admirer. Il Moretto painted chiefly in Brescia and its neighbourhood, and hence, though a diligent worker, his productions were for long but comparatively little known. They have, however, steadily risen in esteem, and are now more than ever admired and sought after. Moretto's pictures are indeed of a very high order of excellence; pure and refined in design; elevated in character; full of feeling; noble in expression; and rich and varied in treatment. He painted both in fresco and oil, but in the latter vehicle with the greater success; and he excelled also in religious art and portraiture. A large number of his religious compositions are still preserved in the churches and ecclesiastical establishments of Brescia and its vicinity, and most of the great picture-galleries of the Continent possess specimens of his pencil. In the National Gallery, London, are two pictures by him—No. 299, a very fine portrait of Count Sciarra Martinengo Cesaresco of Brescia, and No. 625, 'St. Bernardino of Siena,' and other saints, 11 ft. 7 in. high, by 7 ft. 6 in. wide. Moretto died about 1560.

MORGAN, LADY. [E. C. vol. iv. col. 341.] At the close of 1858 Lady Morgan published a volume, entitled 'Passages from my Autobiography.' It consisted mainly of her notes and correspondence for the years 1818—19, and was announced as the first of a series of volumes of her unpublished autobiography; but her death, which occurred on the 13th of April, 1859, prevented the accomplishment of her purpose. A sufficiently ample selection from her papers appeared, however, in 1862, in 2 vols. 8vo, under the title, 'Lady Morgan's Memoirs: Autobiography, Diaries and Correspondence,' and is an amusing farrago of vanity, frivolity, and assumption.

MORLACCHI, FRANCESCO, Italian composer, was born at Perugia, June 14th, 1784. After learning violin, organ, and pianoforte playing, and studying the theory of music under Caruso and Mazetti, he began his musical career at the age of eighteen, by composing an oratorio, 'Gli Angeli al Sepolcro.' Aided with funds by Count Beglioni, he made further study

under Zingarelli at Loreto, and Mattei at Bologna. In 1805 and 1806, he composed a cantata for Napoleon's coronation as King of Italy, and many pieces of church music. In 1807 appeared his first opera, 'Il Ritralto,' and in the next three years eight more operas. In 1810 he became director of the Italian theatre at Dresden. Until this time his music had been in the light Italian manner, but he now studied the severer style of Germany. Nevertheless his music was very miscellaneous; in five years he composed two masses, two cantatas, a quantity of church music, canzonets, and two operas, one of which, 'Il Barbiere di Seviglia,' preceded by only one year Rossini's more celebrated opera on the same subject. In 1816 he was admitted a member of the Academy of Fine Arts at Florence, and was complimented by the Pope for his oratorio, 'La Passione.' In 1817, his 'Isaaco' introduced rhythmical chant instead of recitative. He made frequent visits to Naples, Milan, Venice, and other Italian cities, to superintend the bringing out of some of his operas, and the conducting of his masses at cathedrals and churches; but his life was chiefly passed at Dresden. One of his operas, 'Gianni di Parigi,' produced at Milan, had great success; it was afterwards played in London under the title of 'John of Paris.' Another opera, much lauded at the time, was 'Tebaldo ed Isolina.' Altogether, Morlacchi composed ten masses, three oratorios, numerous Te Deums and Misereres, a still greater number of minor pieces of church music, twenty-seven operas, twelve concertos, and several instrumental compositions. Another opera, 'Francesca di Rimini,' was left unfinished at his death, which took place at Dresden, October 28th, 1841.

MORLOT, CHARLES ADOLPHE, geologist and archaeologist, was born at Naples, March 22, 1820. He was educated first at Berne, and afterwards at Paris and Freiberg. His career began as a geological surveyor of the Austrian Alps. In 1851 he was appointed professor of geology at Lausanne, but the post was only intended to be temporary, and in 1854 he retired into private life, and devoted his time to archaic anthropology and to delivering popular lectures. He is best known for his writings on quaternary geology, and its application to elucidating the age of the oldest remains of human art. Thus he found three beds in the delta of the Tinière, a stream falling into the Lake of Geneva, which belonged to three distinct periods, designated as the Roman, the bronze, and stone ages. He made observations with a view to ascertaining the rate at which the delta has been formed, and in this way arrived approximately at the dates of the respective beds. He made extensive investigations on the lake-dwellings of Switzerland, as also on the primitive antiquities of Sweden, Denmark, and North Germany. He was a great lover of music, and gave considerable attention to the peculiarities of national music, as developed in the popular airs of various countries. At the time of his death, which occurred at Berne, February 10, 1867, he was occupied in arranging the archaeological museum of that town. His best known writings are, 'Leçons d'ouverture d'un cours sur la haute antiquité,' 8vo, Lausanne, 1861, 2nd edition, 1862; and 'Études géologiques-archéologiques en Danemark et en Suisse' in 'Bulletin de la Société Vaudoise des sciences naturelles,' vi. pp. 263—328 (1859), which has been translated both into German and English. The result of his investigations in Mecklenburg and other parts of North Germany have only been partially published. They relate to the stone and bronze ages, and to the facts indicating a transition between the two periods. In addition to the above works, he wrote numerous papers on the geology of Austria and Switzerland.

MORNAY, PHILIPPE DE, better known as DU PLESSIS MORNAY, Baron de la Forêt-sur-Sèvre, seigneur du Plessis-Marly, an eminent French Protestant statesman, author, and soldier, to whom the Catholics applied the sobriquet of *le Pape des Huguenots*, was born at the Château de Bui, in Upper Normandy, on the 5th of November, 1549. He was the second son of Jacques de Mornay, seigneur de Bui, a brave soldier whose life was divided between the camp and the pursuits of a country gentleman, and who, up to all but the final moments of his life, was a zealous Catholic. The death of Jacques de Mornay occurred in November, 1559, and the education of Philippe thereby devolved upon his mother, who was an adherent of the reformed doctrines. Under her influence, and the study of the New Testament, Philippe, who had been intended for the Church, in which a well-endowed abbacy and other preferments awaited his acceptance, put off the vestments of a prétendant à l'Eglise, and adopted the principles of the Reformation. In the beginning of 1562 he became a pupil at the Collège Boncourt, at Paris; but his studies were speedily interrupted by the breaking out of the tumults against the

Huguenots. After a stay of only three months, De Mornay was withdrawn from Paris, in order to pursue his studies in the quietude of home—a design which was frustrated by a tedious and alarming illness, which so seriously affected his mind that he forgot nearly all he had learned. In 1563, when his health and his desire for knowledge had alike revived, and safety was reassured to the Protestant inhabitants of Paris, he returned to that city, where for four years he devoted fourteen hours a day to study, becoming familiar with Greek, Hebrew, philosophy, and mathematics, in some of which he exhibited so ripe a proficiency as to reciprocate the instruction of his tutors. In 1567 the edicts favourable to the Huguenots were violated with more than usual boldness, and in the face of the revocation of them which was confidently rumoured to be impending, De Mornay took leave of Paris, and retired to his mother's château of Bui; and when hostilities at length broke out, he was prevented from taking the field on the side of the Protestants by the fracture of his leg, as he was on his way to join the army. At the time of his recovery the *petite paix* of six months, signed at Longjumeau on the 27th of March, 1568, was in force, and he was able to carry into effect a design he had formed of travelling into foreign countries. Accordingly, after great difficulty in accomplishing his exit from France, he arrived, about the middle of August, at Geneva; but, finding the city the scene of plague and of civil and religious commotion, he proceeded on his journey, passing through Switzerland into Germany, where he spent several months at Heidelberg, in the acquirement of the language and the study of civil law. In September, 1569, he repaired to Frankfurt, whence he proceeded to Italy, and further prosecuted the study of law at Padua, where also he extended his proficiency in various departments of learning and science, especially reading the greater part of the Old Testament in the original language, with the most learned of the Jewish rabbis. From Padua he proceeded to Venice, which he left for Rome in 1571, having been prevented from accomplishing a meditated tour of the East by the war then waging between the Turks and the Venetians for the island of Cyprus. From Rome, he returned to Venice, through Tuscany, the republic of Genoa, Piedmont, and Lombardy, and extended his tour to Vienna, from which by a circuit he passed through Hungary, Bohemia, Saxony, Thuringia, Hesse, and Franconia, to Cologne, where he spent the winter, occupying himself in religious, philological, and scientific studies and discussions. During his travels, as well now as at other times of his life, De Mornay combined the inquiries of the scholar, the soldier, and the statesman, observing the monuments, battle-fields, and general antiquities, and the origin, the progress, or the decline, and the several causes of these, of the social, religious, and political institutions of the countries in which he sojourned. In the spring of the following year, he passed through Flanders into England, whither the report of his talents and acquirements had preceded him, and where he was graciously received by Queen Elizabeth. After a few months' residence, he returned to France towards the end of July, 1572, and having passed some days with his mother at Bui, repaired to Paris in order to submit to his friend, Admiral Coligny, a 'Discourse' to the king, and a 'Remonstrance,' entitled 'Qu'il est juste et utile de faire la guerre à l'Espagnol,' the design of which was to procure some assistance for the oppressed Flemings against the tyranny of Spain. After the massacre of St. Bartholomew's-day, August 24, 1572, of which Coligny was one of the earliest and most prominent victims, and from which De Mornay with difficulty escaped, the latter took refuge in England, where he was well received by persons of all ranks. To divert his mind from the miseries of his native country, he had recourse to his studies; and he produced a considerable number of poems, as well as some short treatises, both in Latin and French, in which he besought Queen Elizabeth to succour the afflicted church to which he belonged, and repelled the calumnies with which its members had been assailed. He returned to France in the beginning of 1574, in answer to the urgent solicitations of the Protestant leaders, whose conduct in committing their religion to the ambition and the fortunes of the Duc d'Alençon, brother of Charles IX., he deemed so hopeless and impolitic, that he withdrew to the frontiers, and after the death of the king, May 30th, 1574, retired to Sedan, where he employed himself with literary pursuits, and where he became acquainted with Madame Charlotte Arbaleste de Pas de Fenquères, a Huguenot widow lady, who had escaped from the Paris massacre, and whom he afterwards married on the 3rd of January, 1576. It was at her request that, after their betrothal, he wrote his 'Discours de la

Vie et de la Mort,' 8vo, Lausanne, 1576, Latin version, by Arn. Freitagus, 'Vita Mortisque, atque adeo humanarum Actionum Christiana ac pia Consideratio,' 8vo, Frankfurt, 1585, &c., English translations by E[dward] A[ggas], 8vo, London, 1576, and by Mary Sidney, Countess of Pembroke, 'A Discourse of Life and Death,' &c., 4to, London, 1592, 8vo, London, 1600, 12mo, London, 1606, &c., and by M. A., 'A Pious and Christian Consideration of Life and Death and of all humane Actions,' &c., 8vo, London, 1699, and translated into Frisian and other European languages and dialects. Previous to his marriage, De Mornay took part in the unfortunate battle of Dormans, on the Marne, October 11th, 1575, against the Duc de Guise, where he was slightly wounded and made prisoner. He was admitted to ransom, however, after a detention of eleven days; and towards the close of 1576 attached himself to the King of Navarre, at that time the head of the Protestant party, and afterwards Henry IV. of France. Of this prince he became one of the most confidential advisers, serving him faithfully with sword, and tongue, and pen; and, after the breaking out of the sixth religious war, was accredited, April, 1577, by Henry, who had been declared Protector of the Protestant League, on a special mission to Queen Elizabeth of England, whom he sought to interest in the cause of the continental Protestants, and to obtain from her military and pecuniary assistance. Varying his diplomatic duties with learned and ecclesiastical studies, he composed his treatise on the Church, 'Tractatus de Ecclesia, quo præcipuè quæ hoc nostro Tempore de hoc Capite agitatæ fuerunt Quæstiones excutuntur,' 8vo, 1579 and 1594, "emendator, multis Locis locupletior," &c., 8vo, 1599, English translation, by J. Feilde, 'A Treatise of the Church,' &c., 8vo, London, 1579, 1581, &c., of which a French version, amongst others, was published as 'Traité de l'Eglise, auquel sont disputées les principales Questions qui ont esté menées sur ce Point en nostre Temps,' 12mo, Lausanne, 1587, "reveu et augmenté par l'Auteur," 4to, La Rochelle, 1599, 8vo, 1600, &c. Peace having been concluded in France on the 17th of September, 1577, the scene of De Mornay's mission was transferred, June, 1578, to Antwerp, where he represented the King of Navarre for about four years, during which, in the spring of 1580, when the King of Navarre was again in arms, he was despatched by him once more to England, to negotiate for succour, which, notwithstanding his personal acceptance with Queen Elizabeth, he failed to secure. At Antwerp he produced his work, 'De la Verité de la Religion chrestienne: contres les Athées, Epicuriens, Payens, Juifs, Mahumediistes, et autres Infidèles,' 4to, Antwerp, 1581, 8vo, Paris, 1582, 8vo, Geneva, 1583, &c., Latin translation by the author, 'De Veritate Religionis Christianæ Liber,' &c., 8vo, Antwerp, 1583, 8vo, Leyden, 1587, 1592, &c., 8vo, Herborn, 1609, 1632, &c., English translation, commenced by Sir Philip Sidney, and completed by Arthur Golding, 'A Woork concerning the Trewnesse of the Christian Religion,' &c., 4to, London, 1587, and 1592, "the third time published, and purged from faults," 4to, London, 1604, fourth edition, 8vo, London, 1617; Translation of the fifth and sixth Chapters, by Mr. Bellamy, 'The Lord M. du Plessis-Marly's Thoughts on the Trinity,' &c., 8vo, London, 1721. In 1582 De Mornay returned to France by the command of the king, by whom he was deputed in May, 1583, to attend the national synod assembled at Vitry, and employed in various other confidential services. He took part in the wars which followed the initiation of the famous League, after having drawn up a 'Declaration of the King of Navarre against the Calumnies of the League,' and was severely wounded in the great battle of Coutras, in Guienne, in which Henry defeated the royal army under the Duc de Joyeuse; and in the spring of 1589, after he had been instrumental in bringing about the reconciliation of the French king, Henry III., to the King of Navarre, received from the latter, to whom it had been ceded as a place of safety to the Protestants, the government of the town of Saumur. By the death of Henry III., on the 2nd of August of the same year, the King of Navarre succeeded to the throne of France, and De Mornay became counsellor of state. Political considerations induced a gradual coldness to Protestantism in the mind of Henry IV., who finally conformed to Romanism on the 25th of July, 1593—a step against which De Mornay energetically protested, and after which he withdrew by degrees from the court, and occupied himself with his studies, the duties of his government, and exertions in the cause of the Protestants. He took a very active part in the various negotiations between the king and his subjects of the Reformed communion, till the famous Edict of Nantes was obtained on the 13th of April, 1598; and he produced many controversial

works, one of which, on the Eucharist, gave occasion to a conference, on the 4th of May, 1600, before the king and all the court at Fontainebleau, between the author and Du Perron, Bishop of Evreux, and afterwards cardinal. He now lived in retirement at his government of Saumur for six years; and upon the assassination of Henry IV. by the Jesuit, Ravallac,* May 14th, 1610, he proclaimed and maintained the authority of Maria de' Medici, his widow, as regent. In 1621, Louis XIII. having determined to make war upon the Protestants, De Mornay remonstrated strongly against the injustice and impolicy of such a measure; and for his freedom on this occasion was deprived of his government of Saumur, receiving, as an indemnity, the sum of 100,000 livres. He now retired to his barony of Forêt-sur-Sèvre, in Poitou, where he died on the 11th of November, 1623.

Besides the works already described, De Mornay produced a great number of treatises, of which the principal are one on the Eucharist, which has been already referred to, 'De l'Institution, Usage, et Doctrine du Saint Sacrement de l'Eucharistie en l'Eglise ancienne: comment, quand, et par quels Degrez la Messe s'est introduit en sa Place, en IV. Livres,' 4to, La Rochelle, 1598, "seconde édition, reveue et augmentée," folio, Saumur, 1605, Latin version, 'De Sacra Eucharistia,' &c., folio, Hanover, 1605; 'Advertissement aux Juifs sur la Venue du Messie,' 4to, Saumur, 1607; 'Le Mystère d'Iniquité; c'est à dire, l'Histoire de la Papauté, par quels Progrès elle est montée à ce Comble, &c., où sont defendus les Droits des Empereurs, Rois, et Princes Chrestiens, contre les Assertions des Cardinaux Bellarmin et Baronius,' folio, Saumur, 1611, Latin version, 'Mysterium Iniquitatis,' &c., folio, Saumur, 1611, second edition, 8vo, Saumur, 1612, &c., English translation, by Samson Lennard, folio, London, 1612.

It is natural that about so prominent and distinguished a career as that of De Mornay many works would be conversant. They include, 'Mémoires de Messire Philippes de Mornay, &c., contenant divers Discours, Instructions, Lettres, et Dépêches par lui dressées ou écrites aux Rois, Reines, Princes, Princesses, Seigneurs, et plusieurs grands Personnages de la Chrestienté depuis l'An 1572 jusqu'à l'An 1589,' &c., 4 vols., 4to, vols. i. and ii. La Forest, 1624-25, vols. iii. and iv. Amsterdam, 1651-52, which have gone through numerous editions, the last of which bore the modified title of 'Mémoires et Correspondance de Duplessis-Mornay, pour servir à l'Histoire de la Réformation et des Guerres civiles et religieuses en France, sous les Règnes de Charles IX., de Henri III., de Henri IV., et de Louis XIII., depuis l'An 1571 jusqu'en 1623. Édition complète, publiée sur les Manuscrits originaux, et précédée des Mémoires de Madame de Mornay sur la Vie de son Mari, écrits par elle-même pour l'Instruction de son Fils,' vols. i.—xii., 8vo, Paris, 1824-25; 'Les derniers Heures de Messire Philippes de Mornay,' 4to, Leyden, 1624, by Jean Dailé; 'Histoire de la Vie de Messire Philippes de Mornay, Seigneur du Plessis-Marly,' &c., 4to, Leyden, 1647, composed by David de Liques, and by De Mornay's two secretaries, Meslai and Chalopin; 'Singularia Plessiaca: sive Memorabilia de Vita et Meritis, Fatis, Controversiis et Morte Philippi Mornæi de Plessis,' &c., 8vo, Hamburg, 1724, by Magnus Cousins, "S. R. M. Danicæ Legationis in Gallia Pastor. Præmissa est Præfatio D. Henrici Muhlîi, Theologi in Ecclesia ac Academia Holsatica Primarii;" and 'Duplessis Mornay, 1549—1623. Par Joachim Ambert, Officier supérieur de Cavalerie,' 8vo, Paris, 1847.

MORNY, CHARLES AUGUSTE LOUIS JOSEPH, DUC DE, French minister and politician, was born at Paris, October 23, 1811. After receiving his education at the Lycée Napoléon and the Collège Bourbon, he entered L'École d'État Major, which establishment he quitted in 1832 with the rank of sub-lieutenant. Joining the 1st Regiment of Lancers, he went to Algeria, served under General Changarnier at Mascara and Constantina, was wounded in the last-named engagement, saved the life of General Trézel, was favourably mentioned in despatches, decorated with the Legion of Honour, and raised to the rank of first lieutenant. Returning to France in 1838, he quitted the army, purchased an estate near Clermont, Puy de Dôme, entered largely into the cultivation of beet-root and the manufacture of beet-root sugar, wrote a pamphlet in advocacy of these branches of national enterprise, and was elected president of a society of beet-sugar manufacturers. In 1841 he became a member of the Council General of Agriculture and Commerce; and, in 1842, member of the Chamber of Deputies, where he took part in most discussions relating to the material welfare of the country, such as postal reform, the encouragement of new manufactures, the management of the national debt, the issue of bank notes, &c.

He was re-elected in 1846, and generally supported the Guizot government, though disapproving of some of the less liberal measures of that minister: an article by him in the 'Revue des Deux Mondes,' only one month before the Revolution of 1848, foreshadowed the probable result of the policy pursued. He retired from public life for a time, and attended to commercial and financial pursuits; but entered the Legislative Assembly in 1849, and warmly supported the Prince President, Louis Napoleon. When the coup d'état took place, in December, 1851, the Count de Morny was the most active partisan concerned in it. With the appointment of Minister of the Interior, upon him devolved the task of arresting the two hundred members of the National Assembly who showed resistance, and of signing decrees and ordinances. In 1852, disapproving of Napoleon's proposed mode of dealing with the Orleans property, he resigned, became president of the Council General of Puy de Dôme, was returned as deputy for Clermont, and in 1854 succeeded M. Billault as president of the Corps Législatif. In 1856 he headed a splendid embassy to St. Petersburg, on occasion of the coronation of the Emperor of Russia. During his sojourn in that country he arranged a treaty of commerce between Russia and France; and in 1857 he married a daughter of Prince Serge Troubezkoi. After this he engaged successfully in numerous speculative schemes, industrial and financial, connected with railways, canals, mines, discount banks, credit companies, &c. Several slight dramas and acting proverbs, suitable for private theatricals, were written by him under the pseudonym of St. Rémy. The emperor raised him to the rank of Duc in 1862. He died on the 10th of March, 1865; and his widow soon afterwards disposed of his fine gallery of pictures.

MORREN, CHARLES FRANÇOIS ANTOINE [E. C. vol. iv. col. 351], was born March 3, 1807, and died at Liège, December 17, 1858.

MORRIS, GOUVERNEUR, an American diplomatist and writer, was born at Morrisania, state of New York, January 31st, 1752. He graduated at King's (now Columbia) College, New York, in 1768, studied the law, and was admitted to practice in 1771. He became an active writer of newspaper articles, was chosen delegate to the Provincial Congress of New York in 1775, and, from that year till 1778, took a prominent part in public affairs. In 1781, an accident led to the amputation of one of his legs. He was one of the delegates appointed to draw up the Federal Constitution of the United States in 1787, and to him was assigned the task of giving to that important document its final form and expression. The following year he visited France, where he remained till 1790. In 1791 he was sent by Washington to England, to arrange some disputed points in the Treaty between the king and the newly formed republic. During 1792—94, he served as American minister at Paris. The next four years were spent chiefly in travelling in various parts of Europe. Morris's diary and letters give a vivid picture of the state of France and the continent generally, during this memorable period, and throw much light on the state of parties and the character of the revolutionary leaders. Returning to America, he sat from 1800 to 1803 in the United States Senate as representative of New York state, usually siding with the Federalists in politics. The remainder of his life was spent in easy retirement, maintaining a literary and political correspondence with friends in Europe, and taking part occasionally in public matters, by means of addresses and orations. He died suddenly on the 6th of November, 1816. He was a fluent speaker, but redundant and ornate. In person he is said to have borne so strong a resemblance to Washington, as to have stood as a substitute for him to the sculptor, Houdon. He was one of the earliest promoters of the Erie Canal, and was chairman of the Canal Commissioners. (*Life of Gouverneur Morris*, by Jared Sparks, 3 vols. 8vo, 1832.)

* MORRIS, JOHN, F.G.S., an eminent geologist and palæontologist, was born at Homerton, near London, in 1810. On the completion of his education in private schools at Clifton, Abingdon, and London—in the last of which he was associated with Thomas Griffiths, who subsequently became professor of chemistry in St. Bartholomew's Hospital—he was placed in the establishment of a chemist. This occupation he followed for several years, availing himself during the time of every opportunity for the pursuit of natural science, for which he had acquired a taste whilst at school. He became acquainted with Francis Crow, of Faversham, who had made an extensive collection of fossils from Sheppey and elsewhere, and his devotion to geology was further stimulated by an introduction (through Mr. W. Lonsdale, then Secretary of the Geological Society) to Mr. J. Prestwich, with whom he made many

excursions over the Tertiary districts of England, Belgium, and France. To assist his inquiries, he about this time commenced the preparation of a Table of Organic Remains, for the prosecution of which he received the award of the Wollaston Fund in 1842, as well as in other years. The first edition of the 'Catalogue of British Fossils' appeared in 1843, the second edition in 1854, and a new edition, enlarging the catalogue to the present condition of our knowledge, is very generally desired by geological students.

In 1853 and 1854 Mr. Morris accompanied Sir Roderick Murchison upon two excursions on the Continent, made with a view to the comparison and examination of the Palæozoic rocks. The Harz, Thuringia, Bavaria, and Bohemia were visited, and the results of the examination were embodied in a paper read by Sir R. I. Murchison before the Geological Society in 1855, 'On the Palæozoic and their associated rocks of the Thuringerwald and Harz.' In 1854, at the recommendation of Sir R. I. Murchison, Mr. Morris was elected to the professorship of geology at University College, London, a post he has continued to fill with eminent success to the present time. In 1860 Professor Morris was appointed examiner in geology and palæontology to the University of London: he held the office for five years, and was reappointed to it in 1870. He has also held the offices of examiner in geology and mineralogy to the Council of Military Education, and to the Board of Admiralty; and at the request of the members of the Coal Exchange, London, he has for some years given a series of lectures on 'Coal and Coal Mining,' in connection with the Coal Exchange Museum.

In 1867 Professor Morris was elected president of the Geologists' Association, and in 1871 one of the vice-presidents of the Geological Society of London. In 1871 he was nominated one of the examiners in natural science in Cambridge University, and in the same year was recommended by Professor A. Sedgwick as deputy Woodwardian Professor of Geology at Cambridge.

Professor Morris's writings, of which a list is appended, are of great value; but his distinctive merit is as a teacher. He is universally regarded as one of our ablest and most accomplished geologists, whilst as a teacher, whether in the lecture-room or the field, he is unequalled, and his rare stores of information have always been held unreservedly at the service of students and fellow-labourers in the science. The high esteem in which he is held by geologists generally was evinced by the presentation by Sir R. I. Murchison, in June, 1870, of a handsome testimonial contributed by the then president and some of the past presidents of the Geological Society, together with many other distinguished geologists, "in consideration of the degree in which this science has been advanced by his long and successful labours." "Always," it was said in the Address drawn up by Professor Phillips, of Oxford, "always working in the field, and classifying public and private collections, you have for many years been among the foremost and most diligent of the Students of geology and palæontology; your careful publications have their place among those of the Masters in every geological library; and your thoughtful lectures live, and will live, in the minds of your scholars."

Besides the 'Catalogue of British Fossils,' 1843 and 1854, already noticed, Professor Morris has written the following papers:—'Observations on the Strata near Woolwich,' 1835; 'On a Freshwater Deposit, containing Mammalian Remains, at Grays, Essex,' 1836; 'On some Deposits, containing Mammalian Remains, at Maidstone, Kent,' 1836; 'Remarks on the production of Crystals,' 1838; 'On the Deposits containing *Carnivora* and other Mammalia, in the Valley of the Thames,' 1838; 'A Systematic Catalogue of the Fossil Plants of Britain,' 1839; 'Description of a new species of *Nautilus*,' 1848; 'On the subdivisions of the genus *Terebratula*,' 1846; 'On Mammalian Remains at Brentford,' 1849; 'On *Neritoma*, a fossil genus of Gasteropodous Mollusks,' 1849; 'On Species of Belemnite and *Aptychus*,' 1852; 'Palæontological Notes,' 1851; 'On some Sections in the Oolitic district of Lincolnshire,' 1853; 'The Geology of Aylesbury and Hartwell,' 1856; 'On the occurrence of Allophane at Charlton, Kent,' 1857; 'On a Fern from the Coal Measures of Worcestershire,' 1859; 'Remarks upon recent and fossil Cycadææ,' 'Note on the genus *Siphonotreta*,' 'On Coal Plants,' 1862; 'On Coal: its Geological and Geographical position,' 1861; 'The Leadbearing districts of the North of England,' 'Geological Notes on parts of Northampton and Lincolnshire,' 1869; 'On the genus *Pollicipes* in the Oxford Clay,' 1850; 'On some new Species of the genus *Ancyloceras*,'

BIOG. DIV.—SUP.

1850; 'The Gems and Precious Stones of Great Britain,' 1868; 'On the genus *Æchmodus*,' 1869; and a useful 'Geological Chart,' showing the order of succession of the stratified rocks, their mineral characters, principal fossils, uses in the arts, &c.

* MORRIS, WILLIAM, an English poet, was born in 1834, and was educated at Exeter College, Oxford; after leaving which he devoted himself, with other members of the University, to the practical renovation of taste in domestic furniture, and the achievement of an æsthetic ideal in its form, harmony, and decoration. Mr. Morris habitually resides in London; and is now—July, 1871—engaged in a tour in Iceland, of which it has already been announced he purposes to write an account ('Athenæum,' April 29th, 1871), and in which he is accompanied by Mr. E. Magnússon, his collaborateur in several translations, and himself known for his skilful English translations of Icelandic poetry, especially of *Asgrimsson's 'Lilja' (the Lily)*, an Icelandic Religious Poem of the Fourteenth Century.

Mr. Morris has produced 'The Defence of Guenevere, and other Poems,' 8vo, London, 1858, &c., new edition, 1870, which, dedicated to the author's friend "Dante Gabriel Rossetti, Painter," circles through half its pages about the Round Table of Arthurian romance; 'The Life and Death of Jason. A Poem in Seventeen Books,' 8vo, London, 1867, fifth edition, 1871, which approaches to the epic in form and dimensions, and follows the career of Jason from his childhood, through all his adventures in search of the golden fleece, his exploits, perils, and triumphs, until he lies crushed beneath the fatal beam of Argo, and his faithlessness to Medea, who is of course a figure of co-ordinate importance with Jason himself throughout a considerable proportion of the narrative, which is couched in pure, simple, idiomatic English, and is extremely vivid and graphic in style and movement; 'The Earthly Paradise,' 4 parts, 8vo, London, 1868—70, a collection of tales in verse, comprising in parts I. and II., 8vo, 1868, sixth edition, 1871, and which for literary purposes are distributed over the months "March—August," or, "Spring and Summer," 'Atalanta's Race,' 'The Doom of King Acrisius,' 'The Story of Cupid and Psyche,' 'The Writing on the Image,' 'The Love of Alcestis,' 'Pygmalion and the Image,' 'Ogier the Dane,' and others: in part III., 8vo, London, 1869, fourth edition, 1871, with the motto of "Autumn," or "September, October, and November," 'The Death of Paris,' 'The Land East of the Sun and West of the Moon,' 'The Story of Accontius and Cydippe,' 'The Man who never laughed again,' 'The Lovers of Gudrun,' &c.: and in part IV., 8vo, London, 1870, third edition, 1871, inscribed as "Winter," or, "December, January, and February," 'The Golden Apples,' 'The Fostering of Aslaug,' 'Bellerophon at Argos,' 'Bellerophon in Lycia,' 'The Hill of Venus,' &c. Mr. Morris, who rather despairingly describes himself as "the idle singer of an empty day," and sees in the universe, too exclusively, a vast dominion of Death, has contributed to periodical literature one of his latest fugitive works, being a translation from the Icelandic of 'The Story of Frithiof the Bold,' which appeared in the magazine entitled 'Dark Blue'; and, in association with Mr. Magnússon, has produced a prose volume entitled 'Grettis Saga. The Story of Grettir the Strong. Translated from the Icelandic by Eiríkr Magnússon, Translator of "Legends of Iceland," and William Morris, Author, &c.,' 8vo, London, 1869; and another called 'Völsunga Saga. The Story of the Völsungs and Niblungs. With certain Songs from the Elder Edda. Translated from the Icelandic,' &c., 8vo, London, 1870.

* MORSE, SAMUEL FINLEY BREESE, one of the inventors of the electric telegraph, was born at Charlestown, Massachusetts, April 27th, 1791. After graduating at Yale College, in 1810, he commenced his career as an artist. In 1811, he came to England with Washington Allston, studied painting under Benjamin West, and formed a friendship with Leslie. In 1813 he obtained the Royal Academy gold medal for his sculpture model of the 'Dying Hercules.' Returning to America in 1815, he worked as a portrait painter in Boston, in New Hampshire, and then in South Carolina, and at length settled, in 1822, in New York, where he painted a full-length portrait of Lafayette, for the Corporation. In 1824 he joined other artists in forming a drawing-school in New York, which resulted in the establishment of the Academy of Design in 1826; of this academy he was president for sixteen years. In 1829, he started on a three years' artistic tour in Europe, and on his return in 1832, became professor of the literature of the arts of design in New York University. He lectured on this subject in 1835.

It was about this period that a change in Mr. Morse's pursuits gradually commenced. He had paid some attention to chemistry when at Yale College, and, after his first visit to Europe, had

attended scientific lectures given by Professors Silliman, Day, and Dana. On his return from his second visit, in 1832, a conversation with a fellow-passenger on ship-board led him to conceive the possibility of electro-telegraphy; and then it was, according to the accepted belief in America, that he formed the rough sketch of an electro-magnetic telegraph, with a chemical self-recorder. Devoting occasional time to the subject, he finished a model of his apparatus in 1835, and deposited it in New York University. This instrument could only send a message one way, to a distance of half-a-mile; but, by 1837, he had made improvements which enabled him to send currents in both directions. Failing to obtain the aid of Congress in developing his system, he visited England and France in 1838, but without much success. In 1842, he laid the first submarine telegraph in New York harbour; in 1843, suggested the idea of an Atlantic telegraph from America to Europe; and in the same year obtained a grant of 30,000 dollars from Congress, to enable him to lay down an experimental wire from Washington to Baltimore. The complete success of this wire demonstrated the value of the system, which thenceforward spread with amazing rapidity. It belongs to the historians of science, and to practical electricians, to determine the relative dates and values of the discoveries and inventions of Ronalds, Morse, Steinheil, Cooke, and Wheatstone; but it is indisputable that Morse's system is regarded as the most important on the continent, as well as in America. In 1851, Steinheil himself recommended the German governments to adopt this system, which they did. Professor Morse has since been admitted into many learned societies, and has been decorated by the sovereigns of France, Turkey, Spain, Denmark, &c. A conference of ten European governments, about the year 1860, presented him with an honorarium of 400,000 dollars, in recognition of the value of his invention. On his 80th birthday, 1871, a "telegraphic celebration" was held at his house in New York. Surrounded by friends, and with the apparatus invented by himself, he conversed with people all over the world, receiving congratulations and exchanging greetings.

MOSCHELLES IGNATZ [E. C. vol. iv. col. 357]. This distinguished musician continued to hold the post of Director of the Conservatory at Leipzig, till his death, which occurred on the 10th of May, 1870, within a few weeks of the completion of the 76th year of his age.

* **MOSELEY, HENRY, M.A., D.C.L., F.R.S.**; Chaplain in Ordinary to the Queen, Canon of Bristol, and Vicar of Olveston, was born in 1801, and at an early age directed his attention to mathematical pursuits. In 1818 he published a paper ('Tilloch's Phil. Mag.,' vol. lii.), 'On measuring the depths of Cavities on the surface of the Moon by means of their shadows.' In 1822 he entered St. John's College, Cambridge, and graduated in 1826 as seventh wrangler. In that year the following papers appeared from his hand: 'On the application of the method of Parameters to the determination of certain curves'—('Ann. Phil.,' vol. xi.; Tilloch's 'Phil. Mag.,' vol. lxxvii.); and 'On the equilibrium of the funicular curve when the string is extensible;' and in 1827 a paper on 'Caustics,' ('Phil. Mag.,' vol. ii., N.S.)

In 1828 he entered holy orders, and in 1830 published a 'Treatise on Hydrostatics and Hydrodynamics for the use of students in the University of Cambridge.' On the establishment of King's College, London, in the year 1831, he was appointed professor of natural and experimental philosophy in that institution, and he was also its first chaplain. In 1833 he published memoirs on 'A new principle in Statics, called the Principle of Least Pressure,' ('Phil. Mag.,' vol. iii., pp. 285—88); and on the 'Theory of Resistances in Statics,' ('Phil. Mag.,' vol. iii.) In 1834 a memoir on the application of 'The principle of Least Resistance to the theory of Resistance in Statics,' ('Phil. Mag.,' vol. v.). In 1835 he communicated to the Cambridge Philosophical Society a memoir on the 'Equilibrium of the Arch,' ('Camb. Phil. Trans.,' vol. v., pp. 293—314). In the same year he published an elementary treatise on 'Mechanics applied to the Arts;' and in 1836 'Lectures on Astronomy, delivered at King's College.' In 1837 he communicated to the Cambridge Philosophical Society a memoir on the 'Theory of the Equilibrium of Solid Bodies in Contact,' ('Camb. Phil. Trans.,' vol. vi.); and wrote the article on Definite Integrals in the 'Encyclopedia Metropolitana.' In 1838 he communicated to the Royal Society a memoir on the 'Geometrical forms of turbinated and discoid Shells,' ('Phil. Trans.,' 1838, pp. 351—70). His researches on this subject have been continued by C. F. Naumann, ('Poggendorff, Annal.,' i., pp. 223—236; ii., pp. 245—260; lxiv., pp. 528—542); D'Orbigny,

'Ossements Fossiles;' Macalister, 'Proc. Royal Society,' 1870, and others. In 1839 appeared his elementary work entitled, 'Illustrations of Mechanics.'

In 1841 he communicated to the British Association of Science the description of a machine for calculating the numerical values of definite integrals, ('Brit. Ass. Rep.,' 1841, pp. 35—39; and one to the Royal Society, on the 'Theory of Machines,' ('Phil. Trans.,' 1841, pp. 285—306); and in 1842 he published a 'Treatise on Astro-Theology,' and a paper on 'Conchylometry,' ('Phil. Mag.,' vol. xxi., pp. 300—5). He took an active part in the establishment of the department of practical science and engineering at King's College; and in 1842 published his work on the 'Mechanical Principles of Engineering and Architecture,' which has been reprinted in America, and edited, with notes, by Professor Mahan for the use of the Military School at West Point, and translated into German by Professor H. Scheffer, of Brunswick. In 1844 he was appointed one of Her Majesty's Inspectors of Schools, and especially charged with the inspection of Normal schools for teachers. From that year to 1855 his reports on education to the Committee of Council were published annually in their minutes. He wrote, moreover, various articles on public education in the Edinburgh and Quarterly Reviews about that time and afterwards. In 1848 he was elected Corresponding Member of the Institute of France. In 1850 he communicated to the Royal Society a memoir on the 'Dynamical Stability of Floating Bodies,' ('Phil. Trans.,' 1850). The dynamical stabilities of ships of war are all calculated by the formulæ given in this memoir, ('Trans. Soc. Nav. Arch.,' vol. i.) and in it the consideration of dynamical stability was first introduced in mechanics ('Fincham's Shipbuilding').

In the International Exhibition of 1851 he filled the office of chairman of Jury V.; and communicated, in that year, to the Royal Society, a paper on the 'Rolling Motion of a Cylinder.'

In 1852 he was appointed one of Her Majesty's Chaplains in Ordinary; and in 1853 he was presented, on the recommendation of Lord Aberdeen, to a canonry in Bristol Cathedral. In 1854 he resigned his office as H. M. Inspector of Schools, on his acceptance, from the Dean and Chapter of Bristol, of the vicarage of Olveston; and in that year communicated to the Royal Society a memoir on the 'Descent of Glaciers,' ('Proc. Royal Soc.,' vol. vii., pp. 333—342). In 1855 he took an active part in establishing the 'Bristol Diocesan Trade School.' In the following year he was entrusted by the Secretary for War with the direction of the first competitive examinations for admission to the Royal Military Academy at Woolwich; and was chairman of the committee of management of the Public Conference on Education, over which the Prince Consort presided. In 1857 he published in the 'Phil. Mag.' a memoir on 'Certain relations of the Experimental, Logarithmic, and Binomial Theorems.' In 1858 he became a member of the Council of Military Education. In 1862 he communicated to the Royal Society a second memoir on the 'Descent of Glaciers,' ('Proc. Royal Soc.,' vol. xi.); and in 1868 one on the 'Mechanical impossibility of the Descent of Glaciers by their Weight only' (ibid. 1869). The mathematical discussion of this question he published in the 'Phil. Mag.' of May of that year; and in the same magazine a paper on the 'Uniform motion of an imperfect fluid.' In 1869 he published a paper 'On the descent of a solid body on an inclined plane when subjected to alternations of temperature,' ('Phil. Mag.,' Aug., 1869); and in 1870 one on the 'Mechanical Properties of Ice' ('Phil. Mag.,' Jan., 1870); and another on the 'Veined Structure of the Ice of Glaciers,' ('Phil. Mag.,' April, 1870). In that year he delivered a lecture at the Royal Institution of Great Britain on the 'Cause of the Descent of Glaciers.' In 1871 the University of Oxford conferred upon him the honorary degree of Doctor of Civil Law. In that year he communicated to the Royal Society a memoir on the 'Uniform flow of a liquid.'

The greater part of Canon Moseley's life has been devoted to the cause of public education, and chiefly to that of the working-classes, of which he is an ardent advocate. His reports on the subject, and on the education of elementary schoolmasters, are to be found in the 'Minutes of the Committee of Council on Education' from 1844 to 1855. As it regards the teaching of middle or commercial schools, he recommends that, "It should be placed on a scientific, rather than on a literary basis—a basis of industrial science as distinguished from language.

"What is done with the head, with no relation to what is done with the hands, is," he says, "the business of the universities and public schools, and the occupation of the upper or non-working

classes. Pure work is the occupation of the working-classes. It seems the function of the middle-classes to apply the thought of the educated classes to the work of the uneducated. Their schools should therefore be schools of application.

"By the one side they are in contact with the workers, and by the other with the thinkers. Thinking in respect to working—the thought by which men are makers—therefore belongs to them, to guide the operation of the hand by the operation of the mind, and to know in respect to what is to be made. Other knowledge than that which may be applied, however valuable in itself and for other men, is foreign to them." 'Report on the Bristol Diocesan Trade School,' read at the Church Congress held in Bristol in the year 1864. (See 'Papers relating to the origin and progress of the Bristol Trade School,' Bristol, 1869.)

MOSTAERT, JAN, an eminent Dutch painter, was born at Haarlem, in 1474. He painted religious and historical subjects in a realistic manner, with much force and spirit, and introduced landscape backgrounds, with considerable feeling. He was also popular as a portrait painter. Among his extant works are a 'Mater Dolorosa,' in the church of Notre Dame, at Bruges; a 'Nativity,' and an 'Ecce Homo,' in churches at Haarlem; and a 'Deipara Virgo,' the Virgin with the Infant Saviour, standing surrounded by angels, and attended by prophets and sibyls: this, which is his most remarkable picture, is in the Antwerp Museum (No. 70), where are also two portraits by him. Jan Mostaert died in 1555 or 1556.

***MOTLEY, JOHN LOTHROP**, one of the most distinguished of modern historians, was born on the 15th of April, 1814, at Dorchester, Massachusetts. After graduating at Harvard College, in 1831, he followed up his studies, first for a year at the University of Göttingen, and then for another year at that of Berlin. He made the tour of several European countries—England, France, Germany, Switzerland, and Italy; and on his return to America, having devoted himself to the study of law, was admitted to the bar in 1837. The charms of literature diverted him, however, from the practice of his profession; and he made his first essay in authorship with a novel, entitled, 'Morton's Hope: or, the Memoirs of a Young Provincial,' 2 vols. 12mo, New York, a love story, pleasantly, rather than powerfully told, the scene of which is laid in New England, at the time of the Revolution. A disappointment of the heart forces the hero to visit Europe, where he passes some time among the University towns of Germany, of which, especially of Göttingen, the author introduces some graphic descriptions. 'Morton's Hope' was soon followed by the production of another novel, which, however, was not published until ten years afterwards, when it appeared with the title of 'Merry Mount. A Romance of the Massachusetts Colony,' 2 vols. 8vo, Boston and Cambridge (U.S.), 1849. In 1841, Mr. Motley became secretary of the United States Legation at St. Petersburg, in which office he continued for about eight months, and then returned to America, where he occupied himself chiefly with literary pursuits, contributing to the leading periodicals, especially to the 'New York Review,' to which he furnished papers respectively on De Tocqueville's 'Democracy in America,' and on 'Goethe and his Writings,' and to the 'North American Review,' for which he wrote, October, 1845, a striking article on 'Peter the Great.' He became interested in the history of Holland, for the illustration of which he began to collect authorities. He had already compiled enough to occupy two volumes, when, dissatisfied with the facilities offered to him in America for the prosecution of his subject, he embarked with his family, for Europe, in 1851. On his arrival, he established himself chiefly at Dresden, with the view of writing a history of the great struggle, at the close of which the Netherlands threw off the yoke of Spain—"the great agony," to use his own words, "through which the Republic of Holland was ushered into life." He devoted nearly five years to an examination of the most trusted authorities, chiefly in the libraries of Germany and the Netherlands, at the end of which he published his 'Rise of the Dutch Republic. A History,' 3 vols. 8vo, London, 1855, which was at once reproduced in New York. It was also reprinted in English at Amsterdam. Other editions followed, both in this country—3 vols. 8vo, London, 1858, and 2 vols. 8vo, Edinburgh, 1859, &c.—and in America; and its popularity was so great that its circulation in England had reached 15,000 in November, 1857, and in the United States had attained to nearly 8,000 in June, 1860. The 'History,' prefaced by a succinct historical introduction of ninety-two pages, was conversant about the period from the abdication of Charles V. in 1555, to the death of William the Silent, Prince of Orange, in 1584. 'The Rise of the Dutch Republic,' 6 vols. 8vo,

Leipzig, 1858, formed vols. 32 to 37 of Durr's 'Collection of Standard American Authors;' and a Dutch translation, under the superintendence of R. C. Bakhuizen van den Brink, chief Archivist of the Netherlands, with an Introduction and Annotations, was issued in numbers, as 'De Opkomst van de Nederlandsche Republiek. Met Inleiding en Aanteekeningen,' &c., 3 vols. 8vo, The Hague, 1857, &c., German translation, 'Der Abfall der Niederlande und die Entstehung des holländischen Freistaats,' &c., 3 vols. 8vo, Dresden, 1857—60, new edition, 3 vols. 4to, Dresden, 1862, French translations, 'Fondation de la République des Provinces-Unies. La Révolution des Pays-Bas au XVI^e Siècle. Traduit de l'Anglais par Gustave Jottrand et Albert Lacroix,' 4 vols. 8vo, Brussels, 1859—60, and a 'traduction nouvelle, précédée d'une Introduction par M. Guizot,' 4 vols. 8vo, Paris and Corbeil, 1859, &c. Mr. Motley visited the United States for a short time in 1858; but presently returned to Europe to prosecute his researches for the second portion of his work, which was published with the title of 'The History of the United Netherlands: from the Death of William the Silent, to the Synod of Dort, [or, as variously stated in the title-pages, "to the twelve years' Truce, 1609"]. With a full view of the English-Dutch Struggle against Spain, and of the Origin and Destruction of the Spanish Armada,' 4 vols. 8vo, London, 1860—67, new edition, 4 vols. 8vo, London, 1869. After the publication of the 'Dutch Republic,' its author was elected a member of various learned societies in Europe and America, and especially of the Institute of France, in succession to Mr. Prescott. In 1860, he received the degree of D.C.L. from the University of Oxford, and that of LL.D., from Harvard College, U.S.; and in the following year, 1861, again undertook an official mission, as Minister from the United States to the Court of Vienna. He was recalled in 1867; and was subsequently appointed to succeed Mr. Revard Johnson as Minister at the Court of St. James, with instructions to press more vigorously than ever the "Alabama claims." These were, however, taken out of his hands, and have, it is hoped, arrived at a final solution in the shape of a treaty agreed upon at Washington by a joint commission of English, American, and Canadian statesmen. Mr. Motley, after having been superseded by General Schenck, who arrived in London in June, 1871, has once more turned his attention to historical studies, and under circumstances that promise the most desirable results. He is at present, July, 1871, residing in Holland, at the suggestion of the Queen, where he is engaged in collecting materials for the continuation of his history of that state. He is a patriotic lover of the institutions of his native country, a circumstance the exhibition of which is continually recurring in his history; and which has inspired such minor productions as his 'Historic Progress and American Democracy. An Address delivered before the New York Historical Society, December 16th, 1868,' 8vo, New York, 1869; and 'Democracy, the Climax of Political Progress and the Destiny of advanced Races. An historical Essay,' 8vo, Glasgow and London, 1869.

MOULIN, PIERRE DU, known also as **MOLINÆUS**, an eminent French Protestant divine, and son of Joachim Du Moulin, was born on the 18th of October, 1568, at the Château de Buihi, the seat of the De Mornays, where his parents had been admitted to refuge from the persecution to which the Huguenots were at that time exposed. After the massacre of St. Bartholomew's day, August 24th, 1572, he was taken by his parents to Sedan, where he received his preparatory and collegiate education until 1588, when, having been sent by his father to England, he became a member of Corpus Christi College, Cambridge. After a stay of four years in this country, he embarked for Holland in the suite of the Duke of Wirtemberg, but was shipwrecked near fort Rammekens, on the coast of Zeeland. He celebrated his escape, which was made at the expense of his books and baggage, in a poem entitled 'Votiva Tabella,' which attracted both favour and reputation. Through the interest of the French ambassador, he was appointed to the chair of philosophy at the University of Leyden, which he filled with much distinction for several years, in the course of which he published 'Elementa Logica,' 8vo, Leyden, 1596, eighth edition, 8vo, Geneva, 1625, and many others, French version, 'Eléments de Logique,' 8vo, Sedan, 1621, English version, 'The Elements of Logick: translated out of the French Copie by Nathanael De Lawne,' 8vo, London, 1624. In obedience to a call to undertake the pastorate of the Protestant church at Charenton, Du Moulin left Leyden for Paris, where he arrived on the 28th of February, 1599, and conjoined with his ministerial office, that of chaplain to Catherine de Bourbon, sister to King

Henry IV., who had conformed to Romanism in 1593, and wife of Henry of Lorraine. The Pope pressed Henry IV. to exert his influence with Catherine to become reconciled with the Church of Rome; but she remained steadfast in her Protestantism, in which she was fortified by the arguments opposed by Du Moulin to those of the Papal champions, Perron and Cotton, chaplains to the King, and others. Their discussions and conferences were frequent, and their controversy of long continuance; and amongst the records of them may be mentioned 'Trente-deux Demandes proposées par le Père Cotton, avec les Solutions adjoustées au Bout de chaque Demande: item Soixante-quatre Demandes proposées en Contre-eschange,' 8vo. La Rochelle, 1607, 1608, &c., English translation, "with a new late challenge by a learned Divine to all Papists in twenty-four other Popish Articles," 4to. London, 1614, 1615, &c.

The assassination of Henry IV., May 14th, 1610, gave occasion to Du Moulin, anonymously, to charge that crime upon the doctrines of the Jesuits, and upon Cotton as a disseminator of them; which elicited from Cotton a defence and apology. In 1615, Du Moulin paid a second visit to England, at the invitation of King James I., with whom he had for some time corresponded, and at whose instance he was admitted to a doctor's degree at Cambridge, and collated to the fourth stall in the Cathedral of Christ Church, Canterbury; and for whom he drew up a plan for the reunion of the Protestant Churches, which Blondel has inserted in his 'Actes Antiques.' After a three months' stay, the short duration of which had been a condition insisted upon by his flock before they would allow him to depart, he returned to France; and in 1617, when the United Provinces desired the Reformed Churches of England, France, and Germany, to send deputies to the Synod of Dort, he was designated as one of the four intended representatives of French Protestantism. The formal prohibition, on pain of death, issued by Louis XIII., prevented their attendance; but Du Moulin compensated himself for the disappointment by the zeal with which he promulgated and defended the decrees of the Synod, and by obtaining for them the sanction of the national Synods of the Protestant Church of France. In 1620, he was moderator of the Synod of Alais; and about this time, having been pressed by Lord Herbert of Cherbury, the English ambassador at the French Court, to use his influence with James I. for the succour of that monarch's son-in-law, the King of Bohemia, found himself so obnoxious to his own government, who issued a decree of seizure and imprisonment against him for having solicited a foreign prince to take up arms in behalf of the Protestant Churches, that he was obliged to seek refuge at Sedan as the best means of providing for his safety. Here he was presently appointed to a chair of theology, and to the ministry of the church; and he continued to hold both his academic and pastoral offices to the time of his death. He paid a final visit to England in 1623, about the time of the publication of Cardinal Perron's book against King James, who requested Du Moulin to write a reply, which was published at Sedan, after the death of James, with the title of 'Novitas Papismi: sive, Perronii Confutatio, Regique Jacobi, sed magis satræ Veritatis, Defensio,' French version, 'Nouveauté du Papisme, opposée à l'Antiquité du vray Christianisme. Contre le Livre de M. le Card. du Perron, intitulé, "Replique à la Responce du Roy Jacques I.," folio, Sedan, 1627, "troisième édition, augmentée de divers Traitez par l'Auteur," 4to, Geneva, 1633, English translation, with the life of the author prefixed, by his eldest son, Dr. Peter du Moulin, 'The Novelty of Popery,' &c., folio, London, 1662. Between three and four years previous to his death, Du Moulin was severely injured by a fall from his horse; after which, although he never recovered from its effects, he still continued to prosecute the labours of his twofold vocation, until his death, in his ninetieth year, on the 10th of March, 1658.

The works of Du Moulin, sixty-five in number, are enumerated in Jean Aymon's 'Actes ecclésiastiques et civils de tous les Synodes nationaux des Églises réformées de la France,' 2 vols. 4to, Rotterdam, 1710, &c. As being to a very large extent polemical, and affected by the ecclesiastical and political colour of the time, they are not of absorbing modern interest. The principal of them, besides those which have been already mentioned, are, 'Apologie pour la Cène du Seigneur, contre la Présence corporelle et Transubstantiation,' 8vo, La Rochelle, 1607, 8vo, Geneva, 1608, "dernière édition, revue et augmentée, en laquelle est satisfait à toutes les Accusations des Adversaires," 8vo, Geneva, 1630, English translation, by Edward Skipwith, 4to, London, 1612; 'Heraclite: ou, de la Vanité et Misère de la Vie humaine,' &c., 8vo, Geneva, 1609, &c., English translations, by

R. S [tafford], 'Heraclitus,' &c., 12mo, Oxford, 1609, by Abraham Darcie, 8vo, London, 1624, and by Sir H. L'Estrange, 8vo, London, 1652; 'De Monarchia temporali Pontificis Romani Liber, quo Imperatoris, Regum, et Principum Jura adversus Usurpationes Papæ defenduntur,' &c., 8vo, London, 1614; 'Lettre à Messieurs de l'Eglise Romaine,' 8vo, Saumur, 1618, English translation, by Ry. Goring, 'A Letter unto them,' &c., 8vo, London, 1621; 'Bouclier de la Foy: ou, Defense de la Confession de Foy des Églises réformées du Royaume de France,' &c., 2 parts, 8vo, Charenton, 1618, Geneva, 1619, &c., 8vo, Paris, 1846, English translation, 4to, London, 1620, 1623, 1631, &c.; 'Anatome Arminianismi: seu, Eucleaticæ Controversiarum quæ in Belgio agitantur, super Doctrina de Providentia, de Prædestinatione,' &c., 4to, Leyden, 1619, 1620, &c., English translation, 4to, London, 1620; 'Du Combat Chrestien,' 8vo, Sedan, 1622; 'Oratio de Laudibus Theologiæ,' 8vo, Sedan, 1620; 'Du Juge des Controverses: Traitté auquel est defendue l'Autorité et la Perfection de la S. Escriture contre les Usurpations et Accusations de l'Eglise romaine,' 8vo, Leyden, 1630, English (partial) translation, by G. C., 8vo, London, 1632; 'Anatomie de la Messe,' &c., 8vo, Geneva, 1636, "troisième édition revue et augmentée," 12mo, Leyden, 1638, 8vo, Geneva, 1640, &c.; 'Latino Sermone donata a Lud. Molinæo, Authoris Filio,' 8vo, Leyden, 1637, English translations, by J. Mountaine, 8vo, London, 1641, by G. C., 12mo, Dublin, 1750, and by R. Shanks, 12mo, Edinburgh and Glasgow, 1833; 'Trois Decades de Sermons,' 8vo, Sedan, 1637—39; 'Le Capucin: Traitté auquel est descritte l'Origine des Capucins, et leurs Vœux, Reigles, et Disciplines examinées,' 8vo, Sedan, 1641, English translation, by Philanax Orthodoxus, 16mo, London, 1665; 'Opera Philosophica. Logica, physica, ethica,' 3 parts, 8vo, Amsterdam, 1645, French version, 'La Philosophie mise en François et divisée en trois Parties,' &c., 8vo, Paris, 1644, 12mo, Rouen, 1655, 1661, &c.; and 'The Papal Tyranny, as it was exercised over England for some Ages: set forth by his Son, Dr. Peter Du Moulin. With an Addition on the same Subject, and Reflections,' &c., 4to, London, 1674.

Of works illustrative of the career of Du Moulin, may be mentioned, besides the 'Life' prefixed to the English version of the 'Nouveauté du Papisme,' already alluded to, 'An Account of the last Hours of Dr. Peter Du Moulin,' &c. Translated out of the French Copy printed at Sedan,' 8vo, Oxford, 1658; a Life, by William Bates, in 'Vitæ Selectorum aliquot Virorum, qui Doctrina, Dignitate, aut Pietate inclaruere,' 4to, London, 1681; and another in Hone's 'Lives of Eminent Christians,' 8vo, London, 1834—43, issued by the Society for Promoting Christian Knowledge.

MOULIN, PETER DU, the younger, an Anglican divine, and the eldest son of the preceding, was born at Paris, about the year 1600, soon after his father's appointment to the pastorate of the Protestant church at Charenton. He received his education at the University of Leyden, where he took the degree of D.D., in which he was afterwards incorporated successively by the University of Cambridge, and by the University of Oxford on the 10th of October, 1656. Having repaired to England after his academical course at Leyden, he found a patron in Richard, Earl of Cork; whose sons, after he had resided at Lismore, Youghal, and Dublin, for some time after the pacification of Ireland by the Parliamentary forces, he accompanied to Oxford, where he spent two or three years as their governor. Whilst resident at the University, he was a frequent preacher at the church of St. Peter-in-the-East. He paved the way to royal favour by the publication of a work having reference to the execution of Charles I., entitled 'Regii Sanguinis Clamor ad Cœlum adversus Parricidas Anglicanos,' 8vo, and 4to, The Hague, 1652, which brought down upon its author the severe animadversions of the poet Milton. Almost immediately after the Restoration of Charles II., he was appointed chaplain in ordinary to the king, and was collated, June, 1660, to the fourth prebend in the cathedral of Canterbury, which had been formerly held by his father. He was also preferred to the rectory of Adisham; and, dying at Canterbury in October, 1684, was buried on the 13th of that month in the cathedral. He was a strenuous Protestant and a zealous Calvinist; and his last words are said by Anthony à Wood to have been:—"Since Calvinism is cried down, actum est de Religione Christi apud Anglos."

Besides translating and editing several of his father's works, Dr. Du Moulin was the author of various poems, sermons, and devout and polemical treatises. The principal of these are—'La Paix de l'Ame,' of which the best edition is said to be that

of Geneva, 12mo, 1729, but of which an English version, probably an original one from the hand of the author, had appeared, with a dedication to the Earl of Cork, entitled 'Of Peace and Contentment of Minde,' 8vo, London, 1657, third edition, 1678. A later English version was published with the title of 'A Treatise on Peace of Soul and Contentment of Mind. Written originally in French by Mr. Peter Du Moulin, the Son. A Work consisting of Devotion, Morality, Divinity, and Philosophy, adapted to every Capacity, and equally proper for all Christians in general. First corrected, improved, and re-published, with Notes, by Mr. Sartoris [Geneva, 1729, *ut supra*]. And now translated into English, with additional Notes, by John Scrope, D.D., 2 vols. 8vo, Salisbury, 1765; 'Πάρεργα,' Poematum Libri tres:—(I.) Hymni in Symbolum Apostolorum. (II.) Ecclesiae Gemitus. (III.) Sylva Variorum, 8vo, Cambridge, 1670; and 'Ten Sermons preached on Several Occasions,' 8vo, London, 1684.

MOUNIER, JEAN JOSEPH, a celebrated French politician and writer, was born at Grenoble, November 12th, 1758. After studying at the college in that town, he wavered for a time between the adoption of a military and a commercial life; but at length decided on the law, studied hard, and was received into the faculty of Advocates in 1779. His voice not being strong enough for a pleader in court, he became a chamber counsel, and established his fame as a sound lawyer. As a judge-royal, which appointment he obtained in 1783, his impartial administration of justice was conspicuous; and his range of knowledge was increased by the careful study of the best English writers on the laws and constitution of England. He was concerned in the earliest movements connected with the French Revolution; the struggles between the Central government and the provincial states; the convocation of the Notables; and the endeavours of Neckar to extricate the king from a clique of bad advisers. Mounier published an address to the king and Neckar, on the best mode of convening the States General and Provincial Assemblies. In 1789, he went to Versailles, to represent the Province of Dauphiné in the States General. When the nobles and the clergy refused to make one house with the Tiers État, and the latter resolved to form themselves into a National Assembly, Mounier sided with the popular party, but at the same time tried, with Mirabeau, to bring about amicable relations between the king and the nation. Although earnestly demanding a constitution, he maintained the right of the king to choose his ministers, and defended the rights of property against attacks which began to be frequently heard. The Assembly decided on having only one legislative chamber, against his advice to follow the English plan of having two. When elected president of the Assembly, he acted with dignity and impartiality; but, finding himself powerless to stem the revolutionary torrent, he resigned, and retired to Grenoble, where he published a defence of his conduct. But the resentment of the Assembly pursued him; he fled to Switzerland in 1790, remained there till 1792, then went to England, and afterwards to Weimar, supporting himself by teaching, and especially by conducting a school for high-class education at Weimar. Returning to France in 1801, he was, in the following year, made prefect of Ile-et-Vilaine, by Consul Bonaparte, and raised to the rank of Councillor of State. He died, January 26th, 1806. To mark the respect entertained for Mounier's integrity and abilities, his son was some years afterwards raised to the peerage. Mounier's writings were chiefly published during the earlier years of the Revolution. Among them were 'Considérations sur les Gouvernements, et principalement sur celui qui convient à la France,' 8vo, 1789, German translation by Gentz, Berlin, 1794; 'Observations sur les États Généraux de France'; 'Rapport du Comté chargé du travail sur la Constitution'; 'Recherches sur les Causes qui ont empêchés les Français de devenir libres,' 2 vols. 8vo, 1792; and 'De l'Influence Attribuée aux philosophes, aux francs-maçons, et aux illuminés, sur la Revolution de France,' Tübingen, 1801, Paris, 1821.

MOYREAU, JEAN, French engraver, was born at Orleans, January 19th, 1690. He executed a large number of plates, including a 'Lion Hunt,' after Rubens; 'Rebecca receiving Abraham's Presents,' after Paolo Veronese; and several others, after Rembrandt, Breughel, Claude, Watteau, &c.; but is perhaps best known by his series of eighty-nine plates of the works of Ph. Wouwermans, large folio, Paris, 1749—a series of very unequal merit. Moyreau was nominated Member of the French Academy in 1736, and died at Paris, in 1762.

* MÜCKE, HEINRICH, German historical painter, was born at Breslau, April 9th, 1806. After studying in the

Academy of his native city, he, in 1824, entered the Berlin Academy, and became pupil of Schadow, whom he accompanied to Düsseldorf a few years later. In 1833, he went to Munich, and afterwards visited Italy; but he settled in Düsseldorf, where he was appointed professor in the art-academy, and he is considered one of the most distinguished representatives of the Düsseldorf school. Herr Mücke has painted many subjects from sacred and ecclesiastical history, and many both in fresco and oil, from early German history. Of these, among the most celebrated, are the frescoes from the life of Barbarossa, in the château of Count Spec at Heltorf, near Düsseldorf; the larger ones from the life of Charlemagne, at Aix-la-Chapelle; and those executed for the council of Elberfeld. Among his religious subjects, may be named his large symbolical fresco, 'Christianity,' in the Andreaskirche, Düsseldorf; 'Saints Ambrose, Catherine, and Genevieve'; and 'St. John and the Angel of the Apocalypse.' The 'Taking of Jerusalem by Godfrey of Bouillon,' is well known by the engravings. Mücke deals in symbol and abstract sentiment, like the masters of the Düsseldorf school generally, and his works have, to one not familiar with the theories of the school, a cold, formal, and conventional character. He is an able draughtsman, skilful in composition, and by his countrymen is considered a good colourist.

* MÜLLER, FRIEDRICH MAX, generally known as Max Müller, an eminent orientalist and comparative philologist, is the son of Wilhelm Müller, a German lyric poet [E. C., vol. iv. col. 382], and was born on the 6th of December, 1823, at Dessau, at the Gymnasium of which, after having received a judicious preparatory training from his mother, who was left a widow in October, 1827, he was partially educated. Afterwards he was sent to Leipzig, where he became a pupil at the Nicolaischule, and an inmate of the house of Professor Carus; subsequently proceeding to the university for the prosecution of his philological studies, his proficiency in which, especially in Sanskrit, he signalled by his translation of 'Hitopadesa,' a collection of Sanskrit Fables, by Vishnûsarman, published as vol. xxxiii. of the 'Ausgewählte Bibliothek der Classiker des Auslandes,' and entitled 'Hitopadesa. Eine alte indische Fabelsammlung. Aus dem Sanskrit zum ersten Male in das Deutsche übersetzt,' &c., 12mo, Leipzig, 1844. In 1844 he repaired to Berlin for the further cultivation of his philological and philosophical studies, and for the consultation of the Sanskrit manuscripts of that city; and in 1845 proceeded to Paris, where, at the instigation of M. Eugene Burnouf, he began to collect materials for his 'Rig-Veda-Sanhita. The Sacred Hymns of the Brahmans; together with the Commentary of Sayanâchârya,' &c., 4 vols. 4to, London and Oxford, 1849—62, which was published at the expense of the East India Company, and for the prosecution of which he had left Paris, in June, 1846, for England, where he collated the manuscripts in the library of the East India House and the Bodleian. Afterwards he followed up his labours in the same field by the publication of the 'Rig-Veda: oder die heiligen Lieder der Brahmanen. Herausgegeben, &c. Mit einer Einleitung, Text, und Uebersetzung des Prâtisâkhyâ oder der ältesten Phonetik und Grammatik enthaltend,' 4to, Leipzig, 1856, &c., the third part of which was issued in 1857. In 1848 he took up his residence at Oxford, where in 1850 he was appointed deputy Taylorian professor of modern European languages; and in 1854, on the death of Dr. Trithen—having been admitted a member of Christ Church, and received the honorary degree of M.A. in 1851—was elected to the professorship, the patronage of which is vested in the curators of the Taylor Institution, by whom he has been re-elected at the end of every successive lustrum which forms the period of office. He was admitted to the full degree of M.A. in 1854; in 1856 was appointed one of the curators of the Bodleian Library, of the oriental department of which he subsequently became librarian; and was elected to a fellowship of All Souls' in 1858, at which time he was a member of the Royal Bavarian Academy, corresponding member of the Institute of France, of which he became an associate member in 1869, and an honorary member of the Royal Society of Literature. During the time of the Crimean war, he produced, at the suggestion of Sir Charles Trevelyan, a work entitled, 'The Languages of the Seat of War in the East. With a Survey of the three Families of Language, Semitic, Arian, and Turanian,' &c., 8vo, London and Leipzig, first two editions, 1855, in which he first exhibited to the general public his knowledge of languages and his original views on the philosophy of language. He contributed to the second volume of 'Oxford Essays,' 8vo, London, 1856, a valuable article on 'Comparative Mythology,' of which a French translation ap-

peared as 'Essai de Mythologie comparée,' 8vo, Paris, 1859; and a few years afterwards produced his 'History of Ancient Sanskrit Literature, so far as it illustrates the primitive religion of the Brahmans,' 8vo, London, 1859. To this succeeded his 'Lectures on the Science of Language,' 8vo, London, 1861, sixth edition, 1871, happily combining popularity with philosophical research and speculation, and originally delivered, in the months of April, May, and June, 1861, at the Royal Institution, London, of which a French translation, by MM. Georges Harris and Georges Perrot, appeared with the title of 'La Science de Langage: Cours professé à l'Institution royale de la Grande Bretagne. Traduit de l'Anglais sur le 4^e Edition,' &c. 8vo, Paris, 1864, German version, by Dr. Karl Böttger, 'Vorlesungen über die Wissenschaft der Sprache,' &c., 8vo, Leipzig, 1863, Polish version, by K. E., 'Odczyty o Umiejętności Języka,' &c., 8vo, Warsaw, 1867. In 1860 he contended unsuccessfully for the Boden professorship of Sanskrit, left vacant by the death of his friend, Professor Horace Hayman Wilson, on which occasion Professor Monier Williams, formerly of Haileybury, was the successful candidate. Since this time, as indeed before, the life of Professor Max Müller has been devoted almost exclusively to academical and literary activity, broken by a momentary passage of political controversy during the earlier stages of the late Franco-German war, when he took occasion to publish in a letter to the 'Times' of August 31, 1870, a defence of Count Bismarck's position.

The principal of the works of Max Müller, besides those which have been already mentioned, include an annotated translation of Kalidasa's 'Meghadūta: oder der Wolkenbote dem Kalidasa nachgedichtet und mit Anmerkungen begleitet,' &c., 8vo, Königsberg, 1847; 'Proposals for a Missionary Alphabet,' &c., 8vo, London, 1854, which formed also one of several papers contributed by Max Müller to the third and fourth volumes of Baron Bunsen's 'Christianity and Mankind'; 'Buddhism and Buddhist Pilgrims. A Review,' &c., 8vo, London, 1857; 'The German Classics from the Fourth to the Nineteenth Century. A Reading-Book,' &c., 12mo, London, 1858; 'Chips from a German Workshop,' 2 vols. 8vo, London and Oxford, 1867, 1868, &c., the name of which was suggested to the author by an expression used by his friend, Baron Bunsen; 'A Sanskrit Grammar for Beginners, in Devanāgarī and Roman Letters throughout,' 8vo, London, second edition, revised and accentuated, 1870. In the series entitled 'Handbooks for the Study of Sanskrit,' Müller has edited 'The First Book of the Hitopadesa,' and 'The Second, Third, and Fourth Books,' &c., and, besides works of minor importance, Professor Theodore Benfey's 'Sanskrit-English Dictionary,' 8vo, London, 1866; whilst to J. Bellowes' 'Outline Dictionary for the Use of Missionaries,' 8vo, London and Gloucester, 1867, he contributed an Introduction 'On the Proper Use of the ordinary English Alphabet in Transcribing Foreign Languages.' He has contributed largely to the periodical literature of England, France, and Germany: in this country to the 'Edinburgh Review'; the 'Times'; the 'Contemporary Review,' in which last his most remarkable articles are 'A Chapter of Accidents in Comparative Theology' (April, 1870), and 'On the Migration of Fables' (July, 1870); and to 'Fraser's Magazine,' in which appeared, in the numbers for April, May, and June, 1870, the three 'Lectures on the Science of Religion,' which had been shortly before delivered at the Royal Institution, respectively on the 19th and 26th of February, and the 5th of March.

MULLER, JAN, Dutch engraver, was born at Amsterdam, about 1570. He was a scholar of H. Goltzius, whose manner he imitated and exaggerated. He engraved a large number of plates in a free and spirited, but somewhat monotonous style. Among the best of his subject-plates are the 'Martyrdom of St. Sebastian,' after J. Van Aachen; the 'Raising of Lazarus,' after A. Bloemart; the 'Passion,' after Lucas Van Leyden; and a large print of the 'Camp of Ulysses,' after Cornelis. Besides many more after these, and other celebrated masters, he engraved a large number of his own designs, and several portraits, some of which are much esteemed. His prints range from 1589 to 1625. He died about 1630.

MULLER, JOHANNES [E. C. vol. iv. col. 379], the eminent German physiologist, died at Berlin, April 28, 1858.

MULREADY, WILLIAM, R.A. [E. C. vol. iv. col. 383]. To the Academy exhibition of 1862, Mr. Mulready contributed a large picture, 'The Toy Seller,' the only one of any consequence exhibited by him after the publication of the memoir in the E. C. The picture was unfinished, and far inferior to earlier and smaller paintings, but was not a little remarkable as the work of a man who had been an academical for almost half a century,

and of whose artistic efforts an encomiastic account had been published nearly 60 years before. (See 'The Looking Glass. . . A True History of the Early Years of an Artist. By Theophilus Marcliffe,' [William Godwin], 12mo, London, 1805). The 'Toy Seller' was the veteran's last effort. He died at his house, Linden Grove, Kensington, on the 7th of July, 1863, at the age of 77. His great artistic ability has been already spoken of at sufficient length, and his chief works enumerated. How he achieved eminence, the earnest persistent industry, and conscientious, student-like feeling with which, for over half a century, he pursued his chosen occupation, may be seen in the remarkable series of drawings and studies which the nation possesses, alongside his finished pictures, at South Kensington. The earliest engravings from his designs are in Marcliffe's 'Looking Glass,' referred to above, and in a series of once popular children's books, published by William Godwin, between the years 1807 and 1810, under the titles, 'The Butterfly's Ball,' 'The Lions' Parliament,' 'Cats' Concert,' and the like. Examples of his art at its highest are given in 'The Masterpieces of William Mulready. Memorials of William Mulready,' by F. G. Stephens. Illustrated by 14 photographs of his most celebrated paintings, 4to, 1866.

MUNCH, PETER ANDREAS [E. C. vol. iv. col. 385]. This indefatigable Norwegian antiquary and philologist died on the 25th of May, 1863, at Rome, where he had gone for the second time to examine the MSS. in the library of the Vatican.

MUNRO, ALEXANDER, sculptor, was born in Sutherlandshire, in 1826; studied in Edinburgh, and when about five-and-twenty, came to London, where, under the patronage of the Sutherland family, he found ample occupation. He first attracted public notice by reliefs of a poetic character, and by some statues of children, and it was in these that he continued to excel, though he found the making of busts and portrait statues the more profitable employment. His statues and groups of children were distinguished by rare elegance and loveliness, and there was much fancy though not much vigour in his poetic medallions. In larger works he was less successful. Of his busts and statues the chief merit was their fidelity as likenesses. For some years the state of his health rendered necessary a winter residence in a warmer climate than that of England. He built for himself a villa (La Tourelle) at Cannes, and there he died, on the 10th of January, 1871.

MURE, WILLIAM, an eminent Greek scholar and historian, member and subsequently head of a landed family which had been settled for four or five centuries in the counties of Ayr and Renfrew, was born at Caldwell, in Ayrshire, on the 9th July, 1799. He was educated successively at Westminster and the University of Edinburgh; and repaired for the completion of his studies to the University of Bonn, where he imbibed or developed his tendency to the investigation of classical antiquity. He early attracted the notice of Jeffrey by the ability which he displayed in articles contributed on Spanish Literature and other subjects, to the 'Edinburgh Review,' in 1824 and 1825; a few years after which he produced his first work, the result of an investigation into the true era of Sesostris, or Rameses, the first king of the nineteenth Egyptian dynasty, whose accession he placed between 1410 and 1400 B.C., which was entitled, 'Brief Remarks on the Chronology of the Egyptian Dynasties. Showing the Fallacy of the System laid down by Messrs. Champollion in two Letters on the Museum of Turin,' 8vo, London, 1829. This work was succeeded by 'A Dissertation on the Calendar and Zodiac of Ancient Egypt; with Remarks on the first Introduction and Use of the Zodiac amongst the Greeks,' 8vo, Edinburgh and London, 1832, a learned and elaborate treatise, in the first section of which the peculiarities of the form of year used by the Egyptians are generally treated; the three following sections being devoted to a more minute analysis of the primitive form and probable origin of the Egyptian calendar, astrological and civil; and the fifth and concluding section to the examination of the probable period and circumstances of the first introduction of the Zodiac into Greece. Having spent much time abroad, and especially having wintered at Rome in 1836-37, and having subsequently sojourned at Florence, Colonel Mure—who derived his military title from being commandant of the Renfrewshire militia—embarked at Ancona on the 17th of February, 1838, for Corfu, after which he spent more than two months in acquainting himself directly with the topography and antiquities of other parts of Greece, insular and continental. The record of his Hellenic travels, after which he resumed for a season his intermitted residence at Florence, was published with the title of 'Journal of a Tour in Greece and the Ionian Islands,

with *Remarks on the Recent History, Present State, and Classical Antiquities of those Countries*, 2 vols. 8vo, Edinburgh and London, 1842. On the 8th of December, 1846, he was elected without opposition to a seat in the House of Commons as member for Renfrewshire. He was again returned in the general elections of 1847 and 1852, and on each occasion without opposition; but in 1855, in the face of failing health, retired from parliamentary life by the acceptance of the Chiltern Hundreds. Towards the end of 1847 he was elected Lord Rector of the University of Glasgow, and on the 4th of January, 1848, delivered, and subsequently published, his 'Inaugural Address,' &c., 4to, Edinburgh, 1848. Colonel Mure, who was J. P. and D. L. for Renfrewshire, was a zealous and efficient commanding officer of militia, warmly interested in the furtherance of Scottish agriculture, and generally in every movement which had for its object the improvement of the condition of his fellow-countrymen. He died on Sunday, April 1st, 1860, at Kensington Park Gardens, London, leaving behind him the great literary work of his life in a state of incompleteness. This work was his 'Critical History of the Language and Literature of Ancient Greece,' of which he lived to publish 5 vols. 8vo, London, 1850—57, second edition, 4 vols. 8vo, London, 1859, a work of profound and comprehensive learning, written in a style at once thorough, genial and liberal. The first three volumes of the 'History,' are exclusively occupied with the mythical period of ancient Hellas, embracing biographical and critical sketches of the epic, cyclic, and lyric poets; whilst the fourth and fifth volumes are conversant about the Greek historians, from the fragmentary or traditional predecessors of Herodotus, and the "Father of History" himself, to Thucydides, Xenophon, and others of minor importance. At the time of his death, Colonel Mure was engaged on a sixth volume, to be devoted to the exposition of the Attic drama. He was the author of several fugitive papers, and was to a slight extent engaged in controversy, chiefly, however, in the defence of his opinions from the attacks of hostile critics, to some of whom he was obnoxious as being too conservative of old and long-received traditions. In 1854, he prepared for the press, and presented to the Maitland Club, 'Selections from the Family Papers preserved at Caldwell,' illustrative of the local history of the Counties of Renfrew and Ayr, and enriched with valuable notes from his own pen.

MUSHET, DAVID, the chief founder of the iron manufacture in Scotland, was born at Dalkeith, in 1772. He was brought up as a metal founder, and in 1791, became connected with the Clyde Iron Works, near Glasgow. Although engaged only as an accountant, he soon took an interest in the progress of the manufacture, and made many experiments in his leisure hours on the smelting of iron, and its conversion into steel. For some time he worked in this way until two or three o'clock in the morning, resuming, nevertheless, his duties in the counting-house at six o'clock. He first followed Fourcroy's rules in his treatment of the metal and its ores, but afterwards resolved to work out his results in his own way; and became so skilled in chemistry as to be regarded as the best assayer at the works. In 1794, he discovered the metal titanium in the hearth of the blast-furnace; and, in 1800, took out a patent for a new mode of combining iron with carbon in the production of steel. The managers of the works became, after a time, jealous of his independent research, and dismissed him. In 1801, an incident occurred, which was of great importance to the iron manufacture, at that time small in Scotland. He was engaged, with a partner, in erecting the Calder Iron Works. Crossing the river Calder one day, near Old Monkwell, he picked up and took home a bit of ironstone. On analysing it, he found it to be so rich in metal as to yield 50 per cent. of protoxide of iron. Examining the country around, he ascertained that rich beds of this stone exist in the western counties of Scotland, belonging to the upper part of the coal formation; and he found that there is also so much coal with the iron as to permit of smelting with only a small portion of extra fuel. Hence the introduction of the celebrated *black-band* carboniferous ironstone. The old ironmasters at first ridiculed it as "wild coal," but it has enriched Scotland with millions sterling in the last seventy years. As an iron manufacturer, first in Scotland, and then in Dean Forest, Mr. Mushet introduced many improvements in metallurgic processes—in ascertaining the best temperature for fusing malleable iron; preparing steel from bar iron by a direct action of carbon on the iron; ascertaining the influence of oxide of manganese on iron and steel; determining the qualities of different oxides of iron in the puddling furnace; showing that anthracite, aided by the hot blast, might be employed as fuel for smelting iron, &c. His

discoveries concerning manganese were instrumental, through the medium of Heath's patent, in giving a vast impetus to the steel manufacture; while the great smelting works at Merthyr Tydvil were almost equally benefited by his researches on anthracite. For thirty seven years, from 1798 to 1835, he contributed papers to the 'Philosophical Magazine,' and other journals, on a large number of important matters connected with the manufacture, such as the qualities of ores; the blast furnace; assaying; fuel for iron smelting; air furnaces for cast-iron; the conversion of iron into steel; crystallization of iron, &c. These were collected in 1840, into a valuable volume, 'Papers on Iron and Steel.' He also wrote 'Blast Furnace,' and 'Blowing Machine,' for Rees's Cyclopædia; and 'Iron,' for the supplement to the Encyclopædia Britannica. Mr. Mushet died at Monmouth, June 13th, 1847. The services which he rendered to the iron and steel manufactures are traced in Smiles's 'Industrial Biography.'

MUSPRATT, JAMES SHERIDAN, chemist, was born at Dublin, March 8, 1821. He received his education at Liverpool, where his father, Mr. James Muspratt, had established extensive chemical works. After travelling in France and Germany, he joined the Andersonian University at Glasgow. He studied under the late Thomas Graham, whom he followed to London when the latter became professor of chemistry at University College. Before he had completed his seventeenth year, he was entrusted with the chemical management of Peel Thompson's Print-works at Manchester. After this he went to America, joined in a partnership which proved unsuccessful, and returned to England. In 1843 he went to Germany, and studied under Liebig at Giessen. Here he remained some years, and attracted attention by papers published in Liebig and Wöhler's 'Annalen,' on the sulphides and other chemical compounds. He was associated with Hofmann (who was then, like himself, a pupil of Liebig) in the discovery of toluidine and nitraniline, two of the organic bases among the coal-tar series. In 1843 he published an English translation of Plattner's 'Treatise on the Blowpipe,' and made considerable additions to it in later editions. In 1848 he married Miss Susan Cushman, the American actress. In 1849 appeared his 'Outlines of Quantitative Analysis.' About 1850 he established a College of Chemistry at Liverpool, which has been the means of training many practical chemists. In 1854 he commenced writing a 'Dictionary of Chemistry,' his chief work; this has had a large sale in England and America, and has been translated into French and German. His scientific papers, inserted in Liebig and Wöhler's 'Annalen,' the 'Chemist,' the 'Proceedings of the British Association,' the 'Pharmaceutical Journal,' the 'Proceedings of the Edinburgh Royal Society,' the 'Annals of Pharmacy,' the 'Dublin Royal Society's Journal,' the 'Chemical News,' and other journals, relate to bleaching powder, the acids and salts, the blowpipe, mineral waters, coal-tar products, the action of metallic compounds on the organs and tissues of the body, &c. He also wrote several memoirs of chemists in the 'Lancet' and the 'Medical Times.' Dr. Muspratt died at West Derby, near Liverpool, February 3, 1871. He was Ph.D., a fellow of the Chemical Society and of the Royal Society of Edinburgh, and a member of the Royal Irish Academy.

MUSSCHER, MICHIEL VAN, a celebrated Dutch painter, was born at Rotterdam, in 1645. He was a scholar of A. Van Tempel, but studied also under Metz, and A. Van Ostade. He painted chiefly small portraits, and conversation-pieces, in both exhibiting great beauty of colour and chiaroscuro, and a pleasing, quiet manner, without much originality. His pictures, which are not numerous, have of late years risen much in the estimation of English collectors; in his own country they have long been highly valued. There are excellent examples of his pencil in the Hague Gallery, and in the public and private collections of Amsterdam and Rotterdam. Musscher died at Amsterdam in 1705.

MUSSET, LOUIS CHARLES ALFRED DE, commonly known as Alfred de Musset, a celebrated poet and man of letters, who has sometimes been called the French Tennyson, was born at Paris, on the 11th of November, 1810. He was a son of M. Victor Donatien de Musset, better known as Musset-Pathay, a government official, who died chief of the bureau of military justice, and biographer of J. J. Rousseau, and editor of his works, 'Œuvres Complètes,' &c., 22 vols. 8vo, Paris, 1818-20, and other editions; and was educated at the Collège Henri Quatre, where he early distinguished himself, and formed a friendship with the Duc de Chartres, afterwards Duc d'Orléans, who was one of his fellow-students. He is said to have produced a tragedy so early as 1826; in 1827, carried off a prize in philosophy; and in

1828, published a slight dramatic piece of which De Quincey supplied the motive, entitled, 'L'Anglais Mangeur d'Opium.' Various professions—medicine, law, art, and finance—which he tried successively, failed to fix his attention; and in 1830, having been encouraged in his literary predilections by intercourse with Charles Nodier and Victor Hugo, he produced his first important work, entitled, 'Les Contes d'Espagne et d'Italie,' comprising tales and dramas in verse, which presented a remarkable combination of vigour, fancy, and erotic breadth and boldness. To this volume succeeded, in 1833, a second collection, which varied as dramatic, pathetic, and Byronic, entitled, 'Le Spectacle dans un Fauteuil,' and 'La Confession d'un Enfant du Siècle,' 2 vols. 8vo, Paris, 1836, new editions, 2 vols. 12mo, Paris, 1840—45, and 12mo, Paris, 1859, which was published after a tour in Italy with Georges Sand. From 1833 to 1840, he published several poems in the 'Revue des Deux Mondes,' amongst which the most remarkable were 'Rolla,' notorious for the startling impiety of its apostrophes, 'Lettre à Lamartine,' 'Espoir en Dieu,' and 'Les Nuits,' which comprised 'La Nuit de Mai' (May 18th, 1835), 'La Nuit de Décembre' (December 1st, 1835), 'La Nuit de Août' (August 15th, 1836), and 'La Nuit d'Octobre' (October 15th, 1837), four poems which have been regarded as marking the culmination of his lyrical achievements. During the political complications of 1840, he answered Becker's German war-song in regard to the Rhine, with a poem commencing "Nous l'avons eu, votre Rhin allemand," which was much on the tongues of the Paris people during the very earliest stages of the war of 1870—71, between France and Prussia. Whilst engaged in the constant exercise of his literary powers, he was appointed to the office of librarian to the ministry of the interior, an appointment which he owed to the influence of the Duc d'Orléans, whose death, July 13th, 1842, the result of a fall from his carriage, he celebrated in one of his most pathetic and powerful poems.

After the revolution of 1848, M. de Musset was deprived of his office, in which he was subsequently reinstated by the Emperor Napoleon III., and with which he conjoined the appointment of reader to the Empress. The irregularities of his life enfeebled the force of his genius, and a volume of verse, 'Poésies Nouvelles,' 12mo, Paris, 1850, new edition, 12mo, Paris, 1862, gave evidence of the premature decline of his intellectual energy. He was, nevertheless, selected in February, 1852, to fill the seat in the Académie Française left vacant by the death of M. Dupaty; and still carrying out, so far as his impaired faculties would allow, the desultory pursuits of his literary life, he died at Paris on the 1st of May, 1857, leaving behind him several unpublished works, and an unfinished drama.

M. Alfred de Musset was a prominent contributor to the 'Revue des Deux Mondes,' to which he supplied dramas, comedies, proverbs, novels, poems, and critical and miscellaneous articles, many of which were afterwards re-published, in various forms and groupings, and in several editions. Of his dramatic works thus first issued may be mentioned, 'André del Sarto : Drame en deux Actes et en Prose,' 12mo, Paris, 1851; 'Les Caprices de Marianne : Comédie en deux Actes, en Prose,' 12mo, Paris, 1851; 'Un Caprice : Proverbe en un Acte,' 1847, new edition, 12mo, Paris, 1864, English (adapted) translation, entitled, 'A Good Little Wife : A Comedy in One Act,' forming vol. xvii. of 'Lacy's Acting Edition of Plays,' 12mo, London, 1860, &c.;

'Fantasio,' of which an English version was published in 12mo, London, 1852 (?); 'On ne badine pas avec l'Amour : Comédie en trois Actes et en Prose,' 8vo, Paris, 1861, which was first produced at the Théâtre Français, on the 18th of November, 1861, and was played in London, in the season of 1871, by M. Got and his company of the Comédie Française. The foregoing dramatic works were included, with others, in a collection of 'Comédies et Proverbes,' 2 vols. 12mo, Paris, 1840, 1848, 1851, "seule édition complète, revue et corrigée par l'Auteur," 2 vols. 12mo, Paris, 1856, 1861, &c.

Amongst the novels first contributed to the 'Revue des Deux Mondes,' may be mentioned 'Les Deux Maîtresses,' 'Emmeline,' 'Le fils du Titien,' and 'Frédéric et Bernerette,' the last of which has been regarded as his best, and all of which were included in a collection entitled, 'Nouvelles,' &c., 2 vols. 8vo, Paris, 1840, 12mo, Paris, 1860, &c.

Various collections, or partial collections, have been made of the several productions, both in prose and verse, of Alfred de Musset, in his lifetime and since his death. These include 'Poésies Complètes,' 12mo, Paris, 1836, "nouvelles éditions, revues, corrigées et très augmentées," 12mo, Paris, 1847, 1849, 1851, &c.; 'Œuvres Posthumes,' 12mo, Paris, 1860; and 'Œuvres Complètes : avec Lettres inédites, Variantes, Notes, Index, Fac-simile, Notice biographique par son Frère. Édition dédiée aux Amis du Poète, ornée de 28 Dessins de M. Bida, gravés sur Acier, sous la Direction de M. Henriquel Dupont, et d'un Portrait d'Alfred de Musset, gravé par M. Danguin, d'après l'Original de M. Landelle,' 10 vols. 4to, Paris, 1865. Amongst the critiques called forth by the works and the career of Alfred de Musset, may be mentioned one which was contributed by Mr. F. T. Palgrave, to the first annual volume of 'Oxford Essays,' 8vo, 1855. His elder brother,

PAUL EDMOND DE MUSSET, born at Paris, November 7th, 1804, has also distinguished himself as a novelist and dramatist. He edited the 'Œuvres Complètes,' 10 vols. 4to, Paris, 1865, of his brother, Alfred de Musset, of whom he also furnished a biography.

MYLNE, WILLIAM CHADWELL, son of ROBERT MYLNE (E. C. vol. iv. col. 413), was born 6th April, 1781. While still a boy he assisted his father in engineering works, and at the age of thirty succeeded him as engineer to the New River Company. The rapid extension of the metropolis and the competition of rival water companies rendered the post an arduous one. The old wooden pipes, which up to 1810 were the chief water conduits, would not now stand the increased pressure; cast-iron pipes, at the cost of nearly half a million sterling, were substituted under Mylne's direction. He also had a large engineering practice in the Fen country and elsewhere; he erected a number of bridges, such as the single arched iron bridge over the Cam at St. John's College, Cambridge; and he was architect of the church of St. Mark's, Clerkenwell. He also succeeded his father as surveyor to the Stationers' Company, and was much engaged before Parliamentary Committees on Water, Dock, and Drainage works. In 1852, in conjunction with his son, he undertook new works for the New River Company to the extent of three quarters of a million sterling. He was during many years the guiding hand in the Society of Engineers known as the 'Smeatonians.' He was elected into the Royal Society in 1826. He died on the 25th of December, 1863.

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* **NADAR**, a name assumed by FELIX TOURNACHON, French designer, writer, and aeronaut. He was born at Paris, April 5, 1820. Under the pseudonym of Nadar he, about 1840, began writing for periodical publications, to which he contributed a large number of light and ephemeral papers. Amongst other undertakings, he commenced a gallery of contemporary celebrities, under the title of 'Panthéon Nadar,' but though it had some success abroad he did not long continue it. For a time he practised photography, and his portraits were awarded more than one medal. At the same time he continued his publishing speculations, and contributed both with pen and pencil to the

'Charivari,' the 'Journal pour Rire,' 'Polichinelle,' &c., and wrote some light dramatic pieces and pantomimes which lived their hour on the stage. In 1863 he turned his attention to aërostation, and attracted notice by the large dimensions and assumed excellence of a great balloon called the 'Géant,' of which and a voyage made in it he published an account, 'Mémoires du Géant : A Terre et en l'Air,' 18mo, Paris, 1864. His ascents and schemes in that and subsequent years are briefly noticed in BALLOON, E. C. S., ARTS AND SCIENCE DIVISION.

NAPIER, VICE-ADMIRAL SIR CHARLES JOHN, K.C.B., M.P. [E. C. vol. iv. col. 442]. The narrative and

defence of the Baltic expedition referred to in the memoir just cited appeared in 1857 in a very thick 8vo volume, with the title of 'The History of the Baltic Campaign of 1854, from Documents and other Materials furnished by Vice-Admiral Sir C. Napier, K.C.B. Edited by G. Butler Earp;' but this injudicious book did nothing to remove the feeling of dissatisfaction with which the conduct of the campaign was generally regarded. Admiral Napier died on the 9th of November, 1860. In 1862 was published, 'The Life and Correspondence of Admiral Sir Charles Napier, K.C.B.; from personal Recollections, Letters, and Official Documents, by Major-General Elers Napier,' 2 vols. 8vo.

* NAPIER, ROBERT CORNELIS, BARON NAPIER OF MAGDALA, was born in Ceylon, December 6, 1810. After receiving his education at Addiscombe Military Academy, he went to India, entered the Bengal Engineers in 1826, and was engaged for nearly twenty years in the Public Works Department. His chief work was the construction of the military station at Umballa, with the finest barracks at that time existing in India; this was commenced in 1842, at which time he bore the rank of captain. When the Sikh war broke out in 1845, he obtained leave of absence from his civil duties, and took part in the battles of Moodkee, Ferozeshah, and Sobraon. With the rank of major, he was appointed engineer to the Durbar of Lahore, and constructed extensive barracks near that city. In 1848 he was senior engineer at the reduction of Mooltan; then he accompanied General Whish to the Chenab, served under Lord Gough at Gujerat, and was promoted to the rank of colonel. In 1849 Earl Dalhousie appointed him engineer-in-chief of the newly-annexed Punjab. During the next eight years his skill was well displayed in the making of roads, the construction of irrigation canals, and the erection of barracks and public buildings; indeed Napier was one of the best assistants of the Lawrences in their development of the resources of the Punjab. When the mutiny broke out in 1857, he was in England on sick leave; but, hastily returning to Calcutta, he became chief of the staff to Outram's relieving force at Lucknow, where he was wounded. With the rank of brigadier; he was engineer-in-chief at the same place under Sir Colin Campbell (afterwards Lord Clyde), and was knighted for his services. In 1858 he joined Sir Hugh Rose in the harassing campaign in Central India and Rajpootana, where they had the fierce and astute rebel chieftain Tantia Topee against them; during the whole of the summer months, from March to September, long marches and severe fighting were almost incessant, amid the vicissitudes of intense heat and heavy rains. In 1860 he commanded a division of Sir Hope Grant's army in China, and took part in that short but decisive campaign. In 1861 he was raised to the rank of major-general, made a knight of the Bath, and succeeded Sir James Outram as military member of the Governor-General's Council. In 1865 he became commander-in-chief of the Bombay army, with the military rank of lieutenant-general. When the British government decided on sending a military expedition to Abyssinia in 1867, they gave the command to Sir Robert Napier. He organized the greater part of the arrangements at Bombay, sent off the pioneer force in September, and the main body in October. He issued a proclamation to the chiefs and people of Abyssinia in November; but did not himself land in that country till January, 1868. On the 2nd of April he arrived before Magdala; and by the 13th King Theodore was dead, and the fortress stormed. By the exercise of great forethought and activity, Napier brought back the whole of his army to the coast before the rainy season began; and ended his campaign with a smaller loss of life than was ever known in a force of such magnitude. In July he landed at Dover. A vote of thanks to him and his army was agreed to by both Houses of Parliament; he was raised to the peerage; and an annuity of 2000*l.* a year was granted to him and his next heir male. He was also made G.C.B. and knight of the Star of India. The extreme costliness of the Abyssinian expedition led to the appointment of a Commission of Inquiry; and this Commission reported, in 1870, that the cost had in part been occasioned by divided authority in India and in England; but no direct blame was attached to Lord Napier on this ground. He was appointed commander-in-chief of the army of India in 1870, and assumed the duties of this post on the 9th of April.

NAPIER, LIEUT.-GENERAL SIR WILLIAM FRANCIS PATRICK, K.C.B. [E. C., vol. iv. col. 424]. In 1857 Sir William Napier published a memoir of his brother, Sir Charles James Napier—'The Life and Opinions of General Sir Charles James Napier, G.C.B.,' 4 vols. 8vo—in which the idolatry of the BIOG. DIV.—SUP.

Napiers was carried to the extremest fanaticism, and every one who had by any chance interfered with the plans or prospects of either of the brothers was attacked with the most contemptuous acerbity. In 1858 General Napier edited 'William the Conqueror: a Historical Romance. By General Sir Charles J. Napier, G.C.B., &c. He died on the 12th of February, 1860. A marble statue has been erected to his memory in St. Paul's Cathedral.

* NAPOLEON III. CHARLES LOUIS NAPOLEON [BONAPARTE, E. C. vol. i. col. 805]. The Congress of Paris completed its labours on the 30th of March, 1856, when articles of peace were signed, and a treaty entered into and guaranteed. The epistolary and other demonstrations made by the Emperor in the cause of Italian liberty and independence were not of a nature sufficiently active to satisfy the aspirations of the wilder patriots, and the impatience of Tibaldi, Bartolotti, Grilli, and others broke out into a plot against the life of the Emperor, which, having become known to the police, was forestalled, July, 1857, by the arrest of the conspirators, who were convicted and sentenced to various punishments. In August following, the Emperor and Empress visited Queen Victoria at Osborne; and, on the 25th of September, the Emperor Napoleon met the Emperor of Russia at Stuttgart. Upon the unsuccessful attempt made by Orsini and others, January 14th, 1858, on the life of the Emperor of the French, the latter forthwith made a demand upon the British Government for an alteration of the laws affecting political and other exiles in England, to meet the case of Dr. Bernard and other refugees in London, who were supposed to be implicated in the attempt of Orsini. This demand produced little result, except the downfall of the administration of Lord Palmerston, who, in his 'Conspiracy to Murder Bill,' had evinced too great a readiness to comply with its terms; but in France the plot led, February 18th, to the passing of the Public Safety Bill, or 'Loi des Suspects,' which continued in force till the 31st of March, 1865. On the 11th of March, 1858, a pamphlet was issued with the title of 'Napoléon III. et l'Angleterre,' a sort of state-paper or manifesto, addressed alike to the people of France and England, and calculated to soothe the aggrieved feelings of the latter towards the Emperor, by whom the brochure was legitimately believed to have been inspired. The great increase in the naval and military strength of France, of which the purpose was undefined, caused uneasiness in England; but this feeling was considerably allayed by the Emperor's invitation to Queen Victoria to be present at the maritime fêtes at Cherbourg, where her Majesty met the Emperor on the 4th and 5th of August.

The threatening words addressed by the Emperor to the Austrian ambassador at Paris, January 1st, 1859, caused a panic throughout the exchanges of Europe; and a few months after, Louis Napoleon, regarding the invasion of Sardinia, his ally, by the Austrians, as a declaration of hostilities, quitted the Tuileries on the 10th of May for the seat of war in Italy, having previously appointed the Empress to be Regent in his absence. He landed at Genoa on the 12th, and, assuming the chief command of his army, took part in the combats and victories of the allies until the battle of Solferino, June 24th; and France and Italy believed that he intended to achieve the independence of the latter, and to make her free "from the Alps to the Adriatic." But in this expectation they were disappointed. On the 6th of July an armistice was abruptly proposed to the Emperor of Austria, who, on the 11th, met the Emperor of the French at Villafranca, where, on the following day, a peace was agreed to, the conditions of which were subsequently ratified by the treaty of Zurich, which, after protracted conferences between the Austrian and French envoys, was signed on the 10th of November. This temporising treaty, which fettered and crippled all patriotic aspiration after peninsular "unification," was annulled by the formation of the kingdom of Italy in 1861, when Napoleon III. recognised, June 4th, the title of Victor Emmanuel. Meanwhile the Italian campaign resulted in the territorial aggrandisement of the empire by the acquisition of Nice and Savoy, the treaty for the correlative cession and annexation of which was signed on the 24th of March, 1860. A further portion of Italian territory was acquired early in February, 1861, by the purchase, for four millions of francs, of the principality of Monaco.

The Emperor of the French had been for some time preparing the way for the abolition of the restrictions on commerce, when he announced a free-trade policy; and, assisted by the experience and counsel of Mr. Cobden, who was charged with a confidential mission for that purpose by the British

Government, a treaty of commerce between France and England was drawn up, which, being signed on the 23rd of January, 1860, went far to re-establish the Emperor in the same favour with the people of England as he had enjoyed in the earlier stages of the Crimean war. This good feeling was further developed by the concession to English subjects of a free entry into France without the necessity of passports, which took effect on the 1st of January, 1861.

The massacre of the Maronites by the Druses, in June, 1860, stirred the sympathy of the Emperor Napoleon, who undertook the protection of the Catholic population of Turkey, whither he despatched troops, who were withdrawn only after the suppression of the insurrection by the arms of the Sultan, and in deference to the expostulations of the British Government. With the latter he joined about this time in fitting out an expedition for the punishment of the Chinese for the acts of treachery of which they had been guilty towards the European powers with whom they had contracted commercial engagements. The Anglo-French army accomplished a victorious march up to Peking, where they destroyed the summer-palace of the Emperor, and dictated to his Government the terms of a peace, which was signed with much ceremony on the 26th of October, 1860, and which included articles of indemnification for the expenses of the war. An expedition against Cochin China resulted in the acquisition of six of the provinces of that country, March 28th, 1862.

In June, 1860, the Emperor of the French met the German sovereigns at Baden; and on the 6th of October, 1861, received the King of Prussia at Compiègne. In September, 1860, accompanied by the Empress, he visited Savoy, Corsica, and Algiers; in reference to the last of which he afterwards expressed peculiarly benevolent sentiments. "I repeat it," he wrote in a letter, dated February 6th, 1863, "Algiers is not a colony, properly speaking, but a realm. The natives have, like the colonists, an equal right to my protection, and I am as much Emperor of the Arabs as I am Emperor of the French." In the latter part of 1861, France, England, and Spain agreed to despatch a joint expedition to Mexico, for the purpose of exacting the redress of injuries of long continuance against the subjects of the respective allies, and the enforcement of pecuniary claims which were obstinately contested by the government of President Juarez. From this expedition the English and Spanish Governments receded in April, 1862; after which the French army alone continued the quarrel, and on the 10th of June, 1863, entered the capital amidst many demonstrations of enthusiasm, and succeeded in initiating an imperial form of government, of which the Archduke Ferdinand of Austria, thenceforth known as the Emperor Maximilian of Mexico, consented to be the head [MAXIMILIAN FERDINAND JOSEPH, E. C. S., col. 868]. France, at length, was obliged to abandon the enterprise—notwithstanding that it represented what the admirers of Napoleon regarded as "la plus grande idée du règne"—being threatened with war by the United States of America; and the last detachment of the French army was withdrawn from Mexico early in 1867, and in June of that year the Emperor Maximilian was dethroned, and executed at Queretaro.

On the 4th of November, 1863, the Emperor Napoleon issued a circular of invitation to a congress, for the purpose of considering the various questions that threatened to disturb the peace of Europe, and several of the powers promptly acceded to the proposal; but, having been declined by England on the 25th; it was never carried into effect. In the aggressive war against Denmark, waged by the allied forces of Prussia and Austria, in 1863-64, for the recovery of Schleswig-Holstein to Germany, England and France, notwithstanding the treaty of London, 1852, took no part; and this inactivity was the occasion of much animadversion and misapprehension. So far as France is concerned, it has been surmised that the Emperor was already under the influence of Count Bismarck, who held out the expectation of territorial advantages on the condition of his non-interference in the count's schemes of aggrandisement for Prussia. The official justification of the quiescent attitude assumed by the Imperial Government in this question contains passages which, read in the light of subsequent events, are interesting enough for transcription. "The Emperor," it said, "has always been disposed to pay great regard to the feelings and aspirations of nationalities. It is not to be denied that the national feelings and aspirations of Germany tend to a closer connection with the Germans of Holstein and of Schleswig. The Emperor would feel repugnance to any course which should bind him to oppose in arms the wishes of Germany. It may be comparatively easy

for England to carry on a war which can never go beyond maritime operations of blockade and capture of ships. Schleswig and England are far apart from each other. But the soil of Germany touches the soil of France, and a war between France and Germany would be one of the most burthensome and one of the most hazardous in which the French empire could engage."

On the 15th of September, 1864, the Emperor concluded a convention with the Italian government, which stipulated, on condition of the Papal government being at that time in a condition of competent self-defence, and of non-interference from without by the King of Italy, for the evacuation of Rome by the French troops two years after the arrangement of the treaty. The last detachment of the French army of occupation accordingly evacuated Rome on the 11th of December, 1866. In the course of events this movement, however, was only for a time; for threatened political complications, chiefly arising from the impatience of Garibaldi in 1867, was made to justify the temporary renewal of the occupation of the Eternal City. On the 11th of June, 1866, the Emperor, after having alarmed Europe by the expression at Auxerre, May 6th, of his detestation of the treaties of 1815, declared that "France would observe an attentive neutrality in the war between Austria and Prussia," then impending; after the close of which, by the peace of Prague, the Emperor, in his speech at the opening of the French Legislature, February 14th, 1867, claimed to have "arrested the conqueror at the gates of Vienna." The early part of 1867 was characterised by various political reforms; and during the continuance of the International Exhibition, which was opened at Paris on the 1st of April, the Emperor was the host of several crowned heads, notably, in June, of the Emperor of Russia and the King of Prussia. The Emperor of Austria, who met Napoleon III. at Salzburg, in August, was also received later in the year, at Paris, October 23rd—November 5th. The *jour de l'an* of 1868 was marked by a friendly reception of the diplomatic body; but also by a bill, which passed into law in February following, by which the army was raised to a force, virtually, of 1,200,000 men. In June, the press laws underwent considerable relaxation; and after an election in which an increased number of opposition deputies was returned, the Emperor issued a message to the Legislature, July 12th, 1869, announcing important political changes, by which, *inter alia*, the responsibility of ministers was introduced; and on the 10th of September a new constitution was promulgated, by which the Emperor abdicated personal government, and invited the nation to a participation in the management of its affairs. The 15th of August, 1869, the centenary of the birth of Napoleon I., was signalled by a general amnesty to political offenders, and by the granting of increased pensions to the survivors of the *grande armée*. The progressive concessions to freedom on the part of the Emperor attracted new friends and conciliated old foes, so that at length a new liberal ministry was formed, January 3rd, 1870, by M. Emile Olivier, who for a long series of years had been in opposition, and to whom the Emperor addressed a letter, dated March 22nd, agreeing to certain alterations in the constitution of the Senate. "I request you," the Emperor wrote, "to come to an understanding with your colleagues, and lay before me the draught of a *Senatus Consultum*, which shall firmly fix the fundamental dispositions derived from the *plébiscite* of 1852; and which shall divide the legislative powers between the two Chambers, and restore to the nation that portion of constituent power it had delegated to me." The *Senatus Consultum* was received with favour; and the "liberal modifications introduced since 1860" were approved by a *plébiscite* which showed a majority of 7,527,379 supporters of the Emperor and the recent political changes, against a minority of 1,530,909 who voted against them. The ceremony of formally announcing to the Emperor the result of the *plébiscite* was performed on Saturday, May 21st, in the Salle des États of the Louvre; and the Olivier ministry, with slight modifications, continued its existence until the 9th of August, 1870, having, especially in its earlier stages, done good service to the empire, which it carried successfully through the trying circumstances attending the shooting of Victor Noir by Prince Pierre Bonaparte, on the 10th of January, at Auteuil.

For some time there had been a growing jealousy, on the part of the government and the people of France, of the increasing power and prestige of Prussia, fortified as these were by the military successes against Denmark, in 1864, and against Austria, in 1866—a feeling which was not lessened by the fact that Prussia had succeeded in baffling the designs of France upon Luxembourg, in 1867, although at the price of the neutrality, and the destruction of the fortifications, as decreed by a congress held in

London, between the 7th and 11th of May, in the same year. Other causes, whether secret or open, of misunderstanding, were not wanting, and the opportunity of an appeal to arms was eagerly embraced by both countries—an opportunity which was found, or made, in the circumstances attending the candidature of Prince Leopold of Hohenzollern-Sigmaringen for the throne of Spain, in the beginning of July, 1870. This candidature was violently denounced by the French Government, and in deference to the outraged feelings of France, and in accordance with the representations of Great Britain and the consent of the King of Prussia, the prince on the 12th of July declined the proffered crown. The French Government, not content with a simple renunciation, sought to exact a guarantee from the King of Prussia that such an offer, if repeated, should not be accepted. The King of Prussia not only refused the guarantee demanded, but declined to receive Count Benedetti, the French ambassador, when the latter sought to intrude upon his privacy, on the 13th of July, at Ems. All representations made in favour of peace by friendly neutrals were powerless to allay the animosity of the parties to the interchange of insults; and the Emperor Napoleon, driven to take that step, as he afterwards told Count Bismarck, by the pressure of French public opinion, declared war against Prussia, on the 15th of July, amidst the enthusiastic and almost unanimous approbation of the Chambers. On the 28th he set out to undertake the chief command of the army, and on the same day issued from Metz a proclamation, in which he warned his soldiers that the war would be long and severe. The sequel revealed in catastrophe the rottenness of the military system of France. Disaster followed disaster in rapid succession, until the emperor felt compelled to surrender himself at Sedan, on the 2nd of September, to the King of Prussia, who allotted him Wilhelmshöhe, near Cassel, as his residence, where he arrived on the evening of the 5th, having, the day before, been formally deposed from the empire, on the motion of M. Jules Favre. The flight of the Empress from Paris was almost coincident with the sentence of personal and dynastic deposition; and she repaired to Hastings, which she reached on the 8th of September, her arrival having been anticipated by that of her son, the Prince Imperial, on the previous day. The Emperor continued for several months at Wilhelmshöhe, where, on the 31st of October, he received a short visit from the Empress, and where he assisted in the production of a pamphlet, in which he sought to evade the responsibility of recent disasters, entitled, 'Note sur l'Organisation Militaire de la Confédération de l'Allemagne du Nord,' Wilhelmshöhe and Brussels, January, 1871. In March the Emperor regained his freedom, and repaired to England, being met at Dover by the Empress and the Prince Imperial, whom he accompanied to their residence at Camden House, Chiselmhurst, where they have hitherto found a home.

The reign of the Emperor Napoleon III., although closing in misfortune and gloom, and chequered throughout its course by many shadows, had on the whole been for France a continued progress in splendour and prosperity. Treaties, commercial and otherwise, were entered into with the leading powers of Europe, as well as with a few of those of Asia; the city of Paris, under the lavish and imperious administration of Baron Haussmann, grew from one stage of magnificence to another; the fleet was re-organised and developed; and the army, down to the last abrupt and fatal catastrophe, had a prestige equal to that of any other state in the world; the whole system of public instruction was remodelled; and science, art, and letters were fostered by the establishment of new sanctions and encouragements, especially of the quinquennial prize of 100,000 francs, called the Prix de l'Empereur, August 12th, 1864. But to all this there was a dark reverse: luxury, enervation, and moral and mental depravity spread from the court outwards, corruption and decay were rapidly germinating, and hence in the hour of trial the entire imperial system collapsed.

Besides directing a voluminous issue of the 'Correspondance' of Napoleon I., and either producing or inspiring various political pamphlets, in which the position of France and her ruler was, from time to time, defined or expounded, with reference to the current affairs of Europe, the Emperor Napoleon III. is the admitted author of two volumes—the third and concluding one being indefinitely postponed—entitled, 'Histoire de Jules César,' 4to and 8vo, Paris, 1866-66. In this work, which has been translated into English, German, Dutch, Spanish, Russian, and Hungarian, the imperial author seeks, in a phase of ancient Roman history, an analogy and a justification for the events of the *parvenu* empire of his own family. Other works, either produced by the Emperor or intimately connected with him,

include, 'Œuvres de Napoléon III.,' 4 vols. 8vo, Paris, 1864-67; 'Discours, Messages, Lettres, et Proclamations de S. M. Napoléon III. (1849-1861),' &c., 8vo, Paris, 1861; 'La Politique Impériale exposée par les Discours et Proclamations de l'Empereur Napoléon III., depuis le 10 Décembre, 1848, jusqu'en Février, 1868,' 8vo, Paris, 1868.

NARRIEN, JOHN [E. C. vol. iv. col. 458], died on the 30th of March, 1860, in his 78th year.

NARVAEZ, MANUEL RAMON MARIA, DUKE OF VALENCIA, a Spanish general and politician, was born on the 5th of August, 1800, at Loja, in Andalusia. Early following his inclination for a military career, he became a cadet in the Walloon Guards of Ferdinand VII., in 1815, the year after that monarch's restoration, and received his commission in 1820, just at the period when an insurrection forced the despotic king to return to constitutionalism. In 1822 and 1823 Narvaez opposed the insurrectionary and military movements of the party of reaction; and when the latter triumphed, by the help of a French army, in October of the latter year, he retired to his native place of Loja, where he continued till the death of Ferdinand (September 29th, 1833). In 1834, he fought with great courage and distinction on the queen's side, against the Carlists; and on the 25th of November, 1836, being in command of a division under the orders of Espartero, totally defeated Gomez at Majaceite. In 1838, after a successful campaign of three months against the brigands of La Mancha, he was named Captain-General of Old Castile and general-in-chief of the army of reserve; which commands he resigned, owing to the increasing influence of Espartero, whose rival for the highest offices he had for some time been considered. He retired to Loja; but having interested himself in an unsuccessful insurrection which broke out in November, 1838, at Seville, a city which sent him as deputy to the Cortes, he was obliged to seek refuge in France, whither Maria Christina, the queen-mother, after being deprived of the regency by Espartero, in October, 1840, also repaired. After a series of movements and intrigues for the restoration of Queen Christina and the overthrow of Espartero, who had assumed the regency in May, 1841, Narvaez placed himself at the head of a movement which was successful in both its issues. Landing at Valencia on the 27th of June, 1843, he marched upon Madrid, which he entered in triumph on the 24th of July. Espartero was compelled to retire to England; Queen Christina returned to Spain; and after the declaration of the majority of Isabella II., in November, 1843, and the promotion of Narvaez to be Lieutenant-General of Spain, the latter became, in May, 1844, President of the Council and Duke of Valencia, and, later in the same year, captain-general of the army. His administration, which lasted till March, 1846, was an open and declared reaction against the liberal party. In April, 1847, he accepted the post of ambassador to France, from which he returned to become, October 4th, the head of a new cabinet, over which, with a slight intermission caused by a misunderstanding with the Queen-Mother, he presided till January, 1851. He once more became President of the Council on the 12th of October, 1856, and laboured with much hardness and severity to restore the absolute integrity of the royal prerogative; and although his measures met with little opposition in the country, the intrigues of the court compelled his resignation in October, 1857. He returned to power on the 16th of September, 1864; and, resigning on the 21st of June, 1865, was succeeded by O'Donnell, whom he assisted, in June, 1866, to suppress a great military revolt at Madrid. In the following month, in association with Bravo Murillo, he succeeded O'Donnell in the administration of the government, and signalised his rule by extreme severity, exactions, and sentences of exile. In December, 1867, after a long suspension of its sittings, he convoked the Cortes, from which he subsequently obtained an indemnity for all the acts done by him without its authority or participation. Various attempts were made to destroy his power, by political votes, street-risings, and military insurrections; but, although both O'Donnell and Prim, the idol of the army, took part in them, they were all unsuccessful. Narvaez died on the 23rd of April, 1868, bearing down to the grave with him the last hope of the government of Queen Isabella, to whom he had been a loyal subject, and for whom he had pursued such courses of rigour and unscrupulousness as to entail upon his memory the reprobation of all friends of liberty, progress, and enlightenment.

* NAUMANN, KARL FRIEDRICH, mineralogist, was born at Dresden, May 30th, 1797. He was educated at Freiberg, Leipzig, and Jena; and the most influential of his teachers were Werner and Mohs. During the years 1821 and 1822, he made a

scientific tour in Norway, and after teaching, in a subordinate capacity, at the universities of Jena and Leipzig, he was appointed professor of crystallography at Freiberg, in 1826, and in 1835 professor of geognosy. In 1842 he removed to Leipzig, on receiving the professorship of mineralogy and geognosy in the university of that town. Besides some ninety or more papers relating to minerals, rocks, the geology of Saxony and Norway, the measurement of shells, and the special forms of the curves developed in shells, he has also written several works, some of which have had a large circulation as text-books. His 'Beiträge zur Kenntniss Norwegens,' 2 parts, 8vo, Leipzig, 1824, which was the main result of his Norwegian excursion, formed an excellent repository of what was then known of the rock-structure of Norway. Amongst his mineralogical works, we have 'Grundriss der Krystallographie,' 8vo, Leipzig, 1826; 'Lehrbuch der reinen und angewandten Krystallographie,' 2 vols., 8vo, Leipzig, 1830; 'Elemente der Mineralogie,' 8vo, Leipzig, 1846, eighth edition, 1871; 'Elemente der theoretische Krystallographie,' 8vo, Leipzig, 1856. His geological works comprise a 'Geognostische Skizze des Königreichs Sachsens,' contributed to the 'Gaea von Sachsen,' 8vo; descriptive explanations of some of the sheets of the geological survey map of Saxony; and of a 'Lehrbuch der Geognosie,' 2 vols., 8vo, 1850—1854, with an atlas, second edition, 3 vols., 8vo, 1858—1868, which last is almost an exhaustive manual of general lithology, stratigraphy, and palæontology. His system of mineralogy, first published in 1828, and subsequently modified, possessed considerable merits, inasmuch as he employed both the external characters and the chemical composition in drawing up his system, and thus succeeded in forming several natural groups.

NAUMANN, JOHANN ANDREAS, ornithologist, was born at Ziebigk, April 13, 1747. He was a man of wealth, who devoted himself to the study of birds, and who is known on account of some ornithological works he wrote, more especially a 'Naturgeschichte der Land- und Wasservögel des nördlichen Deutschlands und angrenzender Länder,' 22 parts, 8vo, Köthen, 1795—1804. It has passed through several editions, the latest being a much enlarged one, by his son, J. F. Naumann, assisted by Blasius, Baldamus, and Sturm, 8vo, 1822—1860, Leipzig and Stuttgart. He died May 15, 1826.

NAUMANN, JOHANN FRIEDRICH, son of the preceding, was, like his father, an ornithologist. He was born at Ziebigk, near Köthen, in Anhalt, February 14th, 1780, was educated at Dessau; and from there was called home in order to help in managing the family property. He is best known on account of his ornithological works, more particularly the edition of his father's work on the birds of Germany; 'Taxidermie,' 8vo, Halle, 1815, second edition, 1848; and in conjunction with C. A. Buhle, 'Die Eier der Vögel Deutschlands und der benachbarten Länder in naturgetreuen Abbildungen und Beschreibungen,' 8vo, Halle, 1818—1828. He also wrote a few papers on birds. He died at Ziebigk, August 15th, 1857.

NECKAM, ALEXANDER, whose name varies as Neckham, Necham, and Nequam, and who is also known as Alexander de Sancto Albano, an eminent scholar of the 12th and 13th centuries, was born at St. Albans in September, 1157, on the same night that King Richard I., who became his foster-brother, was born at Windsor. Not much is known of his personal history, except from a few autobiographic passages and allusions which occur in his works, especially in his poems, and from a small number of brief statements which are scattered through the pages of chroniclers and other writers of a date only a little more recent than his own. He received his earlier education at the Abbey of St. Albans; and became so proficient in learning that he was soon entrusted with the government of the dependent school of Dunstable. Desirous of a wider field, he did not continue long in this office; and in 1180 he is ascertained to have been acting as a professor of the seven arts, and particularly of logic, in the University of Paris, where, also, in the character of a student, he applied himself to canon law, theology, and medicine. He returned to England in 1186 or 1187, and resumed his functions of master of the school of Dunstable, which he again relinquished, after a tenure of about twelve months, for the purpose of entering one of the monastic orders. Being displeased at the levity with which the Abbot of St. Albans—who punned upon one of the forms, Nequam, of his name—received his application for admission into his society, which was of the Benedictine order, he assumed the habit of an Augustine canon in the monastery of Cirencester, of which he was elected abbot in 1213, having possibly, but not certainly, acted for some time previously as prior of St. Nicholas, at Exeter. His death,

according to the best authorities, took place in 1217, at Kemsey, in Worcestershire; and he was buried at Worcester.

Neckam attained the reputation of being a universal scholar, proficient in the whole circle of the sciences, including canon law, medicine, and theology. He was, besides, one of the most accomplished Latin poets of his time; and his language is distinguished by considerable purity and elegance. The greater part of his works exhibit a decided tendency to grammatical studies, his chief treatises in this kind being 'Isagogicum de Grammatica,' or an Introduction to Grammar; 'Corrogationes de Tropis et Figuris'; 'Repertorium Vocabulorum'; 'Distinctiones Verborum'; and 'De Accentu in mediis Syllabis'; some of which are preserved in the British Museum and in the libraries of Oxford and Cambridge. His work entitled 'De Utensilibus,' or 'De Utensiliis Nominibus,' is an early specimen of a class of tract at once descriptive and philological, which begins by giving an account of the various apartments of a house, from the bed-room to the kitchen, together with the furniture and apparatus proper to each; and which then proceeds to castles and other dwellings of strength or greatness, and finally to agricultural operations and the conduct of different trades and professions. This work, with the title of 'De Utensilibus,' is incorporated with 'A Volume of Vocabularies, illustrating the Condition and Manners of our Forefathers, as well as the History of the Forms of Elementary Education and of the Languages spoken in this Island from the tenth Century to the fifteenth. Edited from MSS., in public and private Collections, by Thomas Wright, Esq., M.A., F.S.A., &c., 4to, 1857, privately printed; and, with the title of 'De Utensiliis Nominibus,' is the second of three treatises which form the volume 'Lexicographie Latine du XII^e et du XIII^e Siècle. Trois Traités de Jean de Garlande, Alexandre Neckam, et Adam du Petit-Pont. Publiés, avec les Glosses françaises, par M. Aug. Scheler, Dr.Ph., 8vo, Leipzig, 1867. The most elegant of Neckam's poems is one on the monastic character, which is of frequent occurrence in manuscript, and is probably identical with that which, under the title of 'Ad Viros religiosos,' is generally cited as one of his lost productions. His most important poem, however, is a scientific treatise in elegiac verse, distributed into ten 'Distinctiones,' or books, which treat successively (1) of the creation; (2) of the orders of angels; (3) of stars, planets, and the heavenly bodies generally; (4) of meteorology and other branches of natural philosophy; (5) of the form of the earth and its geographical features; (6) of geology, and the nature and qualities of the metals and precious stones; (7) of the medicinal qualities of different plants; (8) of fruits, seed, &c.; (9) of the natural history of animals, with some remarks on the brain and senses of man; and (10) of the seven arts, and of science in general. Of his prose works on science the most popular is his 'De Naturis Rerum,' which to a great extent follows the order of the poem of which an analysis has just been given, and in which his natural-history sections are enlivened by anecdote. These two works have been published as one of the volumes of the series entitled 'Rerum Britannicarum Medii Ævi Scriptores: or, Chronicles and Memorials of Great Britain and Ireland during the Middle Ages,' published under the direction of the Master of the Rolls, and has for its special title, 'Alexandri Neckam, "De Naturis Rerum. Libri duo:" with the Poem of the same Author, "De Laudibus Divinæ Sapientiæ. Distinctiones decem." Edited by Thomas Wright, Esq., M.A., F.S.A., &c., 8vo, London, 1863. The theological treatises of Neckam are numerous and varied, expository, homiletic, and exegetical; and he is said to have produced commentaries on the Gospels, on Ecclesiastes, and the Song of Solomon, as well as on the Psalms, the Book of Proverbs, and the Prophecy of Ezekiel. His miscellaneous profane commentaries are conversant about some of the writings of Aristotle; the 'Metamorphoses' of Ovid; and a portion of Martianus Capella. He produced, likewise, a translation into Latin elegiac verse of Æsop's Fables; and his skill as a fabulist is attested by the incorporation of his 'Novus Avianus,' or portions of it, with two volumes of recent issue, entitled respectively, 'Poésies inédites du Moyen Âge, précédées d'une Histoire de la Fable Ésoopique par M. Édilestand du Méril,' 8vo, Paris, 1854, and 'Aviani Fabulæ xxxii. ad Theodosium, ex Recensione et cum Instrumento critico Gulielmi Froehner,' 8vo, Leipzig, 1862.

NECKER, LOUIS ALBERT, geologist, mineralogist, and zoologist, was born April 10, 1786. He was educated at Geneva. He inherited from his mother, Madame Necker de Saussure, and his uncle, Horace Benedict de Saussure, that love for natural-history studies which has rendered his mother's family so well known

in science. In 1806 and 1807, he lived at Edinburgh, and made some long excursions to the Hebrides. In 1810, he became the assistant professor of mineralogy and geology in the Academy of Geneva, and shortly after attained full professorial rank. As a professor he acquired most fame by the success which attended his field-excursions; and his best lectures were those which he delivered to his students in explanation of the mountains amidst which they were rambling. He made numerous excursions on his own account, and thus traversed most parts of France, Switzerland, Italy, and the whole chain of the Alps; but the country about the Lake of Geneva received most of his attention. Finding the climate too humid for his constitution, he established himself, in 1840, at Portree, in the Isle of Skye, where he devoted himself to the quiet though constant observation of natural phenomena; and it was at this small town that he died, November 20, 1861. All his works were published prior to 1842; but he collected many notes at Portree. His writings relate to a wide range of subjects, viz., mineralogy, physical geography, birds, but chiefly geology. A few of these may be noticed. One of the first subjects which he studied, was the migration of birds; and, after many years' observation, he published the result of his inquiries in a very interesting 'Mémoire sur les Oiseaux des environs de Genève,' which appeared in the 'Mémoires' of the Physical Society of Geneva, vol. ii. pp. 29-122, (1823). His first visit to Scotland furnished materials for his 'Voyage en Ecosse et aux îles Hébrides,' 3 vols. 8vo, Geneva, 1823. He proposed publishing a series of volumes on the Alps, under the title of 'Études géologiques dans les Alpes,' the first volume appeared in 1841, but no other has succeeded it. It contains a full account of the country about Geneva; and is noticeable as an application of the principles of the Lyellian school to the explanation of the geological phenomena occurring in his native district. One of his best papers was a 'Mémoire sur la Vallée de Valorsine,' published in vol. iv. of the 'Mémoires' of the Physical Society of Geneva, pp. 209-246 (1828). He proposed a natural method of classifying minerals, which was given in his 'La règne minéral ramené aux méthodes de l'histoire naturelle,' 2 vols. 8vo, Paris, 1835. (De Candolle, *Mémoires de la Société de Physique et d'Histoire naturelle de Genève*, vol. xvi. pp. 452-456).

NEES VON ESENBECK, CHRISTIAN GOTTFRIED, botanist and entomologist, was born near Erbach, in the Odenwald, February 14, 1776. He studied at Darmstadt, where his taste for natural history was first imbibed, and at Jena, where he graduated as doctor of medicine. On leaving the university, he settled at Frankfurt-am-Main, as a practising physician. While thus occupied, he published some works on freshwater algae and on mushrooms, which attracted so much attention, that, in 1818, the University of Erlangen appointed him professor of botany and director of the botanical garden. In the same year he became the editor of the 'Nova Acta Academiæ Cæsareæ Leopoldino-Carolinæ Naturæ Curiosorum;' and this important scientific serial received his editorial supervision for forty years. In 1819 he removed to Bonn, on being appointed professor of natural history, and established a botanical garden, which was managed by himself and his brother, T. F. L. Nees von Esenbeck. In 1831 he was transferred to the botanical chair at Breslau. In 1848 he was elected a member of the German parliament, and soon became a leader of the popular party. The powerful influence of his eloquence and personal character rendering him obnoxious to the government, he was removed from his professorship in 1851. By this event he was deprived of his means of subsistence, and during some of his last years he was reduced to the utmost penury. He died at Breslau, March 16, 1858. He was a most laborious worker, and his numerous writings stamp him as one of the leading systematic botanists of the present century. His services in connection with the academy *Naturæ Curiosorum* were also important; for he it was who revived it, after it had been dormant more than a quarter of a century, and he was largely instrumental, partly as its president for many years and partly as the editor of its works, in maintaining its high character. His most important or noticeable works were, 'Die Algen des süßen Wassers nach ihren Entwickelungsstufen dargestellt,' 8vo, Bamberg, 1814; 'Das System der Pilze und Schwämme,' 2 plates, Würzburg, 1816; 'Handbuch der Botanik,' 2 vols. 8vo, Nürnberg, 1820-21; 'Hepatica Hedwigii,' and 'Agrostologia Brasiliensis,' forming portions of volumes i. and ii. of Martius's 'Flora Brasiliensis'; 'Naturgeschichte der Europäischen Lebermoose,' 4 vols. 8vo, 1833-38; 'System Laurinearum,' 8vo, Berlin, 1836; 'Monographie der Ichneumoniden,' 2 vols. 8vo, Stuttgart, 1838; and 'Hymenopterorum Ichneumonibus

Affinium Monographiae,' 2 vols. 8vo, Stuttgart, 1834. Besides other botanical books, he also wrote numerous papers, some of which are important descriptive and classificatory monographs of groups of plants, such as those on the *Acanthaceæ*, contributed to De Candolle's 'Prodromus,' and the *Solanææ* of the East Indies, in the 'Transactions of the Linnean Society,' vol. xvii., pp. 37-82. He assisted in the works written by his brother, Bischof, and other naturalists, and published several works on politics and on mesmerism. He won high repute as a lecturer, and drew together very large classes.

NEES VON ESENBECK, THEODOR FRIEDRICH LUDWIG, brother of the preceding, and like him a botanist, was born near Erbach, July 26, 1787. He was occupied first as a druggist, next as the inspector of the botanical gardens at Leyden, and last as the professor of pharmacy at Bonn. He died at Hyères, December 12, 1837. Besides helping his brother in various ways, he wrote numerous works and papers which chiefly relate to the plants which are used for medical purposes. Amongst these the most noticeable are, 'De Muscorum Propagatione Commentatio,' 4to, Bonn, 1820; 'Beschreibung officinellen Pflanzen,' 3 vols. folio, Düsseldorf, 1828-29, to which he was only one of several contributors; 'Handbuch der medicinisch-pharmaceutischen Botanik nach den natürlichen Familien des Gewachsreichs,' 3 parts, 8vo, Düsseldorf, 1830-32, in which he was associated with Ebermaier; 'Icones plantarum medicinalium,' folio, Düsseldorf, 1833, with 120 plates; and 'Genera Plantarum Floræ Germanicæ iconibus et descriptionibus illustrata,' 8vo, Bonn, 1835-39, of which he drew up the first sixteen numbers, others being added by Spenner and Endlicher.

*NEHER, BERNHARD, German historical painter, was born in 1806, at Biberach, in Württemberg. After preparatory training under his father, a painter of ability, he entered the Stuttgart Art Academy, and thence passed into that of Munich, where he was for a while a pupil of Cornelius. He then went as exhibitor to Rome, where he stayed four years, and attracted the notice of Ludwig of Bavaria, at whose invitation he returned to Munich to paint a fresco of the 'Return of the Emperor Ludwig, after his victory over Frederick of Austria,' on the exterior of the Isarthor; and others of the Virgin and St. Benno. In 1836 he was recalled to Weimar in order to paint a series of seven large pictures in the Schiller Gallery, from Schiller's ballads and dramas; and afterwards in the Goethe Gallery, several from the poems of Goethe. These he completed in 1847, and then proceeded to Leipzig, where he had been appointed director of the Art Academy. He had also been nominated professor of painting in the Stuttgart Academy. Herr Neher has painted several frescoes for churches, including a large altar-piece for the new church of St. Peter at Hamburg, numerous oil paintings from religious and secular history, and made cartoons for church windows. His works are characterised by elevation of sentiment and poetic feeling.

NEILSON, JAMES BEAUMONT, one of the improvers of the iron manufacture, was born at Shettleston, near Glasgow, June 22nd, 1792. He was the son of a millwright, whom he assisted, when a youth, in making and erecting mining pump-machinery. In 1814 he was mechanical engineer (at that time called 'engine-wright') at the Irvine Colliery, Ayrshire. He went to Glasgow in 1817, and became engineer to the first gas-works established in that city. In the twenty years of his employment in this situation, he introduced many improvements in gas-making; among these were the substitution of clay retorts for iron, the use of refuse tar as liquid fuel to heat the retorts, and the removal of ammonia from the crude gas by means of sulphate of iron. He was one of the first introducers of workmen's institutions, encouraging the men employed at the gas works to efforts at mental improvement in leisure hours. The discovery by which he afterwards acquired distinction had, however, no immediate connexion with his duties as a gas-engineer. Discussing, with an ironmaster, the probable cause of certain irregularities of the blast in smelting furnaces, they sought to ascertain whether there is too much sulphur in the air in summer, or an excess of aqueous vapour, or a deficiency of oxygen. A paper by Mr. Neilson, read before the Glasgow Philosophical Society in 1825, shows that he had at that time very crude notions on the subject. He obtained permission from the proprietors of the Clyde and Dundyvan Ironworks to make experiments with their blast-furnaces; and at length he arrived at the capital discovery, that if the air-blast for a smelting-furnace be used hot instead of cold, a double economy results: the same furnace can produce an increased quantity of pig-iron per week,

and the cost of production is very materially lessened. A patent was taken out in 1828; Mr. (afterwards Lord) Brougham is said to have "written the title" of it. Neilson having no capital, the patent was obtained in partnership by him, Mr. Dunlop of the Clyde Iron Works, Mr. Wilson of the Dundee Iron Works, and Mr. Macintosh. So favourable was the use of the hot blast in smelting the Scotch blackband ore discovered by Mr. Mushet, and so great was the yield of the furnaces, that almost all the smelters in Scotland gradually adopted the plan. As some of them, however, disliked paying one shilling per ton for the use of the patent right, they entered into a combination to dispute the validity of the patent. Trials and appeals followed one another during a long series of years: one of the trials occupied sixteen days, and led to the examination of a hundred and forty witnesses; this was merely one, for there were twenty actions going on simultaneously. The decision was finally in favour of Neilson and his partners; but not before the enormous sum of 40,000*l.* had been paid in law expenses. Those enquirers who have traced the influence of the hot blast on the progress of the iron-manufacture estimate at something like 30*s.* per ton the economy effected by its use, and thus attribute to Mr. Neilson "the saving of several millions sterling annually to the country;" but it would not be safe to adopt so broad an estimate without close scrutiny, especially as the cold-blast products are better fitted for some purposes than the hot-blast. Still, the vast importance of the discovery is unquestionable. Mr. Neilson (who was a fellow of the Royal Society and of the Chemical Society, and a member of the Institution of Civil Engineers) died at Queenshill, Kirkcudbrightshire, January 18th, 1865.

NESBIT, CHARLTON, a celebrated wood-engraver, was born in 1775, at Swalwell, near Gateshead. At the age of fourteen he was articled to Bewick, and whilst with him engraved most of the cuts in the editions of Parnell and Goldsmith, published in 1796, and some of the tail-pieces in the first volume of Bewick's 'British Birds.' On the termination of his apprenticeship he engraved a view of St. Nicholas Church, Newcastle-on-Tyne; it was the largest woodcut which had up to that time been produced in England, and for it young Nesbit was awarded the medal of the Society of Arts. In 1799 he came to London, where he remained till 1815, when he returned to his native place. There he continued to practise his profession till 1830, when he again settled in London, where he died, November 11th, 1838. Charlton Nesbit was the best of the many pupils of Bewick, and one of the ablest wood-engravers of his day. His cuts are always carefully engraved, and are remarkable for their skilful rendering of surface and texture.

NESELRODE, KARL ROBERT, COUNT VON [E. C., vol. iv. col. 461], died at St. Petersburg on the 23rd of March, 1862. His autobiography has since been published in French and German.

NEUKOMM, THE CHEVALIER SIGISMOND [E. C., vol. iv. col. 463], died at Paris on the 3rd of April, 1858, in the 80th year of his age.

* NEUMANN, KARL FRIEDRICH, a German orientalist and historian, member of a Jewish family in humble circumstances, was born on the 22nd of December, 1798, at Reichmannsdorf in the neighbourhood of Bamberg, and at an early age entered a counting-house at Frankfurt-am-Main. In 1816 he repaired to the University of Heidelberg, after which he studied successively at the Universities of Munich and Göttingen, at the former of which he became a convert to Protestant Christianity. His earliest work was entitled 'Rerum Creticarum Specimen,' 8vo, Göttingen, 1820; and in 1822 he was appointed professor of history at the Gymnasium of Speier, but was obliged to vacate his office in 1825, on account of the liberality of his opinions. The same year he published his Historical Essays, 'Historische Versuche,' 8vo, Heidelberg, 1825; and he thereafter employed himself as a private tutor at Munich till 1827, when he repaired to Venice, and took up his residence at the Convent of San Lazzaro, for the purpose of acquiring the Armenian language. In 1828 he migrated to Paris, in order to study the oriental languages, which, especially those of India and China, he further prosecuted in London, where he spent a portion of the year 1829, having previously published his 'Mémoire sur la Vie et les Ouvrages de David, Philosophe Arménien du V^e Siècle de Notre Ère, et principalement sur ses Traductions de quelques Écrits d'Aristote,' 8vo, Paris, 1829. In April, 1830, he left London on a scientific voyage to India and China, with a commission to purchase a library of miscellaneous Chinese works, at that time an almost total blank in the libraries of Germany; and returned in the

following year with about ten thousand volumes in various departments of literature, of which more than 2,400 were placed in the royal library of Berlin. Before setting out on this expedition he had contributed to a German periodical, called 'Hermes,' an article on Chinese Philosophy and Literature, which was published independently as 'Chinesische Philosophie und Literatur,' 8vo, Leipzig, 1829; and shortly after his return in 1831, was appointed to a chair in the University of Munich, the duties of which embraced not only lectures on the Chinese and Armenian languages and literatures, but also on the political and literary history of the leading nations of Asia. During his incumbency of this office he produced several important works, amongst which were one on the Pilgrimages of the Buddhist Preachers of China and India, 'Pilgerfahrten buddhistischer Prediger aus China und Indien,' 8vo, Leipzig, 1833; a History, compiled from Russian and Armenian sources, and chiefly from the Russian of S. Glinka, of the Emigration of forty thousand Armenians, &c., 'Geschichte der Uebersiedlung von vierzig Tausend Armeniern, welche im Jahre 1828 aus der persischen Provinz Aderbaidshan nach Russland auswanderten. Nach dem russischen und armenischen Originale frei bearbeitet, und mit einer Einleitung versehen,' 8vo, Leipzig, 1834; an Essay on the History of Armenian Literature, &c., 'Versuch einer Geschichte der Armenischen Literatur, nach den Werken der Mechitaristen frei bearbeitet,' 8vo, Leipzig, 1836; the first volume of Asiatic Studies, 'Asiatische Studien,' 8vo, Leipzig, 1837; a Journey to Circassia, 'Reise nach Tscherkessien,' 8vo, Stuttgart, 1840; 'Russland und die Tscherkessen,' 8vo, Stuttgart, 1840, forming a part of 'Reisen und Länderbeschreibungen der älteren und neuesten Zeit;' a History of the Anglo-Chinese War, 'Geschichte des Englisch-Chinesischen Krieges,' 8vo, Leipzig, 1846, new edition, 1855; and the first volume of an Epitome of the History of the smaller States of Germany, 'Kurzer Abriss der Geschichte der Kleineren Staaten Deutschlands,' &c., 8vo, Treves, 1847. Once more, however, the freedom of Professor Neumann's political speculations and opinions rendered him obnoxious to the authorities; and for a too frank expression of his democratic sympathies in 1848, he was, in 1852, deprived of his academic chair.

A few of his more important works remain to be mentioned, including a treatise on the people of Southern Russia, &c., 'Die Völker des südlichen Russlands in ihrer geschichtlichen Entwicklung. Eine von dem Königlichen Institut von Frankreich gekrönte Preisschrift,' 8vo, Leipzig, 1847; Contributions to Armenian Literature, 'Beiträge zur armenischen Literatur,' 8vo, Leipzig, 1849; History of the English Empire in Asia, 'Geschichte des englischen Reiches in Asien,' 2 vols. 8vo, Leipzig, 1857; History of Eastern Asia from the first Chinese War, &c., 'Ostasiatische Geschichte vom ersten chinesischen Krieg bis zu den Verträgen in Peking (1840—60),' 8vo, Leipzig, 1861; and a History of the United States of America, 'Geschichte der vereinigten Staaten von Amerika,' 8vo, Berlin, 1863, &c. Professor Neumann has also published English and German translations of Chinese and Armenian works, and has edited 'Die Reisen des Venezianers Marco Polo,' &c., 8vo, 1845; Gützlaff's History of the Chinese Empire, 'Geschichte des chinesischen Reiches,' &c., 8vo, 1847; and the 'Reisen des J. Schiltberger aus München in Europa, Asia, und Africa von 1394 bis 1427,' &c., 8vo, 1859.

* NEUREUTHER, EUGEN, German designer, was born at Munich in 1806. The son of Ludwig Neureuther, a landscape painter of much local celebrity (born 1775; died 1830), he studied under his father at Bamberg, and afterwards in the Munich Art Academy. At first he painted landscapes for his patron, King Maximilian, after whose death he was employed by Cornelius in painting arabesques and other decorative work in the Trojan Hall of the Glyptothek and the arcades of the Hofgarten. By the advice of Cornelius, he resolved to devote himself to the designing of illustrations of popular writers. His first essay was a series of lithographic illustrations to Goethe's ballads and novels (fol., 1829—39), which received the warm approbation of the great poet. Neureuther has since published a large number of these illustrations, which have met with abundant acceptance from his countrymen. They include illustrations to Wieland's Oberon, Herder's Cid, the Nibelungenlied (in conjunction with Julius Schnorr), Bürger's Leonora, Becker's Rhine song, Bavarian mountain songs, and many besides, and have been often re-issued under the title of 'Randzeichnungen.' They are varied, usually well done, and exhibit considerable invention and fancy; but have a certain hard, heavy, narrow nationality, which will always interfere with their general enjoyment. Of late years he has painted many oil pictures. In 1848

he was appointed director of the artistic department of the royal porcelain works at Nymphenburg.

NEUWIED, PRINCE ALEXANDER PHILIP MAXIMILIAN OF, naturalist and traveller in Brazil and other parts of America, was born at Neuwied, September 23, 1782. In early life he entered the Prussian army, and having acquired the rank of major, he retired from the service in 1806, for the purpose of following out investigations in natural history. In 1815 he went to Brazil, and spent nearly two years in exploring the interior of that country. In 1833, he commenced extensive travels in North America. The results of his journeys were embodied in some expensive works, which formed valuable contributions to the knowledge of the regions described in them. Their titles are, 'Reise nach Brasilien in den Jahren 1815—1817,' 2 vols. 8vo, with a folio atlas, Frankfurt-am-Main; 'Beiträge zur Naturgeschichte von Brasilien,' 4 vols. 8vo, Weimar, 1825—1833, with 'Abbildungen,' in folio, 1822—1831; 'Reise in das innere Nord-America in den Jahren 1832 bis 1834,' 2 vols. 4to, with folio plates, Coblenz, 1839—1841; and 'Verzeichniss der auf seiner Reise in Nord-Amerika beobachteten Säugethiere,' 8vo, Berlin, 1862. A sketch of the birds observed during this last North American journey appeared in Cabanis's 'Journal für Ornithologie' for 1858. He died February 3, 1867.

* NÈVE, FÉLIX JEAN BAPTISTE JOSEPH, a Belgian Orientalist, was born on the 13th of June, 1816, at Ath, in Hainault, and, after having received his earlier education at the College of Lille, pursued his studies successively at the Universities of Leyden, Bonn, and Munich. Subsequently he repaired to Paris, where he further prosecuted his researches into Oriental philology and philosophy, under Burnouf and others. In 1838, he graduated as doctor in philosophy and letters; and, in 1841, became a tutor of ancient literature and the Oriental languages at the Catholic University of Leyden, where he was appointed in the years 1844 and 1853, respectively, to the extraordinary and the ordinary professorship. In 1860, he was elected a member of the Académie Royale of Belgium.

The works of Professor Nève, which have been devoted, to a great extent, to an exposition of Buddhism and of the Vedas, include, 'Études sur les Hymnes du Rigvéda, avec un Choix d'Hymnes traduits pour la première fois en français,' 8vo, Leyden, 1842; 'Introduction à l'Histoire générale des Littératures orientales: Leçons faites à l'Université catholique de Louvain,' 8vo, Paris, 1844, 8vo, Leyden, 1845; 'De l'État présent des Études sur le Bouddhisme et de leur Application,' 8vo, Ghent, 1846; 'Essai sur le Mythe des Ribhavas, premier Vestige de l'Apothéose dans le Véda. Avec le Texte sanscrit et la Traduction française des Hymnes adressés à ces Divinités,' 8vo, Paris, 1847; 'Relations des Suffridus Petri et d'autres Savants du XVI^e Siècle avec l'Université de Louvain. E. Henschling, et les derniers Temps de l'Enseignement de l'Hébreu au Collège des Trois-Langues,' 12mo, Leyden, 1848; 'De l'Origine de la Tradition indienne du Déluge,' 8vo, Paris, 1849, originally contributed to the 'Annales de Philosophie chrétienne,' in which he further discussed 'La Tradition indienne du Déluge, dans sa Forme la plus ancienne,' 8vo, Paris, 1851; 'Le Bouddhisme, son Fondateur et ses Écritures,' 8vo, Paris, 1853, reprinted from the 'Correspondant'; 'Les Pouranas. Études sur les derniers Monuments de la Littérature sanscrite,' 8vo, Paris, 1855; 'Mémoire sur la Vie d'Eugène Jacquot de Bruxelles,' 4to, Brussels, 1856; 'Coup d'Œil sur les Monuments du Christianisme primitif, publiés récemment en syriaque,' 8vo, Paris, 1856; 'Mémoire historique et littéraire sur le Collège des Trois-Langues à l'Université de Louvain,' 4to, Brussels, 1856, which obtained the prize of the Royal Academy of Belgium; 'Des Portraits de Femme dans la Poésie épique de l'Inde. Études morales et littéraires,' 8vo, Brussels, 1858; 'Exposé des Guerres de Tamerlan dans l'Asie occidentale,' 8vo, Brussels, 1860; 'L'Église d'Orient et son Histoire d'après les Monuments syriaques,' 8vo, Paris, 1860; 'Quelques Épisodes de la Persécution du Christianisme en Arménie au XV^e Siècle. Traduits de l'Arménien [principally of Thomas of Medzolph] en français,' &c., 8vo, Leyden, 1861; 'Saint-Jean de Damas sous les premiers Khalifes,' 8vo, Brussels, 1861; 'De l'Invocation du Saint-Esprit dans la Liturgie Arménienne,' 8vo, Leyden, 1862; 'Frédéric Windischmann et la haute Philologie en Allemagne,' 8vo, Paris, 1862; 'Calidasa; ou, la Poésie Sanscrite dans les Raffinements de sa Culture,' 8vo, Paris, 1864; 'Le Sanscrit et les Études Indiennes dans leur Rapport avec l'Enseignement classique,' 8vo, Bruges, 1865; and 'Du Beau littéraire dans les Œuvres du Génie Indienne,' 8vo, Brussels, 1865. Besides the

periodical publications to which it will have been incidentally seen that Professor Nève has furnished articles, it may be mentioned that he is also a contributor to several others, amongst which are the 'Journal Asiatique'; the 'Revue Catholique,' of Leyden; and the 'Messager des Sciences historiques de Belgique.'

NEWCASTLE, HENRY PELHAM CLINTON, FIFTH DUKE OF [E. C., vol. iv. col. 464]. On the formation of the Palmerston ministry, June, 1859, the Duke of Newcastle returned to office as Secretary of State for the Colonies; and in that capacity accompanied the Prince of Wales on his visit to Canada and the United States. He continued to preside at the Colonial Office till March, 1864, when the state of his health compelled him to resign. He retired to his seat, Clumber, Nottinghamshire, where he died on the 18th of October following, at the age of fifty-three.

NEWCOMEN, THOMAS, one of the inventors of the steam-engine, was born in the second half of the seventeenth century; but little is known of his early history. While employed as a smith at Dartmouth, Devonshire, he made himself acquainted with scientific subjects, and carried on a correspondence with Dr. Robert Hooke, who communicated to him the facts relating to the inventions of Papin and the speculations of the Marquis of Worcester on the possibility of working machinery by steam-power. Savary, a captain or manager of one of the Cornish mines, adopted a plan of condensing the steam in the cylinder after the piston had made its upward movement, by the action of cold water contained within a jacket outside the cylinder; while a little water was also kept on the top of the cylinder. Whether the idea was due to Newcomen is not clear; but a new form of atmospheric engine was devised, depending on the condensation of steam by the admission of water into the cylinder. A patent was obtained for the invention in 1705, by Newcomen, Savary, and a glazier at Dartmouth named John Cawley. The cylinder was open at the top, and communicated at the bottom by a short pipe with the steam boiler. The piston was packed with hemp and tallow round the edge, to render it steam-tight. Water flowed from a small tank over the cylinder, down a pipe, and into the bottom of the cylinder, where it spread out in a spray of fine rain. The force of the steam drove up the piston; the spray condensed the steam, and made a partial vacuum; the atmospheric air drove the piston down again; and the reciprocating action thus produced worked the beam of a pumping-engine. At first the spray-jet was turned on and off by hand; but, by 1712, a self-acting apparatus for this purpose was in use. Newcomen's atmospheric engine was afterwards greatly improved, and came into general use, especially for pumping water from mines. It prepared the way for Watt's inventions. Newcomen is supposed to have died about 1713.

NEWTON, REV. JOHN [E. C. vol. vi. col. 1014].

NEWTON, SIR WILLIAM JOHN, miniature painter, was born in London in 1785, and very early acquired popularity as a miniature painter. The elegance of his style, and the exquisite finish of his best works, won for him the patronage of the highest circles, which the urbanity of his manners did much to promote. For a long series of years he was the favourite miniature painter of the court and aristocracy, and, like Reynolds, he could boast that three generations of the noblest and loveliest in the land had been painted by him. Though hardly to be ranked with the greatest painters in his particular branch of art, he was one of the very best of his time, and the rank and character of his sitters give great interest to his works. In his later years he made various essays in religious and historical design, but they were not of much value. He was an early and zealous student of photography, and in various ways an accomplished gentleman. He was miniature painter in ordinary to the queen, and in 1837 received the honour of knighthood. He died at his residence, Cambridge Terrace, Hyde Park, on the 22nd of January, 1869, in the 84th year of his age.

NICCOLINI, GIOVANNI BATTISTA, an Italian dramatist and patriot, member of a noble Florentine family, and descending, through his mother, from the lyric poet Filicaja, was born at the Bagni di San Giuliano, about four miles from Pisa, where his father filled a subordinate public employment. The date of his birth, about which many mistakes are prevalent, is ascertained by Napoleno Giotti, his biographer in 'I Contemporanei Italiani,' to have been the 31st of October, 1782. He received his earlier education at Florence, and after the completion of his studies, chiefly in philosophy and law, at the University of Pisa, and the production of several laudable poetic pieces, was appointed, in 1807, to be secretary and professor of history and

mythology in the Accademia delle Belle Arti, at Florence. After the restoration of the grand-ducal government in the person of Ferdinand III., in September, 1814, he was appointed by that prince to be librarian at the Palazzo Pitti; but shortly resigned his office in order to resume his old functions at the Accademia, in the discharge of which he appeared to enjoy a more complete independence. Some time after, he produced his tragedy of 'Nabucco,' 8vo, London, 1819, new edition, 1830, which was strikingly conversant with the events of the career of Napoleon, who was symbolised by Nabucco, or Nebuchadnezzar, whilst Pope Pius VII. and Carnot were represented respectively by Mitrane and Arsace, and these three pairs again stood for the three typical forces of the world. A French translation of 'Nabucco,' by Prince Pierre Napoléon Bonaparte, was published as 'Nabuchodonosor. Tragédie, traduite en Vers français,' &c., five *livraisons*, 4to, Paris, 1861. The life of Niccolini was, speaking generally, one continued period of dramatic production, interrupted for a few years, during which he signalled his sympathy with the deeper literary awakening that agitated Italy, employing his pen on philosophical subjects, and especially producing a work entitled, 'Del Sublime e di Michelangiolo. Discorso,' &c., 8vo, Florence, 1825. To this epoch belong also his 'Elogio di L. B. Alberti,' &c., 8vo, Florence, 1819; and his intimate connection with a review published by Vieusseux, and entitled, 'Antologia,' Florence, 1819—1832. In his latter years he was engaged upon an important prose work, the History of the House of Hapsburg, which, although frequently announced as being on the eve of publication, was left unfinished at the time of his death, which took place at Florence, on the 20th of September, 1861. His funeral was celebrated with great pomp and circumstance in Santa Croce, where an oration was pronounced over his grave by his friend, Professor Vannucci; and one of the latest evidences of the gratitude and favour with which his name is still regarded is to be found in a small publication entitled, 'Festa letteraria commemorativa di G. B. Niccolini, celebrata nel R. Liceo Niccolini di Livorno il 17 Marzo, 1868. Relazione e Discorsi,' 8vo, Florence, 1868.

The principal of the works of Niccolini, besides those already mentioned, comprise his 'Polissena: Tragedia in cinque Atti,' 8vo, Florence, 1810, second edition, 1813, and forming part of the 'Teatro Classico Italiano,' 8vo, 1829, a work which obtained the prize of the Accademia della Crusca; 'Medea: Dramma tragico in cinque Atti,' new edition, 8vo, Florence, 1825; the tragedies of 'Ino e Temisto,' 'Edipo,' and 'Matilde,' the first and last of which were reprinted in 8vo, Florence, 1825; 'Antonio Foscari: Tragedia in cinque Atti,' &c., 8vo, Florence, 1827, a work which gave rise to considerable controversy, and was received with corresponding favour; 'Giovanni da Procida: Tragedia in cinque Atti,' &c., 8vo, Bologna, 1831, in which the author gave utterance to all his impatience and detestation of foreign domination; 'Ludovico Sforza,' 1834; 'Rosmonda d'Inghilterra,' 1839; 'Arnaldo da Brescia: Tragedia in cinque Atti,' &c., preceded by a Life of Arnold, 12mo, Florence, 1843, and 12mo, Marseille and Paris, 1843, of which a reimpression was for a long time interdicted in Tuscany, on account of its ardent aspirations after liberty, German translation, Berlin, 1845, English translation, by T. Garrow, 12mo, London, 1846; 'Filippo Strozzi: Tragedia in cinque Atti,' &c., corrected d'una Vita di Filippo e di Documenti inediti, 8vo, Florence, 1847; 'Lezioni di Mitologia ad Uso degli Artisti,' 2 vols., 8vo, Florence, 1855, which, notwithstanding its late publication, had been produced in earlier life; and various selections and collections of his works, none of which have any claims to completeness; 'Prose,' 8vo, Florence, 1823; 'Tragedie,' 2 vols., 12mo, Capolago, 1831; 'Opere in Verso e in Prosa,' 3 vols., 8vo, Florence, 1831, new edition, 3 vols., 12mo, Florence, 1844, "edizione ordinata e rivista dall'Autore: quarta Impressione," 3 vols., 12mo, Florence, 1858; 'Tragedie scelte ed altre Rime,' 32mo, Paris, 1840, &c.; 'Poesie,' inserted in 'Rime scelte di vari Poeti moderni,' 32mo, Paris, 1844; and 'Poesie Nazionali,' &c., 8vo, Florence, 1859. To the labours of Professor Niccolini as an editor of the works of others, we owe the 'Poesie di A. d'Elci. Con la Vita dell'Autore, scritta dal Sig. G. B. N.,' 8vo, 1827; F. Bechi's 'Prose, edite e inedite,' 12mo, 1845; 'La Divina Commedia. Prima edizione originale italiana, eseguita sotto la Direzione dei Proff. G. B. Niccolini e G. Bezzuoli,' 8vo, 1840, &c.; and 'La Divina Commedia di Dante, &c., ridotta a miglior Lezione da G. B. N.,' 12mo, 1846.

NICHOL, JOHN PRINGLE, astronomer, was born at Brechin, Forfarshire, in 1804. He passed with great credit through King's College, Aberdeen; and then for several years

filled the office of schoolmaster successively at Dun, Hawick, and Cupar-Fife, where he edited a Liberal newspaper. About 1824 he was appointed rector of Montrose Academy, an office he resigned in 1833 on account of ill-health. He had long abandoned his original intention of entering the Church; but his mathematical studies, and his popularity as a lecturer, led to his appointment, in 1836, as professor of practical astronomy in the university of Glasgow. During his twenty-three years' occupancy of this post, although he made no special discoveries in astronomy, he did much, both as a lecturer and a writer, to diffuse a knowledge of the progress of the science. Among other works he published, 'Architecture of the Heavens,' 8vo, Edinburgh, 1837, 9th edition, 1868; 'Phenomena and Order of the Solar System,' 8vo, 1838; 'Thoughts on some important Points relating to the System of the World,' 8vo, 1846; 'The Stellar Universe: Views of its Arrangements, Motions, and Evolutions,' 8vo, 1848; 'The Planet Neptune: its Exposition and History,' 8vo, 1848; 'Order and Structure of the Planetary System,' 1851; 'The Importance of Literature to Men of Business': an Address delivered before the School of Art at Stirling, 1852; 'Cyclopedia of the Physical Sciences,' 8vo, 1857, 2nd edition, 1860—his most extensive work. A paper by him, in the 'Proceedings of the Edinburgh Royal Society' for 1844, was entitled, 'Remarks on the Illustrations presented by the Surface of the Moon, respecting certain Geological Phenomena'; and another, 'Remarks on the Chronology of the Formation of the Moon,' in the 'Proceedings of the British Association,' 1855. He died, September 19th, 1859, and was succeeded in the professorship at Glasgow by Mr. Robert Grant.

NICHOLLS, SIR GEORGE, K.C.B. [E. C., vol. iv. col. 485]. This excellent public servant died on the 24th of March, 1865, in the 80th year of his age.

* NICHOLSON, SIR CHARLES, distinguished for his services in New South Wales, was born November 23rd, 1808, of a Westmoreland family. After graduating as M.D. at Edinburgh University, he went to Australia in 1833, and settled at Sydney as a physician. When parliamentary government was established in New South Wales, he took an active part in the proceedings, and was at various times speaker of the Legislative Assembly, and president of the Legislative Council. He received knighthood in 1852. Sydney University, the most important educational establishment in the southern hemisphere, was greatly aided by him in its inception and organisation; he was vice-chancellor in 1853, and chancellor or rector in 1854 and subsequent years. He received the degree of D.C.L. at Oxford in 1857, and that of LL.D. at Cambridge, in 1858, and was soon afterwards made a baronet. Since his residence in England, he has taken part in many schemes of educational and social improvement, and was one of the commissioners for Australia at the London International Exhibition of 1871.

NICHOLSON, BRIGADIER-GENERAL JOHN, an able Indian officer, was born at Vergemont, county of Dublin, December 11th, 1822. His uncle, Sir J. W. Hogg, a director of the East India Company, sent him in 1839 to India, where he at once assumed active duties as a cadet, and became, in 1841, ensign of the 21st Native Bengal Infantry. He went to Afghanistan in 1840; was at Ghuznee, under Colonel Palmer, in 1842, at the time of the disaster at the Khyber Pass; and was kept in confinement until the defeat of Akbar Khan by Sir Robert Sale and Sir George Pollock. He was promoted to the rank of lieutenant in 1842, and captain in 1845. In 1845—46 he served in the Sutlej, watching the movements of the Sikhs, and taking part in the actions at Moodkee and Ferozeshah. As major, he was appointed assistant to the Resident at Lahore. During the second Sikh war he was associated with Major Herbert Edwardes in the brilliant operations which were so instrumental in bringing the Punjab under British rule; and aided Henry Lawrence at the battle of Chillianwallah. With the rank of colonel, he was mostly engaged in civil duties from the period of the second Sikh war to that of the mutiny, in the district of Dera Ismail Khan—visiting England in the meantime. When the mutiny began in 1857, Nicholson displayed great sagacity and decision in preventing the native troops in the Punjab from joining those at Delhi. He hastily got together a flying column, disarmed some doubtful regiments at Phillour, Umritsir, and Jhelum, and marched on towards Delhi. Brigadier-general Nicholson (for that was now his rank, although only in his thirty-fifth year) was known to the natives as the "Lion of the Punjab," and some of the tribes almost worshipped "Nikkul Seyn" as a superhuman being. His intrepidity was well shown in his extraordinary march from the Punjab to

Delhi, in fiercely hot weather, with only 1200 Europeans, an equal number of Punjabees, whose fidelity was not assured, and through the territories of native princes who were wavering in their loyalty. Nicholson arrived outside Delhi on the 8th of August, and his column a few days afterwards. With 2000 men, he started on the 25th to overtake a rebel force of 7000 at Najuffhur, and after fourteen hours of incessant marching and fighting, completely defeated the enemy. When the storming of Delhi took place on the 14th of September, Nicholson headed the first column, consisting of 1000 men. In one of many attacks on the Lahore Gate, when the troops had to advance along a narrow lane swept by the enemy's grape shot and musketry, a bullet struck Nicholson, who had taken the lead of his men, and he fell mortally wounded. The queen granted the posthumous dignity of Knight Commander of the Bath, in respect for his name; and the East India Company made a special grant of 500*l.* a year to his widowed mother. The iron constitution of John Nicholson came in aid of his skill and daring. An officer who served with him during the Mutiny, said, "The day we marched to Murdan, he was twenty-six hours in the saddle, following up the mutineers."

* NICOL, ERSKINE, A.R.A., was born at Leith in July, 1825. He was apprenticed to a house painter in Edinburgh, but in his spare hours studied so diligently in the Trustees' Academy, that, on the expiration of his apprenticeship, he was found qualified to fill the office of teacher of drawing in the Leith Academy. Whilst occupying this post he laboured with success to obtain more artistic culture, and about 1847 established himself in Dublin as a portrait painter and teacher. The peculiarities of Irish character attracted his attention, and he was induced to dedicate his pencil to the representation of scenes of familiar Irish life. He returned to Edinburgh in 1850, and the following year contributed to the exhibitions of the Royal Academy, London, and the Scottish Academy, in both cases with decided success—his subjects being 'Done Up Intirely'; 'Spirits an' Tibbaksy.' Of this class of pictures, including the well-known 'Did it pout with its Betsy'; 'Toothache'; 'Guinness's Best'; 'Waiting an Answer'; 'The Hope of the Family'; 'A Deputation'; 'The Lease Refused'; 'Children's Fairing'; 'Both Puzzled'; &c.; mostly of small size and skilful execution, he continued to furnish examples to the exhibitions, and the oddities of Irish expression and character being rendered with a good deal of dry humour, they have obtained a large share of popularity. Mr. Nicol, who had been for some years an associate of the Scottish Academy, removed in 1862 to London, and in 1866 was elected associate of the Royal Academy. Several of his pictures have been engraved.

NIEDERMAYER, ABRAHAM LOUIS, musical composer, was born at Nyon, Canton de Vand, Switzerland, April 27th, 1802. He went at an early age to Vienna, where he studied composition under Forster, and the pianoforte under Moscheles; and thence to Italy to complete his education under Fioravanti and Zingarelli. He began to compose in 1820. In 1828, he went to Paris, and received advice and encouragement from Rossini. In 1833—34 he was a teacher of the pianoforte at Brussels. Returning to Paris, he produced his best opera, 'Stradella,' in 1837. In 1843, he compressed this work from five acts into three. In 1845, Louis Philippe decorated him with the Legion of Honour. In 1846, he assisted Rossini in adapting his 'Donna del Lago' for the French stage. About the year 1853, Niedermayer organised a plan for a school of religious music for the training of composers, singers, organists, and chapel-masters; he devoted much attention to this establishment, writing and composing for it, with the aid of a government subvention, and educating many pupils who became good ecclesiastical musicians. Besides 'Stradella,' his chief compositions, before this period of his life, were the following:—'Il Reo per Amore,' opera, 1820; 'Casa nel Bosco,' two act opera, 1828; 'Marie Stuart,' five act opera, 1844 (a romance in this work became very popular); 'La Fronde,' five act opera, 1853. He composed many melodious vocal pieces, somewhat in the style of Schubert, under the titles, 'Le Lac,' 'L'Isolément,' 'Le Soir,' 'L'Automne,' 'La Voix Humaine,' 'L'Âme du Purgatoire,' &c. He also composed several masses, pianoforte pieces, and organ pieces. In 1855 he published 'Traité d'Accompagnement du Plain Chant,' in conjunction with M. d'Ortigue, in which they developed some new views which have attracted the attention of scientific musicians. In 1856 he commenced a new journal of religious music, 'La Maîtrise,' which he edited for two years. He was preparing an extensive work on organ accompaniment when attacked with his final illness; he died at Paris, March 14th, 1861.

BIOG. DIV.—SUP.

NIEL, ADOLPHE, marshal in the French army, was born at Muret, Haute Garonne, October 4th, 1802. In 1821 he entered L'École Polytechnique, and two years afterwards L'École d'Application at Metz. He was promoted to the rank of lieutenant of Engineers in 1827, and captain in 1830. Proceeding to Algiers in 1832, he distinguished himself at the taking of Constantina. He became chief of battalion in 1837, lieutenant-colonel in 1842, and colonel in 1846. In 1849 he was attached to the expedition to Rome as chief of the engineering staff; was made general of brigade, and presented the keys of Rome to the Pope at Gaeta in the same year. On returning to France, he became head of the engineers' department in the Ministry of War, and one of the military advisers of the government; to which was added the rank of general of division in 1853. When the Russian war broke out, he commanded the engineers in the Baltic, and was made aide-de-camp to the Emperor for his services at the capture of Bomarsund. Early in 1855 he was sent to the Crimea to report upon the state of the French army outside Sebastopol, and on the best mode of prosecuting the siege. His views meeting with approval, he was appointed to the command of the Engineers in the Crimea, and took a prominent part in the operations which brought the war to an end. A history of these operations, 'Le Siège de Sebastopol,' was published by him, 1858, 4to, with atlas. For these services he was made Grand Cross of the Legion of Honour. He became senator in 1857. In 1858, as aide-de-camp to the Emperor, he went to Italy, to demand the hand of the Princess Clotilde for Prince Napoleon. When war broke out with Italy in 1859, he took command of the first army corps, and for his services at Solferino was raised to the rank of marshal of France. During the next few years he was quietly occupied as president of the Council General of Haute Garonne. In 1867 he succeeded Marshal Randon as Minister of War, made great changes in the organisation of the army, introduced the Chassepot rifle, and formed a new kind of militia under the name of the Garde Mobile. He died rather suddenly, August 13th, 1869, before he had completed his plan for strengthening the army in numbers and organisation; and France, when plunged in war with Germany, had cause to regret his loss.

NIÉPCE DE SAINT VICTOR, CLAUDE FÉLIX ABEL [E. C. vol. iv. col. 507]. In 1857—58 M. Niépce de Saint Victor published an account of a singular property which he believed he had discovered in light of becoming, under certain circumstances, latent or absorbed ('Mémoire sur une Nouvelle Action de la Lumière,' three papers). Great interest was excited by the announcement, and the experiments were repeated and varied by numerous investigators, with the result that the phenomena could be produced by heat as well as by light. Later he published memoirs on the action of light on vines, in electricity, &c. He also continued his efforts to produce colour in photography, and he sent to the International Exhibition of 1862 heliochromes, or photographs in the natural colours, obtained from models, drawings, &c. The colours were, however, faint and fugitive, and though he continued his experiments, he failed to discover any means of fixing the colours. To the same exhibition he also sent numerous specimens of his process of heliographic engraving, which appeared full of promise, but has not been made commercially successful. He died from an attack of apoplexy in April, 1870. A collection of his letters has since been published by M. Victor Fouqué, with an introductory notice, in which the merit of rendering the discovery of photography available, if not the actual discovery, was claimed as due to M. Niépce de Saint Victor rather than to M. Daguerre.

NITZSCH, CHRISTIAN LUDWIG, zoologist, was born at Benaha, a small village, near Leipzig, September 3, 1782. His education was received partly at Wittenberg, and partly at Gotha. His taste for natural history was early developed, so that even when a boy he used to spend his leisure evenings in studying the works of Linnæus, which studies were encouraged by the two Erdmanns, one of whom was professor of physic at Dresden, the other professor of medicine at Wittenberg. In 1808 he took his M.D. degree, and shortly after became the extraordinary professor of zoology and botany at Wittenberg. In 1816 he was transferred to the chair of zoology at Halle, with which was comprised the directorship of the Zoological Museum. In 1827 and 1835 he made extensive tours through Europe for the purpose of forming the acquaintance of the principal naturalists, and of ascertaining the condition of science in the various centres of learning. He died August 16, 1837. Nitzsch gave his especial attention to birds, and although he was a con-

stant and laborious worker, he produced comparatively little, owing to his peculiar temperament, his method of working, and his short life. He formed an elaborate plan of investigation, in accordance with which he collected an immense mass of material, but his life was not sufficiently long to permit of his elaborating it into memoirs. His design was to work out every part of his subject before publishing any isolated papers respecting it, and the great aim of all his investigations was to discover the truly natural system of birds. For his purpose he found that three branches of investigation required especial attention, viz., the internal structure, the arrangement of the feathers, and the parasites. The latter two subjects he made especially his own. One of the earliest papers was entitled 'Pterographische Fragmente,' and was published in 'Voigt's Magazin' for 1806. When he had passed his 50th year his health began to give way, and he thought it desirable to hasten the publication of the principal results of his labours. He had already, in 1818, issued one instalment, viz., that on parasites, in Germar's 'Magazin für die Entomologie' for that year, under the title of 'Die Familien und Gattungen der Thierinsecten (Insecta epizoica) als Prodrum einer Naturgeschichte derselben.' He now commenced the second on pterylography, but at the time of his death the work was not completed; he left, however, sufficient material for the standard work on the subject, which was published after his death under the editorship of H. Burmeister, under the title of 'System der Pterylographie,' 4to, Halle, 1840. He wrote comparatively little respecting the third branch of his subject, that on internal structure. The principal contribution published during his lifetime was 'Observationes de Avium de arteria carotide communi,' 4to, Halle, 1829, in which he gives a classification based upon the form and position of this artery. The manuscripts left by him furnished materials for several papers, which have appeared in the 'Zeitschrift für die gesammten Naturwissenschaften' for 1859 and subsequent years. They include papers on the anatomy of parrots, sparrows, and *Vultur fulvus*; on epizotic parasites; and on *Entozoa*.

NOBILI, LEOPOLD, was born in 1784, and died at Florence, 5th August, 1835. In the earlier part of his life he served in the army, but having a taste for science he quitted it, retired to Reggio, and published some theoretical speculations on magnetism and light. In 1825 he directed his attention to experimental science, and invented the galvanometer with two needles; also, in conjunction with M. Melloni, the thermomultiplier, which has rendered so many services to the science of heat. He published several papers on electro-physiology, on thermo-electricity, on chemical action, magnetism, and electricity. He is also known for his researches on the colours developed on metallic plates by voltaic action. He named the new process 'Metallochromy.' His papers were published in the 'Bibliothèque Universelle,' but translations of a number of them appeared in Taylor's 'Scientific Memoirs.' A long notice of him will be found in Tipaldo's 'Biografia degli Italiani illustri,' vol. v.

* NÖGGERATH, JOHANN JACOB, mineralogist, was born at Bonn, October 10, 1788. In 1814 he was appointed one of the mining commissioners for the district of Ourthe, and in the following year he was nominated to a similar office in connection with the Roër, Rhein, and Moselle districts; so that he was officially connected with nearly the whole mining area of the province of the Lower Rhine. In 1822 he took the chair of mineralogy and oryctognosy at Bonn—first as the extraordinary professor, and subsequently, in 1828, as the ordinary professor. He has published numerous works and papers on minerals, rocks, and fossils, more especially those which occur in the Prussian provinces bordering on the Rhine below Mayence. The whole district was thoroughly well known to him, and this circumstance, combined with the opportunities which his official posts afforded him, enabled him to contribute a large amount of information respecting it. Some of the earliest works are amongst those which are best known, as, for instance, 'Mineralogische Studien über die Gebirge am Nieder-rhein,' 8vo, Frankfurt-am-Main, 1808; and his account of the lignite beds at Putzberg. He also wrote a more general work, in which J. Burkart was his coadjutor, which has for title, 'Der Bau der Erdrinde nach dem heutigen Standpunkte der Geognosie,' fol. Bonn, 1838. Science is also indebted to him for accounts of several earthquakes which have been felt in the Rhine valley, of two or three remarkable falls of hail, and of the agate quarries of Oberstein, in which last paper he describes the means employed for artificially colouring these stones. A genus of ferns

which flourished in the Devonian and Carboniferous periods has been named after him.

NORDEN, JOHN, topographer and surveyor, was born about 1548. He was admitted a commoner of Hart Hall, Oxford, in 1564; graduated B.A. in 1568, and M.A. in 1573. He commenced his career as an author, by the publication of several devotional treatises, which, though now exceedingly scarce, appear to have been long held in much esteem. Of these the first probably was 'The Sinful Man's Solace,' 8vo, London, 1585, a tract of 12 pages, partly in verse; and it was followed by 'A Pensive Man's Practice,' 4to, 1585, fortieth edition, 12mo, 1629; 'Mirror for the Multitude,' 8vo, 1586; 'Antithesis or Contrarietie between the Wicked and the Godlie. Set forth in form of a Pair of Gloves fit for every man to wear,' 1587; 'Poor Man's Rest,' eighth edition, 12mo, London, 1620, fifteenth edition, 1641; 'Progress of Piety,' London, 1596, reprinted by the Parker Society; 'Christian Comfort and Encouragement unto all English Subjects not to dismay at the Spanish Threats,' 8vo, London, 1596; 'Mirror of Honour,' 4to, London, 1597; 'Interchangeable Variety of Things,' 4to, London, 1600; 'The Labyrinth of Man's Life, or Virtue's Delight,' 4to, London, 1614; 'Loadstone of a Spiritual Life,' 16mo, London, 1614; 'Pensive Soul's Delight,' 12mo, London, 1615; 'An Eye to Heaven in Earth,' 12mo, London, 1619; 'Help to True Blessedness,' 12mo; 'Pathway to Patience in all manner of Afflictions,' 8vo, London, 1626.

What led Norden to adopt surveying as a profession is unknown. He resided in the neighbourhood of London, first at Fulham, and afterwards for many years at Hendon, and he was patronized by Lord Burleigh and other distinguished persons. In 1593, he published 'Speculum Britanniae, the first parte. An historical and chorographical description of Middlesex,' small 4to, with a dedication to Queen Elizabeth, followed by an address to Lord Burleigh, a work of great interest to the county antiquary, not merely as for the curious information it furnishes respecting the condition of Middlesex towards the end of the 16th century, but on account of its containing original maps of Middlesex, London, and Westminster. Other works of this class were 'Preparative to his Speculum Britanniae,' 4to, 1596; 'Speculi Britanniae Pars. The description of Hartfordshire,' 4to, 1598, reprinted 1610, and again 1618: the previous works were issued together in 1637, with the title 'England. An Intended Guide for English Travellers, shewing in general how far one Citie, and many Shire-Townes in England, are distant from other. Together with the Shires in particular; and the Cheife Townes in euery of them. With a general Table of the most of the principall Townes in Wales,' 4to, 1625. Norden left in MS. 'Speculi Britanniae pars altera; or a Delineation of Northamptonshire,' which was published in 8vo, 1720; 'Speculi Britanniae Pars. A Topographical and Historical Description of Cornwall,' published in 4to, 1728; 'Speculi Britanniae Pars: an Historical and Chorographical Description of the County of Essex,' printed by the Camden Society in 1850; accounts of Kent and of Surrey, noticed by Gough and Rawlinson, as still in existence; and a 'Survey of Windsor Forest,' printed in fac simile, folio, 1845. Norden explained his practice as a surveyor in a 'Surveyor's Dialogue, divided into five books,' 4to, 1607, "with a sixth book newly added," 4to, 1610, third edition, 1618, fourth edition, 8vo, 1738. Several surveys by Norden remain in MS. in the British Museum, the archiepiscopal library at Lambeth, and other great collections. Norden was made surveyor to the King's Woods about 1607, prior to which he appears to have been in distress, caused, according to the statements prefixed to his volumes, by the expenses incurred in making his surveys and preparing them for publication. According to Granger, his stipend as crown surveyor was 50*l.* per annum: his son was associated with him in the office. John Norden died about 1626.

NORDENSKIÖLD, NILS, mineralogist and geologist, was born in 1792 or 1793. He commenced the study of mineralogy at a very early period of his life, and was a pupil of Berzelius. Thus, in 1815, his first paper, on Rumänzouite or Romanzouite, was published; and in 1821, no fewer than ten of his papers were published. In 1820 he gave the results of the numerous excursions he had made in Finland, in the form of an octavo volume, on the mineralogy of that country. In 1824, he was appointed chief director of the mines of Finland, and retained the office till 1855. Hence most of his more important investigations relate to the country with which he was so long connected. His high official post gave him special facilities for obtaining and examining the minerals of the Russian empire.

generally. He is one of the principal authorities on Swedish minerals. He is, however, best known on account of his researches on the glacial phenomena of Finland, which he illustrated by a new map of that region and by a memoir entitled 'Beitrag zur Kenntniss der Schrammen in Finland,' 8vo, Helsingfors, 1863. One of the most important results of these researches, was his clear demonstration of the fact that the glaciation of Finland was due to icebergs drifted along by oceanic currents; and not to terrestrial glaciers. He died at Frugard, February 21, 1866. His son, Professor Adolph Nordenskiöld, is well known as an explorer of Spitzbergen and the Arctic regions.

NORMANBY, CONSTANTINE HENRY PHIPPS, K.G., FIRST MARQUIS OF [E. C. vol. iv. col. 522]. Lord Normanby retained the post of Minister Plenipotentiary at the Court of Tuscany till 1859, when he was recalled. In 1857, he published 'A Year of Revolution. From a journal kept in Paris in 1848,' 2 vols. 8vo. He was, it will be remembered, the English Ambassador at Paris, in 1848, and the recklessness of his statements and the strictures in which he indulged on the various actors in the revolution, called forth much animadversion and several replies. But, with all its small scandal, the book was too dull a one to attract attention beyond the circles immediately interested. After his return from Florence, Lord Normanby took a rather frequent part in the debates in the House of Lords, and published one or two political pamphlets. He died on the 28th July, 1863, and was succeeded by his eldest son, **GEORGE AUGUSTUS CONSTANTINE PHIPPS**, second Marquis of Normanby, born 1819, who has been Treasurer and Controller of the Household, and a Lord-in-waiting to the Queen; Governor of Nova Scotia, and, 1871, Governor of Queensland.

* **NORTHCOTE, RIGHT HON. SIR STAFFORD HENRY, M.P.**, eldest son of the late Henry Stafford Northcote, Esq., who died without having enjoyed the family honours, February 22nd, 1850, was born in Portland Place, London, on the 27th of October, 1818. He was educated successively at Eton and at Balliol College, Oxford, where he took his B.A. degree, in 1839, when he was first-class in classics, and third-class in mathematics; proceeded M.A. in 1842; and was admitted to the honorary degree of D.C.L. in 1863. On the 19th of November, 1847, he was called to the bar by the Society of the Inner Temple, and became legal secretary to the Board of Trade, to the then president of which, Mr. Gladstone, he had acted as private secretary. By the death of his grandfather, Sir Stafford Henry Northcote, March 17th, 1851, he succeeded to the baronetcy; and on the 25th of October, in the same year, was gazetted C.B. of the civil division, in consideration of the zeal and ability with which he had performed his duties as "one of the Secretaries to the Commissioners of the Exhibition of Industry of all Nations." He was returned to the House of Commons as Conservative member for Dudley, in March, 1855, and continued to represent that constituency until April, 1857. He sat as member for Stamford, from July, 1858, to May, 1866, when he was elected for North Devon, which he had unsuccessfully contested in 1857. Sir Stafford's official career has varied with the political fortunes of his party. He was financial secretary to the Treasury, between January and June, 1859; was appointed, July, 1866, to the presidency of the Board of Trade, in the third administration of Lord Derby; and held this office till March, 1867, when he became Secretary of State for India and President of the Council for India. During his tenure of office, which continued till December, 1868, he distinguished himself for the practical interest he manifested in the spread of education amongst the people of India, and especially for the establishment of the "Northcote Scholarships," since withdrawn, for the purpose of enabling the most promising youth of India to complete their education in England. Sir Stafford Northcote was one of the English Commissioners appointed to treat with the Commissioners of America, for the settlement of the Alabama claims, and other vexed questions between the two countries; and their joint labours, which were carried on at Washington, happily resulted in the Treaty named after that city, and ratified by the respective Governments, July, 1871. Sir Stafford is an elder brother of the Trinity House, and chairman of the Hudson's Bay Company; whilst his local offices in his own county of Devon include a justiceship of the peace and a deputy-lieutenancy (1854); and in 1851 he became a captain in the first Devon Yeomanry Cavalry. His literary productions are few, the principal of them being 'A Statement of Facts connected with the Election of the Right Hon. W. E. Gladstone as Member for the University of Oxford in 1847,

and with his Re-elections in 1852 and 1853,' 8vo, Oxford and London, 1853; and 'Twenty Years of Financial Policy. A Summary of the Chief Financial Measures passed between 1842 and 1861, with a Table of Budgets,' 8vo, London, 1862.

NÔTRE, ANDRÉ LE [LE NÔTRE, ANDRÉ, E. C. S. col. 796.]

NUTTALL, THOMAS, botanist, was born at Settle, in Yorkshire, in 1786. He was apprenticed to a printer, and served as a journeyman printer for several years at Halifax and Liverpool. The occupation not proving satisfactory, he went to the United States in 1808. Soon after his arrival in America, he was introduced to Professor Barton, became intimate with him, and was by him induced to apply himself to botanical research. In order to extend his knowledge of plants, he made many and long journeys. Thus, in 1809, and the two following years, he joined Mr. John Bradbury in an expedition up the Missouri valley; and he spent the summer months of several succeeding years in botanical excursions, while the winter months were mainly occupied in arranging the objects collected, and in submitting them to critical examinations. In 1818, he and several friends performed a perilous voyage of 5000 miles through unexplored districts in the region of the Arkansas, and the north-west portions of North America. In 1822, he was appointed curator of the botanic gardens at the Harvard University. In 1834, he made an overland journey to the Pacific, and visited the Sandwich Islands. In 1842 he returned to England, where some property had been bequeathed to him by a relative, one of the provisions in whose will was that Mr. Nuttall should reside on the property for a certain time every year. He only revisited the United States once, for a few months, in 1852. He died at his residence, Nutgrove, near Wigan, Lancashire, September 10th, 1859. Although originally an artisan, Mr. Nuttall became, by dint of hard study and exertion, one of the foremost botanists of America. But his studies were by no means confined to plants. He also gave considerable attention to birds and molluscs. His earliest work, excepting a few papers, was 'The Genera of North American Plants, and a Catalogue of the Species for the year 1817,' 2 vols. 8vo, Philadelphia, 1818. It was in great part set up in type by himself, and large portions were composed without any copy. This work had a great influence in advancing the accurate knowledge of the plants of the United States. His 'Journal of Travels into the Arkansas Territory, during the year 1819,' 8vo, Philadelphia, 1819, contains much information respecting the inhabitants and the meteorology of the regions passed through. Amongst his other works may be noticed his 'Manual of the Ornithology of the United States, and of Canada,' 12mo, Boston, 1834, second edition, 1840; 'The North American Sylva,' 3 vols. 8vo, Philadelphia, 1842-49; and numerous diagnostic botanical papers contributed to American scientific periodicals. His biographer, Elias Durand, says of him that "no other explorer of the botany of North America has, personally, made more discoveries; no writer on American plants, except, perhaps, Professor Asa Gray, has described more genera or species."

NYE, PHILIP, a prominent nonconformist divine of the 17th century, was born of what Anthony Wood calls a "genteel family" in Sussex, in or about the year 1596. On the 21st of July, 1615, he was entered a commoner of Brasenose College, Oxford, from which he shortly afterwards migrated to Magdalen Hall, of which he continued a member until his graduation as B.A. on the 24th of April, 1619, and M.A. on the 9th of May, 1622. He was curate of St. Michael's, Cornhill, London, in 1630; and three years later, in order to escape the imperious measures of Laud, he took refuge in Holland, where, with Dr. Thomas Goodwin, who had also become a refugee, he undertook the co-pastorate of an English congregation, constituted on the Independent model, at Arnheim, in Guelderland. He returned to England late in 1640, and by the favour of Lord Kimbolton, afterwards Earl of Manchester, a partisan of the Long Parliament, was appointed to the living of Kimbolton, in Huntingdonshire. In July, 1643, he was sent, with Stephen Marshall, whose daughter he had married, and others, to Edinburgh, as a member of the commission appointed to treat with the Scotch for their co-operation in the measures agitated by the English Parliament; before both Houses of which he preached, after his return, on the occasion of their taking the Covenant (September 25th) which he had gone to Scotland to expedite. He became the leader of the "dissenting brethren" in the Assembly of Divines at Westminster, which met on the 1st of July in the Jerusalem Chamber. His various services were rewarded by presentation to the rectory of Acton, Middlesex, in succession to Dr. Daniel Fairclough, *vulgariter* Featley, who was ejected

from this and his other preferments. In 1648 Mr. Nye was one of the chaplains who attended the commissioners to King Charles I., then detained at Carisbrook Castle, in the Isle of Wight; and in 1653 was appointed one of the triers of ministers under the Protector, by whose orders he was also concerned as a principal person in managing the meeting of the Congregational Churches at the Savoy, where the 'Declaration of the Faith, Order, and Practice of the Congregational Churches in England' was agreed upon by their elders and messengers, October 12th, 1658. This document, which is of considerable importance, was published in 1659, and was translated into Latin by Professor Hornbeck, or Hoornbeck, at the end of his 'Epistola de Independentismo: cum Independentium in Anglia Confessione,' 8vo, 1661. Nye's political action had been so free and so prominent against Charles I., that, after the Restoration, it was seriously debated by the "Healing Parliament," for several hours, whether he and John Goodwin should be "excepted for life" from the Act of Indemnity (August 29th, 1660), and it was finally determined that, "if Philip Nye, clerk, should, after the first of September following, accept or exercise any office, ecclesiastical, civil, or military, he should, to all intents and purposes in law, stand as if he had been totally excepted." His papers were seized in accordance with an Act of Parliament, and lodged in the archiepiscopal palace at Lambeth; and he is said by Wood, a bitter adversary, to have been "vehemently suspected" of complicity in the conspiracy against the Government, for which Philips, Tonge, Gibbs, and Stubbs were executed, December 22nd, 1662. After Nye's ejection, 1660, from the rectory of St. Bartholomew behind the Exchange, a benefice which he had enjoyed for several years, he preached privately, as opportunity offered, to a congregation of Dissenters, until his death, on the 27th of September, 1672. He was buried in St. Michael's Church, Cornhill, leaving behind him a reputation which has been heartily assailed and vindicated

according to partisan prepossessions. In 'Hudibras' there are two or three uncomplimentary allusions to him, and in Butler's 'Genuine Remains,' occurs an entire poem of over a hundred lines 'Upon Philip Nye's Thanksgiving Beard,' an appendage which Nye, in common with many of the contemporary puritan clergy, cultivated with great care.

Nye is the author of several works, many of which, once of vital importance in the controversies of his time, are now of little but historical interest. They include an 'Exhortation to the Taking of the Solemn League and Covenant, for Reformation and Defence of Religion,' &c., 4to, London, 1643, and several times reprinted; 'The Excellency and Lawfulness of the Solemn League and Covenant, set forth in a Speech to the House of Commons and the Reverend Assembly of Ministers, at the taking of the said Covenant, 25 September, 1643,' 4to, London, second edition, 1660; 'Beams of former Light: discovering how evil it is to impose doubtful and disputable Forms for Practices upon Ministers, especially under the Penalty of Ejection for Nonconformity unto the same,' &c., 4to, London, 1660; 'Case of great and present Use,' &c., 8vo, London, 1677; 'The Lawfulness of the Oath of Supremacy, and Power of the King in Ecclesiastical Affairs. With Q. Elizabeth's Admonition,' &c., 4to, London, 1683, which was printed, for the third time, with a modified title, in 1687, with a dedication to James II., by Henry Nye, the author's son; 'Vindication of Dissenters: proving that their particular Congregations are not inconsistent with the King's Supremacy in Ecclesiastical Affairs,' which was incorporated in a volume with 'The Lawfulness,' &c., 4to, London, 1683. Nye produced many works jointly with other divines of his party; and was concerned, with Thomas Goodwin, in editing a work entitled 'Bowels Opened; or, a Discovery of the neare and deare Union betwixt Christ and the Church, in divers Sermons on the Canticles, by that reverend and faithful Minister of the Word, Dr. Sibbs,' 4to, London, 1641.

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O'DONNELL, LEOPOLDO, DUKE OF TETUAN, Count of Lucena, a grandee of the first class, a statesman, and a marshal of Spain, the third of the four sons of the Count of Abisbal, a distinguished officer of artillery, was born, according to the more probable authorities, on the 12th of January, 1809. He was descended from a family of Irish refugees, who left Donegal and settled in Spain in the beginning of the last century. At fifteen he joined the army, in which it is said he had held a lieutenant's commission since his eleventh year; was promoted to a company at nineteen; and in his twenty-fifth year had already attained the rank of colonel. In the civil war which followed the death of Ferdinand VII., September 29th, 1833, O'Donnell declared himself in favour of the new law of succession and of the regency of Maria Christina, the Queen-Mother; whilst his brothers, yielding to the influence of their mother, between whom and the Princess Maria Francisca, wife of Don Carlos, an intimate friendship subsisted, took up arms for the Pretender. O'Donnell distinguished himself by the courage and conduct which he displayed as a soldier of Queen Isabella, and it was remarked that he hardly ever went into action without being wounded, sometimes severely, and once so dangerously that he was obliged to retire from active service for a year. His sufferings were compensated, however, by the rapidity of his professional promotion, which was accelerated by the warm interest of Espartero in his favour. After the second siege of Bilbao, 1836, he was promoted to the rank of general of brigade, and was named to the command of the army of Guipuzcoa, and held the post until he was summoned to the head-quarters of Espartero at Logroño, in January, 1839. He was soon transferred to the command of the army of the centre, and, having compelled Cabrera, who was at the head of the Carlist forces in Aragon, to raise the siege of Lucena, which in fact put an end to the war in that part of Spain, as it had terminated in the northern provinces, he was created Count of Lucena, and promoted to be a lieutenant-general. In 1840,

having been appointed Captain-General of Valencia, he used all his influence on the side of the Queen-Regent, in an endeavour to counterbalance the power of his benefactor Espartero, who, in spite of this combination, was declared Regent during the minority of the young Queen, by the Cortes, in 1841. Hereupon O'Donnell was obliged to resign his command, and to seek refuge in France, where he joined the Queen-Mother, in whose interest, when the military conspiracies broke out all over Spain, he repaired to Pampeluna, where he placed himself at the head of an insurrectionary movement against the Regent, whilst an attempt was almost simultaneously made at Madrid, by General Diego Leon and others to gain possession of the palace. Both enterprises failed, and O'Donnell returned to France, where he continued to carry on his machinations against the Regent, whose overthrow was at length accomplished by the military movement which resulted in the triumphal entry of Narvaez into Madrid, on the 24th of July, 1843. For his share in this success, O'Donnell was presently rewarded with the lucrative post of Captain-General of Cuba; and, having left Spain a poor man, went back thither, after a few years of office, with a fortune of a million dollars, a sum which he could not have amassed out of the savings of his salary, and which has been roundly described as made up of "the perquisites of his underhand connivance with the slave trade which he had been sent out to prevent." On his return to Spain, he became a member of the Senate, and was soon afterwards appointed, under the Narvaez administration, to the post of director-general of the Infantry, which he held until 1851. After the fall of Narvaez, in January of the last-named year, O'Donnell continued in opposition to the succeeding ministries of Roncali, Lersundi, and Sartorius. Against Sartorius, who is otherwise known as the Count of San Luis, a vast conspiracy, numbering both Moderados and Progresistas amongst its members, was organised, and of this conspiracy O'Donnell was the leading spirit. On the 28th of June, 1854, he placed himself at the

head of the revolution which resulted in a national demand for the return to power of Espartero, under whom O'Donnell accepted the office of Minister of War, August 1st, 1854. In July, 1856, O'Donnell, who, after a time, had begun to quarrel with Espartero, supplanted the latter as Prime Minister and President of the Council, and maintained himself in his position with much severity and bloodshed until Narvaez again succeeded to the premiership in 1857. O'Donnell was again called to power, however, on the 1st of July, 1858, as Minister of War and President of the Council; and, as a variety from the monotonous repetition of domestic massacre, declared war against Morocco on the 23rd of October, 1859, and himself undertook the command-in-chief of the army. The war was a uniformly victorious one on the part of Spain; and O'Donnell, after he had dictated the terms of peace, found himself at such a height of popularity, that he was able to extend the duration of his administration until his resignation, February 26th, 1863, so concluding a term of office without parallel in the political history of Queen Isabella's reign. In acknowledgment of his services in Morocco, O'Donnell was promoted to be a field-marshal, was created a grandee of Spain, and Duke of Tetuan, his title being commemorative of the brilliant victory won on the 4th of February, 1860, in the neighbourhood of that town, and of its capture two days afterwards. He was succeeded as war minister by General Concha; but, after a short interval of a Narvaez cabinet, he was again installed in office on the 22nd of June, 1865. He was assisted by Narvaez in suppressing a great military revolt at Madrid, June 26th, 1866; and, upon his resignation in the following month of July, his administration was succeeded by the Narvaez-Murillo cabinet. He died at Biarritz, whilst waiting the turn of events in Spain, on the night of the 5th of November, 1867, of an asthmatic complaint of some years' standing. His remains were conveyed to Madrid, where his obsequies were celebrated with much pomp and ceremony. Against the habitual treachery and tergiversation which characterised the career of O'Donnell, causing him to lose sight of the dishonour of the means so that the end did but appear desirable, it is to be recorded to his credit that he looked farther forward and around than either of his colleague-rivals, Narvaez and Espartero, and exhibited on the whole more of statesmanship than any recent Spanish politician.

OERSTED, ANDERS SANDÖE [E. C. vol. iv. col. 553]. This eminent Danish statesman and author ended his long and chequered career on the 1st of May, 1860, in the 82nd year of his age. The promised continuation of his autobiography has not appeared, and probably was not written.

* OFFENBACH, JOACHIM, musical composer, was born at Cologne, June 21st, 1819 (or, according to other authorities, July 20th, 1822). He studied music as a pupil at the Conservatoire, and in later years became chef d'orchestre at the Théâtre Français. He was first known as a composer by adapting some of La Fontaine's fables to music; each fable constituting a musical scene, vaudeville, or operetta di camera. They were popular as specimens of light and gay composition. In 1855, he undertook the directorship of the Théâtre des Bouffes Parisiens; and it is there that the operas were produced which have made his name celebrated. In sixteen years he has written more than thirty of these operas, not all short, but all sparkling and merry, some of them puerile, and some associated with scenes and language characteristic of the low moral tone of the second empire. The best known among them are 'Orphée aux Enfers,' 'La Belle Hélène,' 'La Barbe Bleue,' 'La Grande Duchesse,' 'La Princesse de Trebizonde,' 'Vert Vert,' 'La Perichole,' and 'Les Brigands.' During the Exhibition year, 1867, M. Offenbach is said to have received no less than 240,000 francs for royalty or copyright on the representation of his operas. It was especially 'La Grande Duchesse' which drew large audiences; but this was due rather to the manner in which the principal character was portrayed by a Parisian actress, than to the merit of the music. In 1870-71, during the closing of the Paris theatres by war, several French companies visited England, and Offenbach's operas were largely represented in London. Notwithstanding the want of depth, science, and refinement in his music, there is much that is sparkling and brilliant in the melodies and arrangement.

OGLETHORPE, GENERAL JAMES, founder of the Colony (now State) of Georgia, America, was the third son of Major-General Sir Theophilus Oglethorpe, and was born in Westminster on the 1st of June, 1689. He matriculated at Corpus Christi College, Oxford, in 1714, but had entered the army as ensign in 1710, and in 1714 was captain-lieutenant in the First

Queen's Life Guards. To improve his military knowledge, he volunteered to serve under Prince Eugene, and gained honourable notice at the siege of Belgrade in 1717. By the death of his elder brother, he succeeded to the family estate, Westbrook, Surrey, and in 1722 was elected M.P. for Haslemere, which town his father and brother had represented before him. His family had strong Jacobite tendencies, and his elder brother had joined the Pretender in France; but James Oglethorpe remained loyal to the reigning dynasty, though in the House he took an independent course. He came prominently forward in 1728, when, having become acquainted with the inhuman treatment of prisoners confined for debt in the Fleet Prison, he brought the subject before the House of Commons, supporting his case by so terrible an array of facts that a Prison-Visiting Committee was appointed, with Oglethorpe for chairman. The committee did their work thoroughly; the prisons throughout the country were visited; the reports presented to the House displayed so fearful an amount of cruelty that measures were adopted for greatly ameliorating the condition of the unfortunate prisoners; and the keepers of the Fleet and Marshalsea Prisons were by an Act disabled from holding their office, and afterwards tried for murder but acquitted. Oglethorpe had devoted three years to this self-imposed duty, but he felt that his task was only half accomplished unless he could provide a means of subsistence for those he had been instrumental in setting free, and open a channel for the profitable employment of others in like circumstances. His thoughts had been directed towards the unoccupied territory south of the Savannah river, lying between the colony of South Carolina and the Spanish province of Florida in North America, as a promising country for colonization. He accordingly matured a large scheme for founding a colony, and succeeded in inducing a number of opulent persons to join him in advancing funds and to assist in the management. He and his associates obtained a charter, dated June 9th, 1732, for "settling and establishing the Colony of Georgia in America," the colony being so named in honour of George II., by whom the charter was granted. In furtherance of his scheme, Oglethorpe published two pamphlets, 'A New and Accurate Account of the Provinces of South Carolina and Georgia,' and 'An Essay on Plantations,' 8vo, London, 1732; and the trustees appealed to Parliament and the public to enable them to provide free passage, clothes, and provisions for the emigrants, and to meet the necessary expenses. The House of Commons voted them 10,000*l.*, and 26,000*l.* more in the next two years, and considerable sums were furnished by public bodies and private benefactors. On the 16th of November, 1732, the ship *Anne* sailed from Gravesend with the first body of emigrants, about 120 in number, for Georgia. Oglethorpe accompanied them, with the title of governor of the colony, he having however stipulated that he was "to receive no salary or other recompense" for his service. They reached Charleston Harbour, South Carolina, on the 13th of January, 1733, and arrived at Savannah on the last day of the month. Here Oglethorpe landed his followers, and marked out the site of his first town. One of his earliest measures was to obtain an interview with the native chiefs, and enter into a treaty of alliance with them, and to settle terms for a cession of territory, it being, as he said, his hope "that the settlement of Georgia may prove a blessing, and not a curse, to the native inhabitants." He now set about clearing and sowing the ground, building houses, making roads and defences, and forming a plan of government, he himself living all the time under canvas. Other emigrants arrived, including a band of persecuted Protestants from Saltzburg, to whom Oglethorpe had offered a home, and having explored the country and ascertained its capabilities, he sailed for England, April, 1734, taking with him some Indian chiefs, his purpose being to obtain additional emigrants of a better class, and to interest the home authorities in the welfare of the Indians. He remained in England till October, 1735, when he again set sail, this time taking with him John and Charles Wesley as chaplains and missionaries. He again returned to England in November, 1736. The conduct of the Spaniards making it necessary to concert measures for the defence of the infant colony, Oglethorpe received the appointment of general of the forces in Georgia, but the material assistance afforded by the home government was slight and inefficient. Oglethorpe, however, returned to Georgia, and during the five years he remained there was able to repel every inroad of the Spaniards, and to inflict upon them serious losses, though he failed in an attempt to take St. Augustine, mainly through want of co-operation on the part of the commander of the fleet. Oglethorpe had admirably organized and disciplined

the settlers, had founded several new towns, put the colony into a good state of defence, and established terms of close friendship with the natives, who regarded him with unbounded esteem and reverence; but he was overburdened with liabilities, the home treasury having dishonoured his drafts for military and other expenses, and he felt that it was necessary to return home. He left Georgia for good, July 25th, 1743. Arrived in England he had to meet new troubles. An officer who had served under him in Georgia preferred charges of misconduct, which, after adjournment for the production of witnesses from America, were tried before a board of general officers, June 4th, 1744, and pronounced to be "groundless, false, and malicious," and the accuser, Lieut.-Col. Cooke, was dismissed from the service. Oglethorpe was appointed one of the general officers to oppose the threatened French invasion, and in 1745, having been promoted to the rank of major-general, was sent at the head of a regiment of rangers he had raised for service in Georgia, to join the forces marching against the Young Pretender, who had defeated the troops in Scotland and entered England. Oglethorpe joined the main army of the Duke of Cumberland, and took part in the engagement at Clifton Moor. He seemed to have done all that was practicable, but the Duke was dissatisfied, and on his return to London had Oglethorpe brought before a court-martial for "lingering on the road." He was honourably acquitted, September 29th, 1746, and the following year was made lieutenant-general, but does not seem to have been again actively employed. He however continued to take part in the debates in the House of Commons, especially on military topics and the improvement of the condition of the soldier, as he had before been active in endeavouring to improve the condition of the sailor. In 1754 he lost his election for Haslemere, after having represented it for 32 years. He now retired from public life; but though he had reached his 65th year he had lost little of his vigour and activity of body and mind, and for the next 30 years he continued to retain both, living much in society, and much sought after on account of his remarkable career as well as of his personal character and great age. He had founded a colony, and not only lived to see it become "the most flourishing colony on the continent" (Bancroft, vol. v. p. 105), but an independent state. In early life "his strong benevolence of soul" had been celebrated by Pope and Thomson; in his old age he lived in familiar intercourse with Johnson, Burke, and Goldsmith. "At last," as Boswell records, "he was carried off by a violent fever," at his seat, Cranham Hall, Upminster, Essex, on July the 1st, 1785, having completed his 96th year a month before. He had become general by seniority in 1765, and was for many years the oldest officer in the service. (R. Wright, *A Memoir of General James Oglethorpe*, 1867.)

OHM, GEORGE SIMON, was born 16th March, 1787, at Erlangen, in Bavaria, where his ancestors during several generations had carried on the trade of locksmith. His father having acquired an amount of knowledge, including mathematics, unusual in his station of life, determined to give his boys (George and Martin) a superior education, and, accordingly, after they had passed through the elementary school, he sent them to the Gymnasium. Here they made such progress that the mathematician Langsdorf foretold that some day they would emulate the brothers Bernoulli. Hence their father relinquished his intention of bringing them up to his business, and consented to their pursuing a scientific career. George entered the University of Erlangen, but left it after eighteen months in order to give instruction in mathematics in Switzerland. He became a mathematical tutor in the Institute of Gottstadt, near Nidau, in the canton of Berne, where he remained two years and a half. He then became a teacher of mathematics in Neufchâtel. In 1811 he returned to Erlangen, and, after taking his degree, became privat-docent at that place. After this he held a tutorship at the Real-schule of Bamberg, which was soon dissolved. In 1817 he became teacher of mathematics in the Great (Jesuits') Gymnasium at Cologne, where his skill as a teacher was soon recognised. Here he engaged in original inquiries, and was led to discover the true explanation of the then enigmatical phenomena of the voltaic current. In 1826 he obtained leave of absence in order to proceed to Berlin to perfect and publish his new theory, which appeared in 1827 under the title, 'The Galvanic Circle mathematically treated.' His work, however, failed to attract notice, either from the leading scientific men of the day or from the authorities then at the head of affairs in education in Prussia. With feelings of mortification and grief he threw up his appointment at Cologne, and passed seven years in private life with

scarcely any means of subsistence. In 1833, however, the Bavarian Government appointed him professor in the Polytechnic School at Nürnberg. His theory gradually rose into favour, and in 1841 the Royal Society of London awarded him their highest honour, the Copley medal, and in the following year elected him a foreign member. He now became recognised as one of the most eminent philosophers of Germany, and "Ohm's Laws" were introduced into all elementary works on physics. He now engaged in a work on molecular physics, with a view to throw a new light on the nature and co-relations of light, heat, electricity, and magnetism. The first volume of this work was published in 1849 under the general title of 'Contributions to Molecular Physics,' and with the special title of 'Elements of Analytical Geometry of Three Dimensions, according to the system of oblique-angled Co-ordinates.' He deemed this introduction to be necessary because the ordinary mathematical methods did not apply themselves to his ideas with sufficient simplicity and conciseness. He dedicated this work to the Royal Society of London, "whose approbation," he says, "tempered his courage, which had previously been softened by disheartening treatment, to renewed efforts in the field of science." While working at this great undertaking he was, in 1849, called to fill the vacant post of Conservator of the Physical Collection at Munich. Congenial as this appointment was to his tastes, it is to be regretted that his new duties left him no time for the prosecution of his great work. But he published a memoir of great interest on 'The Phenomena of Interference in Uni-axial Crystals.' In 1852 he became professor of Experimental Physics in the High School at Munich, and devoted much time to the preparation of a text-book on physics, in which many of the subjects are treated in a very original manner. This work was published in 1854, in which year he was suddenly carried off by an attack of apoplexy on the 7th of July. His biographer, Dr. J. Lamont, who prepared a detailed memoir on his life and writings for the Royal Academy of Science at Munich, says: "Thus ended the noiseless life of a simple and easily contented, but highly gifted man, who lived solely for science, and who had neither sought nor found social advantages, honours, wealth, or what the world is accustomed to consider as chiefly contributing to happiness." He contributed twelve papers to the Journals of Schweigger and Poggendorff, of which two relate to Acoustics, one to Physical Optics, and the remainder are on electrical subjects.

* OHM, MARTIN, younger brother of the preceding, was born at Erlangen, May 6th, 1792. He studied first at the Gymnasium, then at the University in his native town, and in 1811 became privat-docent. In 1817, he was appointed director of mathematical studies at the Gymnasium of Thörn. In 1824 he was named extra, and, in 1829, ordinary professor at the University of Berlin. He held, also, a professorship at the Bau Akademie, 1824-31; at the Kriegsschule, 1826; at the Artillerie-und-Ingenieurschule, 1833-52. His life has been passed almost wholly in the fulfilment of his duties as professor and tutor, except that, from 1849 to 1852, he was a member of the Prussian Parliament at Berlin, when he took rank as what is called a liberal-conservative. Martin Ohm's writings are numerous and of much value. His great work is 'Versuch eines vollkommen consequenten Systems der Mathematik,' 9 vols. 8vo, 1822-1852, third edition of the early volumes, 1855, &c. His other works include, 'Aufsätze aus dem Gebiete der höheren Mathematik,' 1823; 'Lehre vom Grössten und Kleinsten,' 1824; 'Reine Elementar Mathematik,' 1826; 'Lehrbuch der niederen Analysis,' 2 vols. 8vo, 1828-29; 'Lehrbuch der höheren Analysis,' 5 vols. 8vo, 1829-32; 'Lehrbuch für den gesamten Mathematischen Elementarunterricht,' 1836; 'Lehrbuch der Mechanik,' 3 vols., 1836-1838; 'Geist der Mathematische Analysis,' 2 vols., 1842-1845; 'Übungen in der Anwendung der Integral Rechnung,' 8vo, 1856; 'Die dreieinigkeit der Kraft,' 1856; 'Kurzer Leitfadend und wissenschaftliche Grundlage der gesamten Elementar Analysis,' 1862. He has also published papers on the 'Transformation of trigonometrical Functions,' and other mathematical subjects, in Ferussac's 'Bulletin des Sciences Mathématiques,' the 'Memoirs of the Imperial Academy of St. Petersburg,' and Crelle's 'Journal.'

* OLLIVIER, OLIVIER ÉMILE, a French lawyer and sometime minister, was born at Marseille on the 2nd of July, 1825; and, after having received his general education at Sainte-Barbe, studied law at Paris, to the bar of which city he was admitted as an advocate in 1847. Through the influence of Ledru Rollin, who was a friend of his father, he was nominated, February 27, 1848, to be commissary-general of the Republic in the Bouches-du-Rhône, and in June following was confirmed in his appoint-

ment by General Cavaignac, with the title of *préfet*. He left this office in July to undertake the prefecture of the Haute Marne, the duties of which he fulfilled until January, 1849; after which he resumed his practice at the bar, and was concerned in the conduct of several important cases. In the general election of 1857, he was returned to the Chamber of Deputies as representative of the third circumscription of the Department of the Seine, when, in his character of Opposition candidate, he polled 11,005 votes against the 10,006 of M. Varin, the Government nominee. He took part in the most important questions that came before the Chamber, and generally in a sense extremely hostile to the regime of the Emperor, whose proffered distinctions he declined to the extent of coldly refusing to dine at the Tuileries in April, 1858. Of the five members of the Opposition in the Chamber of Deputies, known as the "Cinq," the one most indulgently heard by the majority was M. Ollivier; who, for the opening of his defence of M. Vacherot, when the latter was prosecuted for his book entitled '*La Démocratie*,' was suspended for three months (December, 1859) from the performance of his functions as an advocate. In 1863 he was re-elected for Paris, and in the first session of the new legislature exhibited so much moderation as to occasion coldness and distrust amongst the more extreme members of his party, whose opposition threatened to overpass the limits of the constitution. "M. E. Ollivier," it was said in one of the journals, "a été républicain pour être préfet, il devient bonapartiste pour essayer d'être ministre." Henceforth his course became more independent, his votes for or against the Government being less and less influenced by the fignment of party consistency. In 1865 he was elected a member of the Conseil général of the Var; and, in July of the same year, having accepted the appointment of commissary-general of the Viceroy of Egypt, at Paris, retired from the general practice of the bar. He was afterwards chosen by the Emperor as arbitrator with reference to the complications occasioned by the formation of the Isthmus of Suez canal. The process of his reconciliation with the Imperial Government was accelerated by the Emperor's decree of the 19th of January, 1867, which embodied various political reforms; and he soon afterwards published an exposition of his political action, for which he claimed good faith and consistency, with the title of '*Démocratie et Liberté* (1861—1867),' 8vo, Paris, &c., 1867. The volume was dedicated to his constituents, and contained his "principaux discours, ses diverses professions de foi, ses articles de journaux depuis 1861;" and he expressed the comfort which he derived against imputations and suspicions from the experience of Washington, Lafayette, Carnot, Benjamin Constant, Casimir Périer, Lamartine, Cavour, Daniel Manin, and Deak. In view of the general elections of 1869, he published in March of that year a kind of manifesto entitled '*Le 19 Janvier*,' which went through several editions, but was not convincing enough to ensure his return by his old constituency, who, in the following June, rejected him in favour of M. Bancel, a candidate of the radical opposition. M. Ollivier was, however, triumphantly returned for the first circumscription of the Var; and, on the 27th of December, was charged by the Emperor with the formation of the first parliamentary cabinet, a task which he succeeded in accomplishing on the 3rd of January, 1870, reserving to himself nominally the Ministry of Justice, and really the direction and responsibility of the administration. His task was to form what was in fact a coalition ministry into a homogeneous cabinet which should faithfully represent the majority of the Legislature, and therewith to lay the "foundation of French liberty." After anxious consideration it was determined to appeal to a *Plébiscite*, on the ground that "it would be shortsighted and dangerous," as M. Ollivier stated, "not to require for the new Constitution the sanction which alone made the strength of the old Constitution. It is the liberal modifications introduced since 1860 that we propose to submit to the approval of the people. We do not intend to submit to a vote that which was supremely decided in 1852, and by again submitting to discussion the principle of the state and of the dynasty to convert the hereditary empire into an elective empire." The *Plébiscite* was taken in May, and resulted in an overwhelming majority approving the position of the Emperor and the measures of the preceding ten years, of which the popular sanction was invited. The opinions which were expressed and the prophecies which were hazarded as to whether the *Plébiscite* would be found to work as the real, or only as the apparent and superficial basis of constitutional freedom, had no time to be brought to the issue. On the 15th of July war was declared against Prussia, a war into which M. Ollivier declared, in an unfortunate expression, which was frequently used against him,

France entered "au cœur léger." The disasters of the Imperial arms speedily led to the necessity of a ministry more specially adapted for the carrying out of a military programme, and the administration of M. Ollivier was superseded on the 9th of August by a "Ministry of Public Safety," which, having been summoned by the Empress-Regent, was characterised by its inclusion of several members who were remarkable chiefly for the pure imperialism of their prepossessions.

M. Ollivier is the author of numerous juridical articles contributed to the '*Revue de Droit pratique*,' which, jointly with MM. Mourlon, Demangeat, and Ballot, he founded in 1856; and he was associated with the first of these gentlemen in the production of a '*Commentaire de la Loi portant Modification des Articles 692, 696, 717, 749a, 779, et 838, du Code de Procédure civile sur les Saisies immobilières et sur les Ordres*,' 8vo, Paris, 1859. Besides other publications of legal or political significance, he has also produced a '*Commissaire de la Loi du 25 Mai, 1864, sur les Coalitions*,' 12mo, Paris, 1864.

OLMÜTZ, WENZEL (or, WENCESLAUS), VON, one of the earliest German engravers, is believed to have been a native of Olmütz, in Moravia. The years of his birth and death are unknown: his engravings are dated from 1480 to 1512. He was a goldsmith as well as an engraver. As an engraver he was an imitator, and probably a scholar, of Schongauer, several of whose prints he copied. He also copied some of the prints of Albert Dürer, and these were formerly attributed to Michael Wohlgemuth. His best prints are those, chiefly of scriptural subjects, made from his own designs. His satirical print, '*Roma caput Mundi*,' dated 1496, is the earliest known in which etching is employed. From the signature to his '*Martyrdom of St. Andrew*,' and one or two others, he appears to have resided for some time at Cologne. Bartsch described fifty-seven prints by Olmütz; but Brulliot, Nagler, and Passavant have raised the number to eighty-two; among them, however, two or three are, at least, of doubtful authenticity.

* OLOZAGA, SALUSTIANO, a Spanish lawyer and politician, was born about 1803, at Logroño, where, after having completed his preparatory study of the law, he commenced his career as an advocate. The liberality of his opinions made him obnoxious to the Government of Ferdinand VII., against whom, in 1831, he was suspected of having conspired. He contrived to escape from the imprisonment to which he was in consequence subjected, and took refuge in France; from which the death of Ferdinand, September 29th, 1833, and the subsequent relaxations of the laws against political offenders, made his return possible. He was elected, in the same year, as deputy to the Cortes, of which his political fervour and his oratory presently rendered him a prominent member, as well as a valuable ally to the liberal administration of Mendizabal, September 1836. In 1840, he was appointed ambassador at Paris, where he remained until, after the declaration of the majority of the young Queen Isabella, in November, 1843, he was recalled to Madrid, in order to form a cabinet, in which he undertook the combined offices of President of the Council and Minister for Foreign Affairs. His administration was of only ten days' continuance. He had brought forward M. Lopez as a candidate for the presidency of the Chamber of Deputies, which rejected him, and named M. Pidal to the office. Olozaga, defeated on this point, demanded, it was asserted, with violence, that the Queen should dissolve the obnoxious Chamber. Upon her refusal, the administration resigned, and Olozaga after a defensive speech in the Lower House, directed especially against Narvaez and his friends, retired to Portugal, and, subsequently, to England, where he remained about three years. Having been elected a deputy in two provinces to the Cortes that assembled on the 31st of December, 1846, he entered Navarre from Bayonne, on his way to Madrid, to take his seat. Notwithstanding the perfect order of his passport, the inviolability of his person as a deputy, and the fact that no prosecution, regular or irregular, existed against him, he was arrested near Buytrago, about New Year's day, 1847, and committed to the citadel of Pampeluna. From this place he transmitted to the Cortes an energetic protest against his imprisonment; and, on the 30th of March, the ministers signed a permission for his return to Spain, simultaneously with a "spontaneous" act of grace on the part of the Queen, conferring the same favour. A few days afterwards he took his seat in the Cortes, where he distinguished himself as a leading member of the liberal party; and was instrumental in bringing about, in 1848, the return to Spain of the ex-regent, Espartero, under whose administration, founded on the Revolution of July, 1854, he was sent a second time as ambassador to France. He was

superseded by Serrano in this office not long after the accession of Narvaez to power in October, 1856. After a series of years, during which he devoted himself consistently to the advocacy and defence of monarchical liberalism, worn out at length with the deferred hope of royal reformation, he gave his enthusiastic adhesion to the Revolution which forced Queen Isabella from the throne of Spain, September 29th, 1868, although he declined at first to take any part in the Government. He was, however, presently admitted to the Council of Ministers, and, on the 23rd of December, returned to Paris as the ambassador extraordinary and plenipotentiary of the Provisional Government. After some time he was recalled to Madrid to assist in the labours of the constitutional commission appointed by the Cortes, of which he was named president, in March, 1869; once more resuming, about two months later, his intermitted functions as ambassador in France. He was recalled in December, 1870, on the ground that although the Spanish Government had recognised the Government of the National Defence, it had not recognised the French Republic; which, on the other hand, had at that time no representative at Madrid. On the 3rd of January, 1871, the day after the young King Amadeo I. had taken the oaths to observe the laws of Spain and the Constitution of 1869, Olozaga, Zorrilla (who was President of the Cortes), and others, were consulted by his Majesty respecting the constitution of the ministry, which, under such auspices, was formed, two days later, on comprehensive and constitutional principles, under the presidency of Marshal Serrano.

* OMALIUS D'HALLOY, JEAN BAPTISTE JULIEN D', geologist, was born at Liège, February 16, 1783. Besides being a man of varied accomplishments in science, he has spent much of his life in filling high official posts. In 1807 he was the mayor of Skeuvre; in 1811, mayor of Brabant; in 1814 the deputy-governor of the arrondissement of Dinant; in 1815 the governor of the province of Namur, and subsequently a member first of the State Council of Belgium and then of the Senate, of which last he was for several years the vice-president. He is a leading authority on the geology of Belgium and France. His first important paper was an essay on the geology of the north of France in the 'Journal des Mines' for 1808, which led to his being requested by the French minister of the interior to draw up similar accounts of other parts of the kingdom. These, together with similar papers relating to neighbouring areas, were collected in his 'Mémoires pour servir à la description géologique des Pays-Bas, de la France et de quelques contrées voisines,' 8vo, Namur, 1828. A work of a similar character is his 'Coup d'œil sur la Géologie de la Belgique,' 8vo, Brussels, 1842. He has also written a text book on geology, which has had a large circulation. It first appeared as two separate works, one entitled 'Éléments de Géologie,' 8vo, Paris, 1831; the other, 'Introduction à la Géologie,' 8vo, Paris, 1833; which were intended to be the first and second parts of a more extended cyclopaedic series of volumes on the elements of inorganic natural history. They were subsequently combined under the title of 'Abrégé de Géologie,' of which the seventh edition appeared in 1862. His 'Précis élémentaire de Géologie,' 8vo, Paris, 1843, reached an eighth edition in 1868. Another popular work is 'Des Races humaines, ou Éléments d'Ethnologie,' 8vo, Paris, 1845, fourth edition, 12mo, 1859. He has also written books and papers on minerals and rocks, on natural geographical divisions, and other subjects.

OMER PASHA. [E. C. vol. iv. col. 570.] Subsequent to the Crimean campaign, Omer Pasha seems to have been regarded with some disfavour by the Sultan. He however received the appointment of governor-general of Bagdad, and on the revolt of the Montenegrins assuming a serious aspect he was sent to suppress it. Later he was employed in various civil as well as military services, but not such as to place him prominently before the public. He died in April, 1871, at the age of 70.

OMMEGANCK, BALTHASAR PAUL, a distinguished Belgian landscape painter, was born at Antwerp, in December, 1755, resided there all his life, and there died on the 18th of January, 1826. He was a scholar of H. J. Antonissen. He painted best local pastoral scenes, with cattle or sheep browsing. All his pictures exhibit close regard to the peculiarities of the season of the year, and the hour of the day; his drawing is good, his management of aerial perspective excellent, and his groups of animals are introduced and painted with great skill. On the other hand, his execution is not pleasing, nor is his colour satisfactory. Ommeگانck made his way as a painter at first slowly, but eventually he became extremely popular; his pictures were eagerly sought for, abroad as well as at home, at high prices, and he was generally regarded as one of the first landscape

painters of his time. Several of his best pictures are in the great private collections of England. At the time of his death he was a member of the Institut royal des Pays-Bas, and of the academies of Antwerp, Brussels, Ghent, Amsterdam, Munich, and Vienna.

OOST, JACOB VAN [VAN OOST, JACOB, E. C. vol. vi. col. 282].

OPPEL, ALBERT, geologist and palaeontologist, was born in December, 1831, at Hohenheim in Württemberg. He was educated at Stuttgart and Tübingen. While yet a student, he entered zealously into the study of natural history, and more especially of the liassic beds of Suabia; so that, in 1856, he gained the prize, for a treatise on the middle lias of that area, from the Tübingen University. In 1853, he took his degree of doctor, and then determined to make the study of the jurassic group of beds the work of his life. For this purpose he travelled through France, England, and Germany, examining every section and every collection of fossils to which he could obtain access. In 1858, he became Wagner's assistant as conservator of the palaeontological museum at Munich; and in 1861, his successor, as also professor of palaeontology in the university of that city. When he was first entrusted with the care of the museum it was in anything but a satisfactory condition, but he soon converted it into one of the finest of its kind in Europe. He died of typhoid fever, December 22nd, 1866, at the early age of 34. His principal works and papers are 'Die Mittlere Lias Schwabens,' in the 'Jahreshefte' of the Society for the Study of Nature in Württemberg, vol. x. pp. 39—136 (1854); 'Die Jura Formation Englands, Frankreichs und der südwestlichen Deutschlands,' in the same periodical, vol. xii. pp. 121—556; xiii. pp. 141—396; xiv. pp. 129—291; 'Palaeontologische Mittheilungen aus dem Museum der Königl. Bayer. Staates,' pts. i—v., 1862—65; and 'Die thionische Étage,' published in 1865.

* OPPERT, JULIUS, or JULES, a distinguished orientalist, by extraction a Jew, by birth and education a German, and a Frenchman by letters of naturalisation, was born on the 9th of July, 1825, at Hamburg. After receiving his preparatory education at the Johanneum of his native city, he repaired, in 1844, to the University of Heidelberg for the study of law; from which being diverted by the superior attractions of oriental philology, he migrated successively to the Universities of Bonn and Berlin, and, in 1847, was admitted to the degree of Ph.D. at the University of Kiel. Soon after, having devoted himself to the study of the Zend and the ancient Persian, he published a treatise on the vocal system of the latter language, 'Lautsystem des Altpersischen,' 8vo, Berlin, 1847; and later in that year repaired to France, where the path of academical preferment was more easy than in Germany to a man of his religious persuasion. He was appointed to the German professorship successively at the Lycées of Laval and Rheims; and presently commenced to contribute to the 'Revue Archéologique,' and the 'Journal Asiatique,' various articles having reference to Persian literature and antiquities, which were subsequently collected in a volume, entitled, 'Les Inscriptions des Achéménides,' 8vo, Paris, 1852. His talent and erudition attracted the attention of the French Institute, and he was appointed to be a member of the scientific expedition sent out by the Government to Mesopotamia, under M. Fulgence Fresnel, in 1851. Of this expedition he published an account, entitled, 'Expédition scientifique en Mésopotamie, exécutée par Ordre du Gouvernement, de 1851 à 1854, par MM. Fulgence Fresnel, Félix Thomas, et Jules Oppert, et publiée sous les Auspices de S. Exc. M. Achille Fould, Ministre d'État et de la Maison de l'Empereur,' 2 vols. 4to, with an Atlas in folio, Paris, 1857—64. On his return to France in July, 1854, M. Oppert devoted himself to the deciphering of cuneiform inscriptions, his inclination for which had been determined by his intercourse, during his eastern sojourn, with Sir Henry Rawlinson, to whom, as "son premier Professeur de Cuneiformes Ninivites," he dedicated 'Les Inscriptions de Dour-Sarkayan (Khorsabad), provenant des Fouilles de M. Victor Place, déchiffrées et interprétées par Jules Oppert,' folio, Paris, 1870. In 1855 and 1856, he was engaged in the execution of a Government commission for the investigation of the monuments collected in the museums of Germany and England, and, on his return, his various services were acknowledged by his admission to the Legion of Honour, and his appointment to the professorship of Sanskrit in the Bibliothèque Impériale. M. Oppert is a member of various learned societies, being especially a member of the Conseil de la Société Asiatique; and is a contributor to various periodicals, from which many of his works have been reproduced. He contributed one of the four translations, after-

wards published, in parallel columns, and showing a gratifying amount of agreement, by the Royal Asiatic Society, with the title of 'Inscription of Tiglath Pileser I., King of Assyria, B.C. 1150, as translated by Sir Henry Rawlinson, Fox Talbot, Esq., Dr. Hincks, and Dr. Oppert,' 8vo, London, 1857. His other works include, 'Grammaire Sanscrite,' 8vo, Berlin and Paris, 1859, second edition, 1864; 'Les Inscriptions cunéiformes déchiffrées une seconde fois. Lecture des Textes cunéiformes par M. le Comte A. de Gobineau, Paris, 1858,' &c., 8vo, Paris, 1859, republished from the 'Revue Orientale et Américaine'; 'Duppe Lisan Assur. Eléments de la Grammaire Assyrienne,' 8vo, Paris, 1860, second edition, 8vo, Paris and Leipzig, 1868, first published in the 'Journal Asiatique'; 'Remarques sur les Caractères distinctifs des différentes Familles linguistiques,' 8vo, Paris, 1860, extracted from the 'Revue de l'Orient'; 'État actuel de Déchiffrement des Inscriptions cunéiformes,' 8vo, Paris, 1861, extracted from the 'Revue Orientale et Américaine'; 'Les Faistes de Sargon, Roi d'Assyrie (721 à 703 avant Jésus-Christ): traduits et publiés d'après le Texte Assyrien de la grande Inscription des Salles du Palais de Khorsabad,' folio, Paris, 1863, produced jointly with Joachim Ménant; 'Histoire des Empires de Chaldée et d'Assyrie d'après les Monuments depuis l'Établissement définitif des Sémites en Mésopotamie jusqu'aux Séleucides,' &c., 8vo, Versailles, 1865, &c., extracted from the 'Annales de Philosophie Chrétienne'; 'Le Livre de Judith,' 8vo, Paris, 1865, extracted from the 'Annuaire de la Société d'Ethnographie'; 'Les Inscriptions commerciales en Caractères cunéiformes,' 8vo, Versailles, 1866, extracted from the ninth volume of the 'Revue Orientale'; 'Un Traité Babylonien sur Brique, conservé dans la Collection de M. Louis Le Clercq,' 8vo, Paris, 1866, extracted from the 'Revue Archéologique'; 'Babylone et les Babyloniens,' 8vo, Paris, 1866, extracted from the 'Encyclopédie du XIX^e Siècle'; and 'La Chronologie Biblique fixée par les Eclipses des Inscriptions cunéiformes,' 8vo, Paris, 1868, first published in the 'Revue Archéologique.'

ORBIGNY, ALCIDE DESSALINES D', French zoologist, was born at Coueron, September 6, 1802. On completing his education at La Rochelle, he devoted himself to natural history studies; and soon became connected with the Museum of Natural History at Paris—a connection which continued during all his working life. Before this connection was established, however, he had written a memoir on the *Foraminifera*, which he erroneously considered to be closely allied to the *Cephalopoda*. Prior to his taking up the study, these minute and frequently microscopic shells had been almost overlooked; and their introduction to scientific notice was mainly due to him. In 1826 he started for South America as travelling naturalist to the Museum of Natural History; and in the course of the following eight years he personally explored the whole breadth of the central portion of that continent, comprising, wholly or partially, Brazil, the Argentine Confederation, Patagonia, Chili, Bolivia, and Peru. He formed extensive and varied collections illustrative of the history and products of the countries visited; obtained books and manuscripts relating to history; and formed a collection of drawings of various kinds. His specimens comprised some 7000 species of animals, upwards of 2000 species of plants, and numerous samples of the rocks. His labours were immediately appreciated, as the Geographical Society of France awarded him one of its annual prizes for his geographical discoveries, and the French Government sanctioned the publication of a great monographic work on South America. The occupation of bringing out this work extended over twelve or thirteen years. While engaged upon it, however, he conceived another task of stupendous magnitude. His scheme was to form a collection of all the French fossils, and to publish an exhaustive palæontological account of France. The first part of the work appeared in 1840, and his attention was mainly devoted to its completion from that period to the time of his death. He made repeated excursions to various parts of France, and collected about 100,000 specimens, which were ultimately purchased by the French Government. In 1853 a chair of palæontology was specially created for him at the Jardin des Plantes. He died at Pierrefitte, near Paris, June 30, 1857. His works are chiefly remarkable for magnitude of conception. He was the first to describe a large number of genera and species; but in many cases the descriptions have lost much of their value, owing to his having formed his diagnoses upon drawings, fragments of specimens, and other imperfect data. His association of the *Foraminifera* with *Cephalopods* was a cardinal mistake, but he subsequently rectified it by placing them near the *Polypes*. In his works on this group of organisms he pointed out that different forms may coexist in

BIOG. DIV.—SUP.

close contiguity in the same sea—a fact which has recently been brought into prominence as one of the principal results of deep-sea dredging explorations. He also framed the stratigraphical nomenclature which is now usually employed in France. Besides nearly a hundred papers, and contributions to Ramon de la Sagra's work on Cuba, he wrote several works, of which the following are the most noteworthy:—'Voyage dans l'Amérique méridionale,' 7 vols. 4to, 415 plates and 18 maps, Paris, 1835—1849; 'L'Homme Américain (de l'Amérique méridionale) considéré sous les rapports physiologiques et moraux,' 2 vols. 8vo, Strasbourg, 1839; 'Paléontologie française. Description zoologique et géologique de tous les Animaux mollusques et rayonnés fossiles de France, comprenant leur application à la reconnaissance des couches. Terrain Crétacé,' 6 vols. 8vo, 1018 plates, 1840—1860; 'Terrain Jurassiques,' 2 vols. 8vo, 432 plates, 1842—1860; this work was left incomplete, but has been, and is still being, continued by a committee of palæontologists; 'Cours élémentaire de Paléontologie et de Géologie stratigraphique,' 3 vols. 12mo and 4to, 1849—1852; 'Prodrome de Paléontologie stratigraphique universelle des Animaux mollusques et rayonnés, faisant suite au Cours élémentaire de Paléontologie,' 3 vols. 12mo, 1850—1852; and 'Mollusques vivants et fossiles,' 8vo, 1845.

* ORBIGNY, CHARLES DESSALINES D', naturalist, and brother of the preceding, was born at Coueron, December 2, 1806. Like his brother, he was educated at La Rochelle, and in 1835 he became assistant to Cordier, the professor of geology at the Museum of Natural History in Paris, with which establishment he is still connected. He has written several geological and palæontological papers, and also some independent works of the same character; but he is best known as a natural-history cyclopædist, having contributed articles to several cyclopædies in addition to that which he edited under the title of 'Dictionnaire universel d'Histoire naturelle,' 16 vols. 8vo, Paris, 1841—1849, to which Arago, Brongniart, Milne-Edwards, Jussieu, and other eminent scientific men contributed. His other works comprise a treatise on the practical application of geology, an account of the geology of Paris and its neighbourhood, and a manual on rocks, drawn up for the most part from the materials which Cordier left after his death.

ORELLI, JOHANN CASPAR VON, a distinguished Swiss philologist, descended from a noble Italian family which took refuge in Switzerland at the time of the Reformation, was born on the 13th of February, 1787, at Zurich, at the Carolinum of which city he received his education. In 1806 he was ordained; and in the following year undertook the pastorate of the Reformed church at Bergamo, where he continued until 1813, conducting his pulpit and other ministrations in German, in French, and, principally, in Italian. Here he produced his contributions to the History of Italian Poetry, 'Beyträge zur Geschichte der Italiänischen Poesie,' 2 parts, 8vo, Zurich, 1810; and in 1813, having become uneasy in his theological position as pastor at Bergamo, accepted a call to a professorship in the cantonal school of Chur, or Coire, the capital of the Grisons, which he left in 1819, in order to fill the chair of eloquence in the Carolinum at Zurich. In 1831 he was appointed city-librarian; and in 1833, after the foundation of the University of Zurich, in the accomplishment of which he had much interested himself, he added to his existing academical employments the office of extraordinary professor of ancient literature in that institution. He died at Zurich on the 6th of January, 1849.

The reputation of Orelli rests especially on his valuable and learned editions of various Greek, Latin, and Italian authors, some of which he accompanied with excellent commentaries. He edited the works, or selections from the works, of Isocrates, Hesiod, Theognis, Plato, Cicero, Phædrus, Horace, and Tacitus; as well as of Tasso and Ariosto, and the 'Physiognomik,' 16mo, 1846, and the 'Ausgewählte Schriften,' 8vo, 1859, of Lavater. He likewise produced, early in his career as an author, the 'Cronichette d'Italia. Vi s'aggiunge la Vita di Dante Alighieri [translated from the German of J. Wismayr], 2 vols. 8vo, Chur, 1822. A biographical sketch of Orelli was issued nearly two years after his death, with the title of 'Lebensabriss von Johann Caspar Orelli. Aus dem Neujahrsblättern der Stadtbibliothek in Zurich besonders abgedruckt,' 4to, Zurich, 1851.

ORFILA, MATTHIEU JOSEPH BONAVENTURE, is the correct name of the eminent French chemist and toxicologist noticed in the E.C. [vol. iv. col. 589] as P. ORFILA.

ORLOV, GENERAL ALEXIS [E. C. vol. iv. col. 589], was made president of the council of the Russian empire in 1857. He died at St. Petersburg, of brain-disease, on the 21st of May, 1861, in his 74th year.

OS, PIETER GERARD VAN [VAN OS, P. G., E. C. vol. vi. col. 282].

* OSBORN, CAPTAIN SHERARD, R.N., was born in 1820. He entered the Royal Navy at an early age; was midshipman of the 'Hyacinth' in the engagement at Canton in 1841, and of the 'Clio' at the capture of the batteries of Woosung in 1842. With the rank of mate, he served in the 'Excellent' gunnery ship in 1843, and then accompanied the 'Collingwood' to the Pacific. Raised to the post of lieutenant, he rejoined the 'Collingwood' in 1846, and served on board that ship for several years. In his next service he accompanied Sir Leopold M'Clinck's expedition to the Arctic Seas in 1850-51; he edited, while at Beechy Island, the curious ship-newspaper, called the 'Illustrated Arctic News'; and, on his return, published 'Stray Leaves from an Arctic Journal,' 8vo, 1852, of which an American edition appeared in the same year. He was then promoted to the rank of commander; in 1851 he rose to the post of captain. In 1856 he edited M'Clure's 'Discovery of the North-West Passage, by H.M.S. Investigator, 1850-54,' 8vo, 1856-57; new edition, 1865. Consequent on a period of service in the China and Japan seas, he published 'Quedah: or, Stray Leaves from a Journal in Malayan Waters,' 8vo, 1857, second edition, 1860; 'The Fight in the Peiho'; 'Japanese Fragments. With Facsimiles of Illustrations by Artists of Yedo,' 8vo, 1861; and the 'Past and Future of British Relations in China,' 1860. 'Quedah: or, my Cruise in Japanese Waters,' 8vo, 1859, new edition, 1865, may be regarded as a continuation of the 'Quedah' already cited. In 1860 appeared his 'Career, last Voyage, and Fate of Sir J. Franklin.' In 1864 he was placed in command of H.M.S. 'Royal Sovereign,' to test the merits of Captain Cowper Coles's turret-system of arranging the guns; his report on the working of the 12-ton guns, the largest at that time used in the navy, encouraged the Admiralty to adopt the same system in new ships of great magnitude. Since that date, Captain Osborn has taken part in the discussion of many questions of great public importance connected with ships, guns, and the naval service generally.

OTTOKAR VON STEIERMARK (Styria), whose name varies as Ottocar and Ottakcher, an early German poet and chronicler, was born in Styria about the middle of the 13th century; and until recently was erroneously identified with another Ottokar, a member of the noble family of Horneck, who was his contemporary. He is now ascertained to have been a minstrel-retainer of Otto von Lichtenstein, governor of Styria, and son of the celebrated Ulrich von Lichtenstein, with whom he appears to have resided at his various fortresses in the valley of the Upper Mur, and to have taken part at various times in the solemn festivities and pageants held at Vienna, Prague, and Presburg. He died in 1318. His principal work, and one of much value to the student of the history of the time, is his rhythmical Chronicle of Austrian Affairs, 'Austriac Chronicon Germanicum,' which, written in the Bavarian dialect, is over eighty thousand lines in length, and contains a narrative of the events in which Austria, Styria, and the neighbouring countries were interested from 1250, the year of the death of the Emperor Frederick II., to 1309. This work was edited, with a Glossary and Annotations, by a Benedictine named Jerome Pez; and the title, although it involves the error of confounding Ottokar with his namesake of Horneck, will convey a sufficient idea of the scope of the volume:—'Ottocari Horneckii Chronicon Austriacum rhythmicum, ab Excessu Friderici II., Imp., id est, ab Anno MCCL, ad Annum usque MCCCIX, perductum continetur: ac potissimum Rudolphi I., Alberti I., Imp. Rom. Friderici pulchri Austriaci Gesta: Res etiam Styriacæ, Carinthiacæ, Bohemicæ, Hungaricæ, Bavaricæ, Salisburgenses, aliarumque Nationum denarrantur. Nunc primum ex Codd. MSS. Bibliothec. partim augustissimæ Vindobonensis, partim celeberrimi Monasterii Admontensis, Ord. S. Benedicti in Styria, in Lucem publicam vindicatum. Accedit Glossarium, quo Germanicæ Voces obscuriores ac obsoletæ in hujus Auctoris Opere occurrentes explanantur. Edidit R. D. P. Hieronymus Pez, &c., folio, Ratisbon, 1745. A critical and expository work, by Theodor Schacht, conversant about Ottokar's 'Chronicon,' and throwing light upon the history, literature, and public life of Germany in the 13th century, but which perpetuates the confusion of persons already objected to, is entitled 'Aus und über Ottokar's von Horneck Reimchronik, oder Denkwürdigkeiten seiner Zeit. Zur Geschichte, Literatur, und Anschauung des öffentlichen Lebens des Deutschen im dreizehnten Jahrhundert,' &c., 8vo, Mainz, 1821; whilst another, by Theodor Jacobi, which at length separates demonstrably the identity of the two Ottokars,

appeared more recently with the title of 'De Ottocari Chronico Austriaco,' 8vo, Breslau, 1830. Besides the 'Austriac Chronicon Germanicum,' Ottokar produced a rhythmical Chronicle of the World, entitled 'Daz Buch der Kaiser,' which is preserved in MS. in the Imperial Library of Vienna, and in which the author, following Latin authorities, traces the fortunes of several nations until the death of the Emperor Frederick II., the date which forms the starting-point of his later and principal chronicle.

* OUDINÉ, EUGÈNE ANDRÉ, a French sculptor and medallist, was born at Paris, January 1st, 1810. He studied under A. Galle, and in the Académie des Beaux-Arts, where, in 1831, he carried off the grand prize for medal-engraving, which entitled him to study in Rome. In that city he was a pupil of Petitot and Ingres. Here he executed a statue of the 'Wounded Gladiator,' which appeared in the Salon in 1837. From this time he continued to practise, and with nearly equal success, both as a sculptor and a medallist; receiving, in 1847, 1848, and 1855, medals of the second class, and in 1843 one of the first class, for sculpture; and in 1839 a first-class for medal-engraving, and two prizes in 1848. In 1844 he was appointed engraver to the Post Office, and later medal-engraver to the Mint; in 1857 he was nominated knight of the Legion of Honour. As a sculptor M. Oudiné has executed several statues for Versailles, the Louvre, the Luxembourg, and other state buildings, and for various churches, as well as many poetic figures, portrait-statues, and busts of private persons. His medals are numerous and of a high order of merit. Among the more celebrated of these are the 'Apotheosis of Napoleon I.,' a medal of unusually large size, the apotheosis being designed by Ingres, whilst on the obverse is the head of Napoleon in very high relief; several state medals executed for the Emperor Napoleon III.; the great medals of the Exposition Universelle of 1855; those of the Battles of Inkermann and Villafranca; the Académie des Beaux-Arts, &c. They are designed with much spirit, and engraved in a masterly manner. A frame of some of the more remarkable among them was in the International Exhibition of 1862.

OUTRAM, LIEUTENANT-GENERAL SIR JAMES, a distinguished officer in the Indian army, was born at Butterley Hall, in Derbyshire, January 29th, 1803. His father, Mr. Benjamin Outram, was a civil engineer, whose name is associated with the introduction of 'outram,' or 'tram' roads, smooth causeways of iron or stone for the wheels of vehicles to run upon. Left an orphan at the age of two years, James Outram was sent to Scotland to be reared and educated, first at Udnay, in Aberdeenshire, and afterwards at Marischal College, Aberdeen. He went out to India as a cadet in 1819, was placed under an officer in command of a body of irregular troops, and received the rank of lieutenant and adjutant of the 23rd Bombay Native Infantry. He went in 1828 to serve in Khandeish, and was for several years engaged in disciplining the wild Bheel tribes. From 1835 to 1838 he had duties with the regular forces in Gujerat. In the last-named year, as aide-de-camp to Lord Keane, he took part in the Affghan war, and distinguished himself by a ride from Khelat through the Bolan Pass. After the capture of Ghuznee, in which he assisted, he became in succession political agent at Gujerat, Commissioner of Upper Sind, and British Resident at Hyderabad. When appointed, in 1842, to negotiate with the Ameers of Sind, he boldly took their part against Sir Charles James Napier, whose terms appeared to him unnecessarily harsh and severe. The controversy between the two distinguished men was hot and angry, but each acknowledged the other's honesty of motive; and Napier gracefully designated Outram "the Bayard of India, sans peur et sans reproche." Outram showed his sincerity by handing over his share of the prize money to the Bombay charities; and the East India Company afterwards endorsed the correctness of his views. He visited England on furlough in 1843, but returned to India in 1844, and took a command in the Mahratta country. He was, at different times, British Resident at Sattara and Baroda. When filling a responsible post at Bombay, his fearless exposure of abuses raised violent acrimony; but, as he was unquestionably in the right, he gained credit in the end for his firmness. Earl Dalhousie, on annexing Oude, appointed Outram British Resident and Commissioner at Lucknow; but this situation was held only for a short time: Outram came to England for the benefit of his health in 1856. When war was declared against Persia shortly after, Outram was appointed commander of the expeditionary force. He left England on the 20th of November, landed at Bournemouth, January 30th, 1857, defeated the Persians in many engagements in the next three months,

brought the war to an end, and returned to Bombay to find that his services were urgently needed in the suppression of the Mutiny. The Governor-General appointed him Military Commander of the Dinapore and Cawnpore division, at a time when Havelock was heroically struggling against almost overwhelming difficulties. Outram organised a plan, in conjunction with Sir Colin Campbell, reached Dinapore from Calcutta August 18th, arrived at Allahabad September 1st, and at Cawnpore on the 15th. Outram now showed the nobleness of his character: although of higher rank than Havelock, he waived his right, leaving the command to one who had so well deserved it, and offered to fight under Havelock until Lucknow was relieved. How that relief was effected, on the 25th, is recorded in the military history of that eventful period; as are the subsequent detention of Outram and Havelock for two months longer in Lucknow, and the wonderful evacuation of that place by Campbell, Outram, and Havelock, with all the English civilians, women, and children, on the 23rd of November. Outram commanded the first division of infantry when Campbell finally regained possession of Lucknow in March, 1858. Soon after this event he was appointed military member of the Governor-General's council. His services were rewarded with a baronetcy, the rank of lieutenant-general, the Order of the Grand Cross of the Bath, and the thanks of parliament. He was one of the original recipients of the Star of India in 1861, and was much pressed to become a member of the Council of India in London; but his health had given way under the influence of climate and exposure, and his day for labour was passed. In 1862 he received the degree of D.C.L. at Oxford University. The state of his health led to the selection of France as a residence, and he died at Pau, March 11th, 1863. He was buried at Westminster Abbey, and was followed to the grave by Lord Clyde and Sir John Lawrence as mourners. Two works from his pen are, 'Rough Notes of the Campaign in Sind and Affghanistan, in 1838—9; being extracts from a Personal Journal kept while on the Staff of the Army of the Indus,' privately printed, Bombay, 1840; and 'Our Indian Army; Minute of Sir James Outram, in opposition to the proposed Amalgamation of the European and Native Forces,' London, 1860. A colossal bronze statue of Outram was erected in the gardens of the Thames Embankment in August, 1871.

OVERBECK, FRIEDRICH [E. C. vol. iv. col. 605]. This eminent painter died at Rome on the 13th of November, 1869, having completed his 80th year in the preceding July.

OWEN, DAVID DALE [E. C. vol. iv. col. 619], geologist, was born at Broxfield House, Lanarkshire, June 24, 1807. His education was received at Hofwyl, in Switzerland. In 1828 he accompanied his father to the United States; but in 1831 he returned to Europe for the purpose of completing his studies. He learned drawing at Paris, and chemistry (under Dr. Turner) and geology in London. In 1833 he joined the geological survey of Tennessee as a volunteer, and in 1837 he was commissioned to make a geological reconnaissance of Indiana. Subsequently he surveyed Iowa, Wisconsin, Minnesota, Kentucky, and Arkansas. His published works consist chiefly of geological reports, of which the following may be mentioned:—'First Report of a Geological Reconnaissance of the northern counties of Arkansas, made in 1857 and 1858,' 8vo, Little Rock, 1858; 'Second Report, &c.,' 8vo, Philadelphia, 1860, in which the middle and southern counties, surveyed in 1850 and 1860, are dealt with; 'Reports of the Geological Survey of Kentucky,' 3 vols. 8vo, 1856—1857; 'Report of a Geological Survey of Wisconsin, Iowa, and Minnesota, and incidentally of a portion of the Nebraska Territory,' 4to, Philadelphia, 1842; and 'Report of a Geological Reconnaissance of the State of Indiana, made in the year 1837,' 8vo, Indianapolis, 1839. He died at New Harmony, Indiana, November 13, 1860.

OWEN, ROBERT [E. C. vol. iv. col. 618]. In the autumn of 1858, though in his 88th year and infirm in health, Mr. Owen made a long journey to Liverpool in order to take part in the second congress of the Social Science Association. He was anxious to explain and defend some of his views, but the travel and excitement were more than he could bear. He fainted on the platform, and although, after a brief rest, he was able to return home, he never fairly rallied. He died at his native place, Newtown, Montgomeryshire, on the 17th of November, 1858. His latest public appearance was at a Social Science meeting; but Owen had long been more concerned in the consideration of Spiritualism (to which he, with other members of his family, had become a convert) than Socialism. (W. L. Sargent, *Robert Owen and his Philosophy*, 8vo, 1860; A. J. Booth, *Robert Owen, the Founder of Socialism in England*, 8vo, 1869.)

P

PACINI, GIOVANNI, musical composer, was born at Syracuse, in Sicily, in 1796. He was sent at an early age to Rome, to receive a musical education; went thence to Bologna, where he studied harmony and counterpoint under Marchesi and Mattei; and thence to Venice, where he received further instruction from Furlanetto. He composed a few pieces of church music, but speedily turned his attention to operas, of which he poured forth a profusion during a period of forty years. At the age of eighteen he wrote his first opera, 'Annetta,' which was produced at Venice. At Pisa, in 1815, appeared his 'Evacuazione del Tesoro;' and at Florence, in the same year, 'Rosina.' At Milan he produced no less than four slight operas in 1817. By the age of thirty he had composed thirty operas, of which the most successful were 'Adelaide e Comigio' and 'L'Ultimo Giorno di Pompeia.' His opera of 'Niobe,' written for Madame Pasta, met with but an indifferent reception. At Trieste, Turin, and other Italian cities, he brought out upwards of thirty operas between the years 1826 and 1847. One of these, 'Giovanna d'Arco,' although supported by Rubini, Tamburini, and Madame Lalande, met with so cold a reception as to disgust him for a time with writing for the stage; but he soon resumed his habit of rapid composition. In 1836 he was appointed director of the Conservatorio at Viareggio. He composed a few stringed quartettes; but his operas, on which his fame rests, were—like those of many recent Italian composers—written hastily, and without much power or originality, although possessing some graceful melody. He died at Pescia on the 6th of December, 1867.

PADOVANINO [VAROTARI, ALESSANDRO, E. C. vol. vi. col. 291].

PAESIello, GIOVANNI [PAISIello, GIOVANNI, E. C. vol. iv. col. 633].

* PAGE, THOMAS, civil engineer, was born in 1810. After being educated as a surveyor, he studied engineering under Sir Mark Isambard Brunel, whom he aided for many years in the difficult works connected with the Thames Tunnel. When he afterwards became a civil engineer on his own account, he constructed several works for the Government, and others for private companies. He was engineer of the suspension bridge over the Thames at Chelsea, in which he introduced some new features of tension and support; it was finished in 1860; and a minute account of its details of structure, by Mr. George Gordon Page, was read before the Society of Engineers in 1861. A more important work was the beautiful new bridge at Westminster, planned by Mr. Page in 1855 in conformity with the ideas of the late Sir Charles Barry, and finished in 1862. In 1861 he was one of the competitors who tendered plans for the Thames Embankment. In the same year he sent in a design for a new bridge at Blackfriars; it was for a structure of iron and granite, 76 feet wide, with three arches, and was provisionally accepted by the Corporation; but the final decision was in favour of a design by Mr. Cubitt. In 1863 Mr. Page read a paper on the 'Foundations of Bridges,' before the British Association for the Advancement of Science; it was published *in extenso* in the 'Civil Engineer and Architect's Journal.' When the projects for some kind of railway or tunnel to connect England and France were

under discussion in 1869 and 1870, Mr. Page prepared plans for a tunnel-tube of wrought iron, made in quarter-mile lengths, which were to be towed out and sunk in their proper places. These were to be connected with eight conical double iron shafts, or towers, which were also to be built on shore, towed out, and sunk. The tops of the towers were to be above water-level, and each surmounted by a lighthouse.

* **PAKINGTON, RIGHT HON. SIR JOHN SOMERSET**, K.C.G.B., F.R.S., second son of the late William Russell, Esq., of Powick Court, Worcestershire, was born there on the 20th of February, 1799, and was educated successively at Eton and at Oriel College, Oxford. By the death of his father and elder brother, he became heir to his maternal uncle, Sir John Pakington, of Westwood Park, by whose decease on the 6th of January, 1830, the baronetcy of the old creation became extinct, and whose name he presently afterwards assumed. He became an active magistrate in his native county, and in 1834 became chairman of the quarter sessions. In the general election of 1837 he was returned to the House of Commons as member for Droitwich, a borough for which he has been twelve times re-elected, and which he still, October, 1871, continues to represent. From the first he acted with the Conservatives, and turning to advantageous account the knowledge he had acquired during a tour in America in 1833, he exercised considerable influence on the legislative measures affecting the interests of Canada, Newfoundland, and the West Indies. He withdrew his support from the government of the late Sir Robert Peel, of which he had previously been an adherent, on the introduction of the bill for the abolition of the Corn Laws. Sir Robert Peel, however, when on the eve of quitting office, recommended him, as a reward for former support, for the honour of a baronetcy, and the title was accordingly conferred upon him on the 27th of June, 1846. On the 27th of February, 1852, he became Secretary of State for the Colonies, in the late Earl of Derby's first administration, and was sworn a member of the Privy Council; but had little opportunity to vindicate the propriety of the appointment before the resignation of the cabinet in December following. On the 15th of May, 1852, he was appointed a member of the Committee of Council for Education; and, after his vacation from ministerial duties, he devoted himself to the education question, and came to the conclusion that the system, as administered by the committee of the Privy Council, was inefficient and unequal in its operations. He took an active part in promoting the Manchester and Salford Education Bill of 1854; and in the spring of the following year moved for leave to introduce a bill of his own, which, although it anticipated several of the principles affirmed by the measure of 1870, he was obliged to withdraw. His speech on this occasion was published with the title of 'General Education.' Speech delivered in the House of Commons, March 16, 1855, on moving for leave to introduce a Bill for the better Promotion of National Education, 8vo, London, 1855; and this was followed by the issue of a pamphlet entitled 'National Education. Address delivered to the Members of the Manchester Athenæum, November 18, 1856,' 8vo, London, 1856. In Lord Derby's second administration, Sir John Pakington took office as First Lord of the Admiralty, February 26, 1858; and on the 15th of June, 1859, four days after the resignation of the cabinet, was gazetted K.C.G.B., civil division, as an acknowledgment of the ability with which he had laboured for the improvement and extension of the navy. On the formation of Lord Derby's third cabinet in July, 1866, he was re-appointed First Lord of the Admiralty, exchanging this office in March, 1867, for that of Secretary of State for War, which he continued to hold until the resignation of the Conservative administration in December, 1868. Sir John Pakington is a D.L. for Worcestershire (1832); Lieutenant-Colonel of the Worcestershire Yeomanry Cavalry (1859); an Elder Brother of the Trinity House; and a Vice-President of the Society of Arts. Several of his speeches on naval, ecclesiastical, social, and educational topics have been published.

PALGRAVE, SIR FRANCIS. [E. C. vol. iv. col. 642.] Sir Francis Palgrave died at Hampstead, on the 6th of July, 1861, after having devoted the leisure of the last four years of his life to the completion of the third volume of his 'History of Normandy and of England,' of which the fourth volume, the last which has been issued, had been previously written. These two volumes were of posthumous publication, and were brought out in 1864, under the editorial care of his eldest son—

* **FRANCIS TURNER PALGRAVE**, who was born on the 28th of September, 1824, and educated at Charterhouse School and at Balliol College, Oxford, of which he was a scholar, and from which he migrated on his election to a fellowship at Exeter

College. After having officiated for about five years as Vice-Principal of the Training College for Schoolmasters at Kneller Hall, and acquiring other preparatory experience, he was appointed to a situation under the Education Committee of the Privy Council, which he still continues to hold. He is principally known as a poet and art-critic; and in the latter capacity has produced handbooks to various exhibitions, and a volume entitled 'Essays in Art,' &c., 8vo, London and Cambridge, 1866, besides contributing the explanatory text to an illustrated work entitled 'Gems of English Art of this Century,' 4to, London, 1869. His poetical works consist chiefly of two volumes, entitled respectively, 'Idylls and Songs,' 8vo, London, 1854, and 'Hymns,' 16mo, London, 1867, second edition, enlarged, 1868. He contributed to the 'Oxford Essays,' 8vo, 1855, a critique on 'The Works of Alfred de Musset;' and wrote the 'Memoir' prefixed to A. H. Clough's 'Poems,' 8vo, London, 1862, &c. He has likewise edited 'Songs and Sonnets by William Shakespeare;' 'The Golden Treasury of the best Songs and Lyrical Poems in the English Language,' 8vo, Cambridge, 1861, forming part of the 'Golden Treasury Series;' 'A Selection from the Works of William Wordsworth,' 8vo, London, 1865, forming part of 'Moxon's Miniature Poets;' and has furnished a 'Biographical and Critical Memoir,' prefixed to the 'Globe Edition' of the 'Poetical Works of Sir Walter Scott,' 8vo, London, 1866. His younger brother,

* **WILLIAM GIFFORD PALGRAVE**, who has acquired a reputation for his Eastern travels, and his vivid literary record of them, was born on the 24th of January, 1826, and educated successively at the Charterhouse and at Trinity College, Oxford. Having received a commission in the Indian army in 1847, he served for some years in the 8th Regiment of Bombay Native Infantry, from which he retired in August, 1853. He became a member of the order of Jesuits, and for several years devoted himself to missionary work in Syria; and in 1862, being still a member of that society—which he renounced in 1865—commenced a tour in Arabia, the expenses of which were defrayed by the Emperor Napoleon III., with "the hope," as he has himself expressed it, "of doing something towards the permanent social good of those wide regions; the desire of bringing the stagnant waters of Eastern life into contact with the quickening stream of European progress; perhaps a natural desire to know the yet unknown, and the restlessness of enterprise not rare in Englishmen." The account of his adventures, which was welcomed as a valuable contribution to the literature of travel, was published with the title of 'A Narrative of a Year's Journey through Central and Eastern Arabia, 1862—1863,' 2 vols. 8vo, London, 1865; French translation, by E. Jonveaux, 'Une Année de Voyage,' &c., 8vo, Paris, 1866, &c., of which an abridged edition, by J. Belin de Launay, was published in 8vo, Paris, &c., 1869. Mr. Palgrave was afterwards employed in the Eastern Consular Service.

PALISOT DE BEAUVOIS, AMBROISE MARIE FRANÇOIS JOSEPH, BARON DE, a French botanist and traveller, was born at Arras, July 27, 1752. After filling some military and official posts, he devoted himself almost exclusively to botanical studies, giving his attention more particularly to the cryptogamic plants. In 1786 his passion for travelling induced him to leave his wife and property, his intention being to return in about four years. He proceeded to the Guinea coast of Africa, and explored a wide tract of country on the right side of the Lower Niger river, making also large collections, which were, however, subsequently destroyed. Most of the crew of the ship in which he went died of yellow fever, a disease with which he was himself struck, so that in 1788 he was compelled to leave for San Domingo. Various causes led to his residence in the West Indies being prolonged far beyond the period he intended, so that he did not revisit his native country until August, 1798. His subsequent time was spent in publishing the scientific results of his travels. His works on cryptogamic plants formed a valuable addition to scientific literature. His principal works are, 'Flore d'Oware et de Benin,' 2 vols., with 120 plates, fol., Paris, 1804—21; 'Insectes recueillis en Afrique et en Amérique,' with 90 plates, fol., Paris, 1805—21; 'Essai d'une nouvelle Agrostographie, ou nouveaux genres de Graminées,' 4to and 8vo, Paris, 1812; 'Musculogie, ou traité sur les Mousses,' 8vo, Paris, 1822. In addition to these, he wrote one or two other books and several articles. He made numerous observations on the organs of fructification of grasses, mushrooms, and mosses. He died at Paris, January 21, 1820.

PALISSY, BERNARD, born at the Chapelle Biron, Périgord, about 1510, was the son of an artisan, received little education, and was brought up as a worker in glass. Having to practise

glass-painting, he studied chemistry, and afterwards natural history, and acquired a sufficient knowledge of art to earn money by painting portraits. Whether from restlessness of disposition, the desire to extend his knowledge, or the feeling that his native place did not afford a fair field for his energy, he travelled through a large part of France and Germany, supporting himself by his calling, and eventually married and settled at Saintes, 1539, where he added to his other occupations that of land-surveying, a knowledge of which he had acquired in his journeyings. In this last line he met with employment in preparing maps of the isles and district of Saintonge and L'Aunis, required for establishing the gabelle. But his attention was about 1553 turned to a subject that soon absorbed all his thoughts and energies. The sight of an enamelled earthenware vase, probably of the kind known as majolica, then in the highest repute, aroused in him the desire to produce ware that should rival or even excel it. His first effort was to find a white enamel, then to procure suitable earths and combine them so as to bear the necessary heat. Years of unremitting toil were spent seemingly in vain, and he was reduced from comparative prosperity to extreme poverty. He has himself related how he was constrained not only to do the whole of the manual labour, even to fetching the water, mixing the clays, grinding the stone, and tending the furnace, but that his fuel having failed he was compelled to burn the fences of his garden, his chairs and tables and even the flooring of his house, to keep the furnace heated. Meanwhile, worn down by anxiety, disappointment, and insufficient food, ragged, barefoot, and haggard in countenance, his neighbours, he says, had come to regard him as a madman, or a fool, and his wife and family covered him with reproaches. But his zeal and perseverance were at length amply rewarded; and the name of Bernard Palissy stands one of the most remarkable in the honoured list of those who have accomplished a great purpose by indomitable resolution and industry. Palissy had in fact introduced a new branch of art manufacture into France, and laid the foundation for the brilliant successes which the French have since achieved in this line. As the result of fifteen or sixteen years of ceaseless labour, he was able to produce a paste of perfect plasticity, and a range of enamel-colours and glazes that furnished him with all he required, and he had attained entire mastery of the furnace. Thus master of the technicalities of pottery, his artistic skill and acquaintance with natural history enabled him to strike out a path that was entirely new. He invented what he called "les rustiques figulines," bowls or vases with figures in relief, in their natural colours, and where possible of the natural size, of shells, fish, lizards, snakes, &c., depicted with a truth and naïveté which only rare habits of observation and a peculiar genius could have rendered possible. These soon became wonderfully popular. It was the age when choice specimens of porcelain and pottery were looked on as gifts worthy of princes, and Palissy received from Catherine de Medicis the title of "inventeur des rustiques figulines du Roy et de la Roynne Mère." Only the credit he had thus won saved him from a miserable death. He had adopted the reformed faith, and was the most conspicuous member of the little congregation of his village. He had taken the precaution to obtain letters of protection from the Duc de Montpensier, but his workshop was entered and seized as a place of religious assembly, and himself arrested and imprisoned at Bordeaux. The Constable de Montmorency, for whom he was engaged in executing various decorations for his château d'Ecouen, applied to the Queen-Mother, who ordered his release, and gave him, for his greater security, permission, as royal potter, to set up his furnaces and laboratory within the precincts of the Tuileries, 1563. Here he found abundant occupation, and for a few years his career was one of unchequered prosperity. He was now thoroughly master of his craft; he had improved his taste by the study of ancient Roman and modern Italian models; he was in favour with the king, and his ware was purchased as fast as produced by princes and nobles. During the terrible massacre of St. Bartholomew he was left unmolested. Around him were gathered in 1575 the leading savans of Paris, to hear an exposition of his views on the origin of fossils—views then for the first time put forth, but now universally admitted. These lectures were repeated annually for several years; their substance was embodied in a series of Dialogues published in 1580, on the 'Nature of Waters and Fountains, as well natural as artificial, of metals, salts, and salt-springs, stones, earths, fire, and enamel, with many other excellent secrets respecting natural things.' The time was at hand, however, when royal patronage was to fail. In 1588, Palissy was arrested as a heretic and cast into the Bastille. His reputation,

the intercession of powerful friends, it is said the intervention of the king, saved him from the stake; he was offered liberty if he would recant, but he would not yield, and he remained in prison till his death, "from natural causes," in or about 1590. Palissy wrote, 'Recepte véritable, par laquelle tous les hommes de France pourront apprendre à multiplier et augmenter leurs trésors,' small 4to, Rochelle, 1563, second edition, 1564; 'Discours admirables de la nature des eaux et fontaines, tant naturelles qu'artificielles, des métaux, des sels et salines, des pierres, des terres, du feu et des émaux, avec plusieurs autres excellents secrets des choses naturelles,' &c., small 8vo, Paris, 1580: these were published together, in two small 8vo volumes, in 1636, under the title of 'Le Moyen de devenir riche.' A pamphlet is attributed to him which appeared in 1557 as a 'Déclaration des Abus et Ignorance des Médecins: par Pierre Brailleur.' His 'Œuvres, avec des Notes de Faujas de Saint-Fond et Gobet,' 4to, Paris, 1777, and 'Œuvres complètes de Bernard Palissy, conforme aux textes originaux imprimés du vivant de l'auteur, avec des notes et une notice historique par Paul-Ant,' 18mo, Paris, 1844, contain all his known writings. The Palissy ware continued for several years to be made by his sons, but with inferior taste and skill. At the present time it is largely imitated in England, as well as in France. Fine specimens of original Palissy ware command extraordinary prices. The best collection extant is that of the Louvre; but many good specimens are contained in the South Kensington Museum. (A. Dumesnil, *Bernard Palissy*, 1851; H. Morley, *Palissy the Potter*, 2 vols. 8vo, 1852; Camille-Duplessis, *Étude sur Palissy*, 1855; L. Audiat, *Bernard Palissy: étude sur sa vie et ses travaux*; Laborde, Jacquemart, &c.)

*PALMER, SIR ROUNDELL, M.P., Q.C., F.R.S., &c., a distinguished lawyer and politician, second son of the Rev. William Jocelyn Palmer, of Mixbury, Oxfordshire, was born in that place on the 27th of November, 1812, and was educated successively at Winchester and at Trinity College, Oxford. He obtained the Chancellor's prize for Latin verse in 1831, and Sir Roger Newdigate's prize for "a copy of English verse of fifty lines, and no more, in recommendation of the study of the ancient Greek and Roman remains of Architecture, Sculpture, and Painting," in 1832; gained an Ireland scholarship in the same year; and an Eldon Law scholarship in 1834. On the 17th of May, 1834, he graduated as B.A. in first-class classics; and having become a fellow of Magdalen College, proceeded M.A. as a member of that society, of which he is still an honorary fellow, on the 10th of November, 1836. He received the degree of D.C.L. in 1862; and is at present counsel to his University, and a deputy-steward. He was called to the bar by the Society of Lincoln's Inn, on the 9th of June, 1837; and became a bencher on his appointment as Queen's counsel in April, 1849. He was first returned to Parliament in 1847 as member for Plymouth, which he represented till July, 1852; and again from June, 1853, to March, 1857. In July, 1861, he was elected for the borough of Richmond; and this constituency he has ever since continued to represent. He was appointed Solicitor-general on the 9th of July, 1861, and on the 16th of the following month received the honour of knighthood; was promoted to be Attorney-general on the 2nd of October, 1863; and resigned with his party in July, 1866, to make room for the third administration of the late Earl of Derby. He is understood to have missed, if not to have refused, the appointment of Lord Chancellor in the Gladstone administration of 1868, on account of his opposition to the Premier's resolution for the disestablishment and disendowment of the Irish Church. Sir Roundell Palmer has taken a conspicuous part in the discussion in Parliament, and the consideration in committee, of various legal, judicial, international, and ecclesiastical questions; and several of his speeches have been separately published, especially those on 'The North American Blockade,' 8vo, London, 1862; on the 'Alabama Question,' 8vo, London, 1863, American edition, 16mo, Cambridge, Mass., 1864, and, with additions, 1866; and on 'The Disendowment of the Irish Church. A Speech delivered in the House of Commons, March 22, 1869, on the Second Reading of the Irish Church Bill,' 8vo, London, 1869. Sir Roundell Palmer has laboured to extend the basis and the advantages of university education; and has lately prominently identified himself with a movement for the establishment of a legal university, whose degrees in law are to be compulsory before admission to practice. One result of this agitation has been a recent regulation by the benchers of the Inner Temple, by which that society will for the future demand that a student shall have satisfactorily passed a professional examination before

being called to the bar. Sir Roundell Palmer has devoted a portion of his leisure to various literary pursuits; and he has published 'The Connection of Poetry with History. A Lecture delivered before the members of the Plymouth Mechanics' Institute,' &c., 8vo, London, 1852; 'English Church Hymnody. A Lecture read at the Church Congress, York, October 11, 1866,' 8vo, London and Cambridge, 1867; and a Selection of Hymns, forming part of the 'Golden Treasury Series,' entitled 'The Book of Praise. From the best English Hymn Writers,' &c., 8vo, London and Cambridge, 1863, new editions, 1864, 1865, &c.

PALMERSTON, HENRY JOHN TEMPLE, VISCOUNT. [E. C. vol. iv. col. 650.] A combined opposition, March, 1857, carried a resolution declaring the course pursued by Sir John Bowring and the British officers in China to be unjustifiable, and consequently censuring Lord Palmerston's administration for having approved that course. Of the alternatives of resignation and an appeal to the country, Lord Palmerston elected the latter; and Parliament was dissolved on the 21st March. Two days after, the Premier, in his address to the electors of Tiverton, declared his policy to be peace abroad, on the conditions of honour and security; and, at home, economy, progressive improvements, the continued diffusion of education among the people, and well-considered measures of reform. The majority he secured in the new Parliament was sufficient to enable him to continue his administration until February, 1858, when he was compelled to resign on account of his reputed anxiety to accommodate the Emperor of the French, at the expense of English honour and independence, exhibited in the Conspiracy to Murder Bill. He was succeeded by the late Earl of Derby, whom he in turn displaced in June, 1859; and signalled an administration, which endured till his death on the 18th of October, 1865, by his conclusion of a commercial treaty with France, by the sympathy which he manifested in the welfare of Italy, by his moderation and firmness in his relations with the United States of America, and by the prudent rather than chivalrous manner in which he extricated himself from the obligations of the treaty of London, 1852, in reference to the Schleswig-Holstein question (1863-64). This question was so intricate that Lord Palmerston claimed to have been one of two persons—the second being then dead—who ever understood it. Lord Palmerston preserved his health and mental vigour until a very short time before his death; and, in spite of his advanced age, his career was considered to have been prematurely closed by imprudent exposure to the sudden coldness of the season. It was his own desire to be interred in the cemetery at Romsey; but Lady Palmerston yielded to the express wish of the Queen and the vehemence of the national desire that he should be buried in Westminster Abbey. Here he was accordingly interred on the 27th of October, when his funeral was attended by the Prince of Wales, the Duke of Cambridge, the representatives of fourteen foreign states, and deputations from various public bodies, whilst ten cabinet ministers bore his pall.

The tidings of his death, as that of a typical Englishman, of whom his political friends and foes, as Sir Robert Peel said of him, were alike proud, were received all over the kingdom with demonstrations of the vivid regret and sympathy due to a personal bereavement—a feeling which he had earned by his own boundless sympathy with all classes of his countrymen. His death, as it was said at the time, marked an epoch in English politics; and his name, once the terror of the Continent, still promises to be cherished by posterity along with the brightest memories of the present reign. The later honours of his life included those of Lord Warden of the Cinque Ports, and Governor or Constable of Dover Castle (1861); D.C.L., Oxford, conferred at the commemoration of 1862, in which year he was also elected Lord Rector of the University of Glasgow; Knight Grand Cross of the Bath; Knight of the Garter; Knight of the Tower and Sword of Portugal; an elder brother of the Trinity House; and honorary colonel of the First Cinque Ports Artillery Volunteers. A marble statue of him was erected in Westminster Abbey, 1869; another erected in the market-place of Romsey, and a memorial window in the Abbey Church of that town, were inaugurated on the 21st of July, 1868; and a statue in one of the public parks of Southampton, of which town he was a burgess, was inaugurated on the 2nd of June, 1869. The death of Lady Palmerston, who had been for more than twenty years a discreet and able fellow-worker for his lordship's political success, and a sharer in his social popularity, took place on the 11th of September, 1869, at Brocket Hall, Hertfordshire.

After the early efforts which have been already mentioned, Viscount Palmerston devoted himself as little as possible to the

task of literary production; which, indeed he seems to have regarded chiefly as a diversion or a political instrument. A valuable insight into many of his views, and his manner of stating them, is given in the instalment of a work by the Right Hon. Sir Henry Lytton Bulwer (Lord Dalling and Bulwer), entitled, 'The Life of Henry John Temple, Viscount Palmerston: with Selections from his Diaries and Correspondence,' vols. i. and ii., 8vo, London, 1870. Other biographical works, of a slighter and more ephemeral kind, are 'Lord Palmerston. A Biography,' 8vo, London, 1865, by John MacGilchrist; and another, by James Ewing Ritchie, entitled 'The Life and Times of Viscount Palmerston: embracing the diplomatic and domestic History of the British Empire during the last Half-Century,' 8vo, London, 1866.

PALMEZZANO, MARCO, sometimes called **MARCO DA FORLÌ**, an eminent Italian painter, was born at Forlì about 1456; was a pupil of Melozzo da Forlì; and was much employed in painting for the churches and religious houses of the Romagna, where he was very popular. The year of his death is unknown; a painting by him, formerly in the Ercolani gallery, Bologna, is dated 1537. His pictures are marked by the hardness and severity of the painters of the Quattrocenti, but some display considerable grace, tenderness, and finish. Specimens of his works are in the Brera, Milan, and the Museum, Berlin. The National Gallery has a large 'Deposition in the Tomb,' No. 596, originally the lunette of an altar-piece in the Cathedral of Forlì.

PANDER, CHRISTIAN HEINRICH, embryologist and palæontologist, was born at Riga, July 24, 1794. He was educated at Riga, Dorpat, Berlin, Göttingen, and Würzburg. While at this last-mentioned place, he commenced, at the instigation of Professor Döllinger, a series of investigations on the development of the chick in the egg, which was afterwards carried on by D'Alton and Baer, so as to lead to important results. It was soon followed by a rapid advance in embryological science generally. Pander's share of the work appeared in the 'Archives générales de Médecine,' vol. i. pp. 178-206; 346-359 (1823), in a paper entitled, 'Historia metamorphoseos, quam ovum incubatum prioribus quinque diebus subit,' but was published first in a shorter form in Oken's 'Isis,' for 1817. When this work was finished, he and D'Alton made an extensive journey through most parts of Europe, for the purpose of examining the anatomical museums, and of collecting marine animals. On returning to Russia he became naturalist to an embassy sent to Bokhara in 1820, and was afterwards attached to the Imperial Academy of Science at St. Petersburg. In the latter capacity he arranged the zoological collection and investigated the geology of St. Petersburg and its neighbourhood. In 1827 he resigned his post and retired to his property at Zarnikau, in Livonia. In 1842 he again entered into official life, accepting an appointment in connection with the School of Mines at St. Petersburg. He died September 22, 1865. Pander took a leading share in developing the knowledge of the palæozoic strata of Russia. In 1831, he published 'Contributions to the Geognosy of the Russian Empire,' which was the first general work on the Silurian beds of Russia. He was the first to discover the remains of fishes in the Devonian strata of Russia, although Sir R. I. Murchison published details before him. His own researches appeared in the form of a valuable monograph on the Devonian fishes, under the title of 'Die Ctenodipterinen des Devonischen Systems,' St. Petersburg, 1853; and 'Ueber die Saurodipteren, Dendrodonten, Glyptolepiden, und Cheirolepiden des Devonischen Systems,' 1860. The hooklets and spines from the lower Silurian near St. Petersburg, which he called conodonts, and which he ascribed to fishes, have proved to belong not to fishes, but to crustaceans and other invertebrate classes.

* **PANIZZI, SIR ANTONIO**, or **ANTHONY**, according to the English form which he has adopted since his knighthood, a distinguished bibliographer and librarian, was born on the 16th of September, 1797, at Brescello, in the Duchy of Modena, and was educated successively at the Lyceum at Reggio and at the University of Parma, where he studied law, and took his doctor's degree in 1818. The political disturbances in the north of Italy, about two years after, in which he was to a considerable extent concerned, rendered it expedient that he should leave his native country; and he succeeded in reaching England, where, through the influence of Lord Brougham and Mr. Roscoe, he was appointed, in 1828, professor of Italian at University College, London. In April, 1831, he was appointed Assistant-Keeper of the Printed Books at the British Museum, to the Keepership of which he was promoted in June, 1837. In July, 1856, he became Principal Librarian, and held this

office until his retirement on full pay in June, 1866; and in 1869 he received the honour of knighthood, in acknowledgment of his successful labours in the improvement of the library and the compilation of a new catalogue, 'Catalogue of Printed Books in the British Museum (A—ZZ)', folio, London, 1841. He has the merit of originating the scheme of a single and sufficient structure for the accommodation of students in the library, which resulted in the erection of the magnificent new reading-room, which was built in the inner quadrangle of the Museum, and was completed in 1857, though the first conception and publication of the idea must be assigned to the late Mr. Thomas Watts [BRITISH MUSEUM, E. C., Arts and Sciences Div., vol. ii. col. 372]. Sir Anthony Panizzi has compiled Guide Books to several of the departments of the British Museum; and is the author of a pamphlet 'On the Supply of Printed Books from the Library to the Reading-Room of the British Museum,' 8vo, London, 1846, privately printed. He has also written a work, of which 250 copies were privately printed, entitled 'Chi era Francesco da Bologna?' 16mo, London, 1858; and has edited the works, or portions of the works, of various standard Italian authors—Bojardo's 'Orlando Innamorato,' 1830; Ariosto's 'Orlando Furioso,' 1832; and a superb comparative edition, in parallel columns, of the first four editions of Dante's 'Divina Commedia,' entitled 'Le Prime quattro Edizioni della Divina Commedia letteralmente ristampate,' &c., folio, London, 1858. In his professorial character he produced 'Extracts from Italian Prose Writers,' 12mo, London, 1828; and 'An Elementary Italian Grammar,' 12mo, London, 1828.

PANOFKA, THEODOR, German archæologist, was born at Breslau, February 25th, 1801, and, on the completion of his course at the University of Berlin, went, in 1822, to Rome; thence in 1824 to Sicily with Baron von Stackelburg, and afterwards to Paris. From Paris he went to Naples to draw up a description of the Blacas Museum, and thence proceeded to Nola to direct the excavations in progress there, and of which he published an account in the 'Kunstblatt.' For a time he filled the post of secretary of the Archæological Institute at Rome, but was recalled to Berlin, nominated a member of the Academy, and, in 1844, professor in the University. He died on the 20th of June, 1858. Panofka was a man of sound judgment and ripe learning, and his archæological writings are of great value. Among them may be named—'Vasi di Premio,' Florence, 1826; 'Museo Bartoldiano,' Berlin, 1827; 'Neapels Antiken,' Stuttgart, 1828; 'Recherches sur les noms des vases grecs,' Paris, 1829; 'Musée Blacas: les vases peints,' 4 parts with plates, folio, Paris, 1830—33; 'Terracotten des königl. Museums zu Berlin,' 4to, 1842; 'Bilder antiken Lebens,' Berlin, 1843; 'Griechinnen und Griechen nach Antiken skizzirt,' 1844; 'Parodien und Caricaturen aus Werken der classischen Kunst,' 1851; 'Ueber merkwürdige Marmorwerke im königl. Museum zu Berlin,' 1857, and many good monographs and occasional papers.

PAPILLON, JEAN, French wood-engraver, born at St. Quentin in 1661, was the son of a wood-engraver of some note in his day—Jean Papillon, of Rouen, born 1639; died 1709. Jean Papillon the younger was the pupil, first of his father, and then of N. Cochin, of Paris. He executed a large number of cuts, some of which are of much merit; and to him is ascribed the invention, about 1688, of printing wall-papers, called "paper-hangings," as being at first an imitation of tapestry. He died in 1723.

PAPILLON, JEAN-BAPTISTE-MICHEL, nephew of the preceding, was born at Paris, June 2, 1698. His woodcuts are found in many of the illustrated works of the period; the best are considered to be those he engraved from the designs of Bachelier, for the folio edition of La Fontaine's Fables. Papillon, who was an enthusiastic admirer of wood-engraving, published in 1776 a work on the art in two volumes, 'Traité historique et pratique de la gravure sur bois,' illustrated by a large number of excellent cuts. The work was long regarded as the chief authority on the subject; but, as a history, it has been superseded by later works, containing the result of more extended research. A collection of his engravings made between 1712—60 was published in three folio volumes. J. B. M. Papillon died in 1776.

PAPIN, DENIS, was born at Blois (it is supposed) in 1647. He was brought up to the study of medicine, and graduated at Paris. He afterwards visited England; became associated with Boyle in his pneumatical experiments, and through his means became a fellow of the Royal Society in 1681. There are several papers of his in the 'Transactions' dating from 1675, and also in the 'Mémoires de l'Académie.' He also published in 1674 a work on the air-pump. He was during a long time Boyle's

amanuensis, and conducted a number of experiments suggested by Boyle. In 1684 he became curator to the Royal Society, with a salary of thirty pounds a year, and he was expected to show at least one experiment at each meeting of the Society. In 1687, he was appointed Professor of Mathematics in the University of Marburg, which he held until his death in 1714 (Arago says, 1710). This writer claims for him the invention of the atmospheric steam-engine, and also that of the steamboat. See 'Annuaire pour l'an 1837,' p. 245, and 'Chemical News,' vol. xvi. pp. 29 and 43.

PARIS, PIERRE ADRIEN, French architect, was born at Besançon in 1747. The son of an architect, he studied first under his father, and then at Paris under Trouard, architect to the king. In 1772 he went as royal pensioner to Rome. The fruits of his studies in that city appeared in his 'Examen des Edifices de Rome,' fol., plates; and his 'Restauration du Colysée,' 45 folio plates. M. Paris also published a 'Recueil de dessins et études,' in 9 vols. folio, which contains many of his own designs; and he made drawings of ancient monuments for Saint-Non's 'Voyage à Naples' and other works. The chief buildings erected by M. Paris were the Hôtel de Ville, Neufchâteau; the portal of the Cathedral of Orleans; and the Hospital of Bourg; but he disavowed the last on account of alterations made whilst it was in progress. In 1778 he was nominated designer to the king, and to him was confided the entire charge of the fêtes of Versailles, Marli, and Trianon. He was also architect to the Opera. He was elected a member of the Academy in 1781, and created knight of St. Michel, in 1788. Deprived of all his employments by the Revolution, he lived in strict seclusion till 1806, but employed his leisure in translating Dickson's 'Agriculture of the Ancients,' and some of the works of Arthur Young, Marshall, and other standard English writers on agriculture. In 1806 he went to Rome, where he for a short time presided over the French Academy. He remained in Italy till 1817, chiefly employed in completing the works above cited. He died at Besançon, August 1st, 1819.

PARKER, THEODORE, an eminent American preacher, lecturer, and writer, the descendant of "six generations of farmers," whose ancestors, originally belonging to Yorkshire, emigrated to America in 1635, and settled at Lexington, Massachusetts. Here Theodore was born on the 24th of August, 1810. He entered Harvard College on the 23rd of August, 1830, and, as the youngest of six children, found it necessary to become a teacher, first in Boston, and afterwards at Watertown, in order that he might continue to be a student. His talents were great, his application ardent, and his acquirements soon presented a very uncommon range and variety, whether in scientific, philosophical, or theological subjects; and he early gave promise of the powerful oratory for which he subsequently achieved a reputation. In 1834 he entered the middle class at the divinity school in Cambridge; and, in concert with some of his fellow-students, became a joint editor of the 'Scriptural Interpreter,' to which he contributed exegetical articles which staggered the partisans of the conventional Unitarianism in which he had been trained, by the extent to which they radiated and reflected the free speculations of Eichhorn and other German rationalists in the department of Biblical criticism. During the autumn of 1836 and the following winter he preached in various places in Massachusetts, as a candidate for the ministry; and in June, 1837, undertook the pastorate of the Unitarian church of West Roxburg, in the neighbourhood of Boston. Here he gradually denuded his creed of the articles which embodied what he regarded as Bibliolatry and superstition; and had already thereby shut himself out from the pulpits of many of his brethren, when his reputation for heresy, infidelity, and pantheism was established by his delivery and subsequent publication of a sermon entitled 'The Transient and Permanent in Christianity,' 8vo, Boston, 1841. This discourse was reviewed and condemned in the 'Christian Examiner and Religious Miscellany,' a magazine to which he was at that time a regular contributor of articles which he presently afterwards collected and published with the title of 'Critical and Miscellaneous Writings,' 12mo, Boston, 1843, second edition, 1856, English edition, 12mo, London, 1849. Later in the year of the first publication of this work, the author also put forth his translation of De Wette's 'Critical and Historical Introduction to the Canonical Scriptures of the Old Testament,' &c., 2 vols. 8vo, Boston, 1843, new editions, 1850, 1859, &c. In the winter of 1841—42 he accepted an invitation to deliver at Boston a course of lectures which he afterwards published as 'A Discourse of Matters pertaining to Religion,' 8vo, Boston, 1842, 4th edition, 8vo, 1856, English edition, 8vo,

London, 1848, in which he discusses (Book i.) 'Religion in general;' (ii.) 'The Relation of the Religious Sentiment with God;' (iii.) 'The Relation of the Religious Sentiment with Christianity;' (iv.) 'The Relation of the Religious Sentiment with the Bible;' and (v.) 'The Relation of the Religious Sentiment with the Church.' He sought in Europe a respite from the odium and antagonism to which this statement of his views rendered him obnoxious; coming over in September, 1843, and devoting nearly twelve months to travelling in England, France, Italy, and Germany. In the autumn of 1844 he returned to his charge at West Roxbury, where for a few months he struggled against an almost universal excommunication; and then migrated to Boston, where he began to preach on the 16th of February, 1845, in a building whose secular avocations included concerts and dramatic representations, called the Melodeon, where, in the spring of 1846, he organised a congregation to which he gave the name of 'The Twenty-eighth Congregational Society in Boston.' Here the clearness, frankness, and eloquence with which he stated his views presently attracted overflowing congregations; and some of his 'Sermons,' published from short-hand notes taken at the time of delivery, are calculated to have "reached a circulation of many hundreds of thousands of copies." Up to this time, besides the writings already mentioned, his more remarkable productions had been articles contributed to the 'Dial,' the 'Boston Quarterly Review,' the 'Christian Register,' and the 'Christian Examiner;' and in December, 1847, he became the founder and leading editor, in association with two others, of a political and theological review, entitled the 'Massachusetts Quarterly Review,' which he conducted during its three years' term of existence, and to which he contributed articles on Emerson, Channing, 'Prescott as a Historian,' and on the 'Political Destination of America.' Besides the delivery of sermons at the Melodeon, in which he discussed nearly every kind of subject, whether of morals, charity, political or social economy, reform, war, and slavery—the last of which he detested, and for his outspoken denunciation of which on a particular occasion he laid himself open to a prosecution in April, 1855—he engaged extensively in lecturing in various parts of the country. In 1852 it was found necessary to procure for his hearers more spacious accommodation in the Music Hall, where he delivered his first sermon on the 21st of November. His congregation was very large, and was constantly increased by the attendance of strangers from various distant places; and his labours as "Sunday preacher, lyceum lecturer, radical leader, and practical philanthropist, were simply such as to apply half-a-dozen distinct suicides to the abbreviation of a single life." ('Atlantic Monthly,' October, 1860.) His health was fitful, and already clouded over by consumption; but his will proved stronger than his infirmities until the morning of the 9th of January, 1859, when, about four o'clock, he was seized with a severe attack of pulmonary hæmorrhage, a few hours before the intended commencement of his service at the Music Hall. For the recovery of his health he repaired first to Santa Cruz, where he recovered sufficiently to address to his congregation, who had sent him a very affectionate letter, an autobiographic retrospect, entitled 'Theodore Parker's Experience as a Minister,' &c., 12mo, Boston, 1859, third edition, 12mo, London, 1859; and the intense summer heat of which he evaded by proceeding to Europe, where he made a leisurely and sometimes painful tour through England, France, and Switzerland. He passed the winter of 1859–60 at Rome, from which he set out in April, in a very enfeebled condition, for Florence, where he died on the 10th of May, 1860, and was buried on Sunday, the 13th, in the small Protestant cemetery near the Pinti Gate.

The principal of the works of Theodore Parker, besides those already mentioned, are 'Speeches, Addresses, and Occasional Sermons,' 2 vols. 12mo, Boston, 1852, and 'Additional Speeches, Addresses, and Occasional Sermons,' 2 vols. 12mo, Boston, 1855; 'Ten Sermons of Religion,' 12mo, Boston, 1853, second edition, 8vo, Boston, 1855, English edition, 12mo, London, 1853; 'A Discourse occasioned by the Death of Daniel Webster, preached at the Melodeon, on Sunday, October 31, 1852,' 8vo, Boston, 1853; and 'The Life of Daniel Webster,' 12mo, London, 1853; 'Sermons on Theism, Atheism, and the popular Theology,' 12mo, Boston, 1853, second edition, 8vo, 1856, English edition, forming No. 1 of Chapman's 'Quarterly Series,' 12mo, London, 1853; 'Prayers,' 8vo, London and Birmingham, 1862, "edited by R. L. and M. G.," 'Lessons from the World of Matter and the World of Man. Selected from Notes of unpublished Sermons, by R. Leighton. Edited by Frances Power Cobbe,'

8vo, London and Bungay, 1865, German translation, by Johannes Ziethen, of his complete works, 'Sämmtliche Werke,' 5 vols. 8vo, Leipzig, 1854–61, &c.; 'The Collected Works of Theodore Parker, containing his theological, polemical, and critical Writings, Sermons, Speeches, and Addresses, and literary Miscellanies. Edited by Frances Power Cobbe,' 12 vols. 8vo, London, 1863–65; and a new edition of his 'Works,' in 14 volumes, now in course of issue at Boston, Massachusetts. Of the crowd of publications conversant about the career and the works of Theodore Parker, may be mentioned his 'Life and Correspondence,' 2 vols. 8vo, London, 1863, New York, 1864, by John Weiss; and Albert Réville's 'Théodore Parker: sa Vie et ses Œuvres. Un Chapitre de l'Histoire de l'Abolition de l'Esclavage aux États-Unis,' 12mo, Paris, 1865, English translation, 'The Life and Writings of Theodore Parker. A Memoir,' 8vo, London and Bungay, 1865. It should be added that Parker bequeathed the chief part of his library, more than 13,000 volumes, to the Free Public Library of the city of Boston.

PARKES, JOSEPH. [E. C. vol. vi. col. 1016.] Mr. Parkes died on the 11th of August, 1865, in the 70th year of his age. During many years, he had occupied his spare time in collecting evidence respecting the title of Sir Philip Francis to the authorship of Junius. He amassed a large quantity of materials, and he commenced a life of Francis, but did little more. The work was continued by Mr. Merivale, and eventually appeared under the title of 'Memoirs of Sir Philip Francis, K.C.B., with Correspondence and Journals. Commenced by the late Joseph Parkes, Esq.; completed and edited by Herman Merivale, M.A.,' 2 vols. 8vo, 1867. It cannot be said to have done much towards elucidating the Junius mystery.

* PARLATORE, FILIPPO, botanist, was born at Palermo, August 8, 1816. He was educated chiefly at Palermo, but a portion of his time was spent in the country, owing to the weak state of his health. During this retirement he amused himself with, and imbibed a liking for, botany. In 1834 he took his degree of doctor in medicine, and commenced medical practice. In 1837, Palermo was visited with cholera, and he carefully studied the disease, on which he wrote an octavo treatise. Botany, however, soon occupied more of his attention than pathology. In 1840 he made a botanical tour through Italy and Switzerland. In 1841 he urged the importance of a herbarium at Florence. Shortly afterwards one was formed, and Parlatore was appointed to take charge of it. This was followed by the re-establishment of the professorship of botany, which had been suppressed, expressly in order that Parlatore might fill it. He made extensive journeys through northern Europe, principally for the purpose of collecting materials for a work he proposed on the geographical distribution of plants. Parlatore is a member of numerous societies, and has received honours from several of the sovereigns of Europe. He has written numerous works and notices, amongst others 'Lezioni di Botanica comparata,' 8vo, Firenze, 1843; accounts of his travels in the Alps and in the North of Europe; lists of the seeds in the museum attached to the Royal Botanical Garden of Florence; and a monographic work on the Italian flora, 'Flora Italiana,' which was commenced in 1848, and is still in progress. He also contributed to Webb's work on the Canary Islands.

PARSONS, or PERSONS, ROBERT, a factious Jesuit, was born in 1546, at Nether Stowey, near Bridgewater, in Somersetshire, and received his education from John Hayward, or Haywood, vicar of that parish, who enabled him to proceed to the University of Oxford, where he was entered of Balliol College, in the latter end of 1563. He graduated as B.A., on the 31st of May, 1568; became successively probationer and chaplain-fellow of his college; and proceeded M.A. on the 2nd of December, 1572. Having caused some scandal by his manner of performing the offices of bursar and dean, he obtained permission to resign his fellowship on the 13th of February, 1574. Although he was allowed to retain his rooms and his pupils, for the sake of keeping up a fair face to the world, Balliol soon became intolerable to him, and he quitted it for London. Thence in the following June he passed over to Calais, and proceeded by way of Antwerp and Louvain to Padua, where he stayed for some time, dividing his studies between medicine and law, which he at length relinquished, and repairing to the English college at Rome, was there admitted into the Society of Jesus, on the 4th of July, 1575. After going through a preparatory course of divinity, and fulfilling certain probationary offices, he was selected, in 1580, to proceed as superior missionary to England, in company with Campian and others, for the purpose of advancing the interests of Romanism. For this object he had recourse to various schemes,

and sought to achieve his ecclesiastical designs by political instruments; and secretly stirring up the Roman Catholics to a rebellion against Queen Elizabeth, seemed to have everything ready for an insurrection, when, by the vigilance of Lord Burleigh, Campian was arrested, convicted, and executed, whilst Parsons himself was forced to seek refuge at Rouen, where he employed himself in the production of several works, which he caused to be craftily exported, and to be circulated in England for the furtherance of his cause. In 1583 he returned to Rome, where the management of the English mission was confided to him; and in 1586 the students in the English seminary at Rome, chose him for their rector. In 1588, the year of the Armada, he was sent by the general of the order into Spain, where he employed every engine to promote the designs of Philip II. for the conquest of England; and was instrumental in planting several English seminaries, a condition of entrance into which he made the subscription to the right of the Infanta of Spain to the crown of England. After the failure of the Armada, he endeavoured to incite Philip to a second invasion of this country; and, when he was unsuccessful in this attempt, laboured to disturb the succession to the crown of England, and especially to divert it from King James VI. of Scotland, whose claims were opposed in a treatise which he published, under the assumed name of Doleman, with the title of 'A Conference about the next Succession of the Crown of England,' otherwise known as 'The Book of Titles,' two parts, 8vo, 1593—94, &c. For two years after the latest date of this publication, Parsons continued in Spain; and, in 1597, after the death of Cardinal Allen, repaired to Rome, with the hope of succeeding him in the cardinalate. Here, however, he found himself in such evil odour that he was fain to retire to Naples, where he devoted himself to his official duties, and to literary activity, until some time after the death of Pope Clement VIII. (March 5th, 1605), when he returned to Rome; and, dying there on the 18th of April, 1610, was interred in the chapel of the college of which he was rector. Parsons was a voluminous author, and his works, besides those which have been already mentioned or indicated, and which vary as controversial, political, and devotional, include, 'A Christian Directorie, or Exercise, guiding Men to their eternal Salvation,' 8vo, 1583, &c., "put into modern English," 8vo, London, 1700, a book which, commonly called 'The Resolution,' has been highly extolled by writers of the author's communion; 'A Manifestation of the great Folly and bad Spirit of certayne in England calling themselves secular Priests,' 4to, 1602; 'A Treatise of three Conversions of England from Paganisme to Christian Religion,' three parts, 8vo, 1603—4, &c.; and a multitude of others, the interest of which has entirely evaporated, except as they throw light on the polemics, strife, and general history of the time.

PASLEY, GENERAL SIR CHARLES WILLIAM, K.C.B. [E. C., vol. iv., col. 683], was born at Eskdale-muir, Dumfriesshire, 8th September, 1780. He received a solid preliminary education in Scotland, and joined the Royal Military Academy at Woolwich in August, 1796. He died 19th April, 1861.

PASS, DE PASSE, or, as the elder Pass signed his plates, VAN PAS, the name of a family of engravers of considerable celebrity, natives of Utrecht. The following are the most eminent: the dates of birth and death are for the most part only approximations—authorities varying both as to birth and death from ten to twenty years:—CRISPIN DE PASS, the elder, born about 1560, was a pupil of Theodor Coernhert. He designed well; was a man of some literary culture; and mixed with good society. Having attracted the notice of Prince Maurice, he was sent by him to Paris; and whilst there he designed and, with the assistance of his son, engraved, under the direction of M. Pluvinel, riding-master to Louis XIII., the prints to the works entitled 'Instruction du Roy en l'exercice de monter à cheval,' fol., 1616, and 'Manège Royal,' fol., 1623, in which he introduced portraits of the French monarch and his principal courtiers. Crispin de Pass is supposed to have spent some years in England. His English portraits are highly valued. The most celebrated is that of Queen Elizabeth, in sumptuous attire, with crown, globe, and sceptre. Others are portraits of Elizabeth in the dress in which she went to St. Paul's, after the destruction of the Armada; James I.; Prince Charles; Sir Philip Sidney, &c. The latest of his English prints is dated 1635; but he lived some years longer, as he published in 1643—44 his celebrated drawing-book, 'Della Luce del Dipingere et Disegnare,' at Amsterdam, where he published several other illustrated works, including portraits of kings and princes; Ovid's Metamorphoses; Garden of Flowers,

BIOG. DIV.—SUP.

&c.—CRISPIN DE PASS, the younger, eldest son, scholar, and assistant of the preceding, was born about 1585, and was living in 1659. He engraved portraits and subject-pieces largely in connection with his father.—WILLIAM DE PASS, second son of Crispin, was born probably before 1590. He learned design and engraving under his father, whom he accompanied to England, and is believed to have remained here the better part of his life. Zani speaks of him as being alive in 1640; but, as he engraved an equestrian portrait of the Protector Cromwell, he must have lived at least till 1653. The prints of William de Pass are very numerous and much esteemed, especially the portraits, most of which are of persons of historical note. Among the best are those of James I., on his throne, surrounded by his family; and George Villiers, Duke of Buckingham, on horseback.—SIMON DE PASS, youngest son and scholar of Crispin, born probably about 1591, spent about ten years in England, and engraved whilst here a large number of historical portraits, book-prints, &c. He then entered the service of the King of Denmark, and was living in that country in 1644.—MAGDALEN DE PASS, daughter and scholar of Crispin, born about 1583, engraved mythological subjects after Elsheimer and others; landscapes, and portraits in a very neat style. She was living in 1623.

PASSAROTTI, BARTHOLOMEO, Italian painter, born at Bologna about 1530, was a scholar and assistant of Taddeo Zuccaro, at Rome. He had a profound knowledge of anatomy, drew well, and composed and painted with great facility, and his works were applauded by his contemporaries; but he is of the period of the decline of Italian painting, and his example helped forward that decline. Passarotti established an academy at Bologna, and numbered Agostino Carracci and other noted painters among his scholars. His chief works are a 'Martyrdom of St. Paul,' at St. Paul's near Rome; an Annunciation, in the Church of S. Giacomo Maggiore, Florence; and an 'Adoration of the Magi,' in St. Peter's. But his portraits are more esteemed than his compositions. There are several admirable etchings by him. He died in 1592.

PASSAVANT, JOHANN DAVID, German writer on art, was born in 1787, at Frankfurt-am-Main; on the completion of his school education, studied painting at Paris, under David and Gros, and then went to Rome, where he spent many years, much of his time being occupied in historical investigations. Here, and after his return to Frankfurt, he painted a few pictures, the best known being that of the Emperor Henry II., in the Kaisersalle, at Frankfurt; but he soon laid aside the pencil, and, having received the appointment of Director of the Städtische Gallery, devoted himself to the study of the history and principles of art, visiting, for the purpose of his inquiries, most of the great collections of Europe. His principal publications are, 'Ansichten über die bildenden Künste,' &c., Heidelberg, 1820; 'Entwürfe zu Grabdenkmälern,' Frankfurt, 1828; 'Kunstreise durch England und Belgien,' Frankfurt, 1833, of which a translation appeared under the title of the 'Tour of a German Artist in England,' 2 vols., 12mo, London, 1836; 'Rafael von Urbino und sein Vater Giovanni Santi,' 2 vols., Leipzig, 1839, supplementary volume, 1859, by far the best life of the great Roman artist extant, especially in the revised French version, 1860; 'Die christliche Kunst in Spanien,' Leipzig, 1858; and his elaborate supplement to Bartsch, 'Le Peintre-Graveur,' 6 vols. 1860—64, the last four volumes being of posthumous publication. He also contributed various papers to the 'Kunstblatt.' He died August the 12th, 1861. Passavant was one of the most learned, laborious, and conscientious of recent writers on art. His opinions, however, are often open to dispute, and his critical judgment is not always to be relied on.

*PASTEUR, LOUIS, chemist, is principally known on account of his experiments in connection with "spontaneous generation" and fermentation. He was born at Dôle, December 27, 1822, studied at Arbois, Besançon, and Paris, and commenced teaching in 1846. At first he was Balard's chemical assistant; in 1848, professor of physics at the Lyceum, Dijon; in 1849, professor of chemistry at Strasbourg, and, in 1854, at Lille. In 1857, he became the head master and director of the scientific studies of the École Normale, in Paris; in 1863, professor of geology, physics, and chemistry at the École des Beaux-Arts; and, subsequently, professor of chemistry at the Sorbonne. His earlier writings are, for the most part, papers on crystallization. He found, by the employment of polarized light in these researches, that racemic acid is separable into two acids, lævo-tartaric and dextro-tartaric, in which most of the physical and chemical properties are identical, the principal exceptions being that the crystals are asymmetrical and hemihedral, but in the form

of reflected images one of the other; that the one form rotates the plane of polarization to the left hand, the other to the right. Their relations to pyro-electricity are also opposite, the positive electricity always being developed on the side with the hemihedral faces. He also discovered other forms of tartaric acid, one being like racemic or tartaric acid, but not separable, as that is, into the two varieties mentioned above; while another is like the ordinary form, from which it is produced by the action of heat, but is less soluble, and gives rise to salts which differ from those into which the ordinary acid enters. These papers obtained for him the Rumford medal from the Royal Society, and a prize from the Société de Pharmacie of Paris. He made elaborate researches on fermentation, the main results arrived at being that the process depends upon the action of microscopic organisms, and that each kind of fermentation, whether lactic, or vinous, or alcoholic, is due to certain species. Thus alcoholic fermentation is started by *Torula cerevisia*; lactic fermentation, by *Penicillium glaucum*, and so on. These researches led him to a careful investigation of the doctrine of spontaneous generation, or abiogenesis. By a series of admirably contrived experiments, he demonstrated that the organisms which give rise to fermentation are derived from germs in the air. He strained air through cotton-wool, and found, as others had before him, that no fermentation took place. He then examined the cotton-wool under the microscope: he found certain solid bodies, which he considered to be germs; and that they were germs he showed by placing them in the proper fluid, and thus developing fermentation. This idea was tested in many ways, the principal object being to prevent the access of germs by currents of air. It was further applied to explain the appearance of those organisms in fluids whose germs are invisible, owing, as is contended, to their minuteness. In 1853, and following years, a disease, called pébrine, broke out amongst silkworms, which resembled, in many points, cholera amongst men. The plague committed great ravages, and after many remedies had been suggested and tried, but with uniform failure, Pasteur was ordered by the French government to give the matter his attention. He found the disease to be due to the growth and multiplication of a plant which Lebert had named *Pankistophyton*. The disease, he said, was contagious, because the plant-corpuscles passed from the bodies of the diseased caterpillars to those of the healthy ones; it is hereditary, because the corpuscles gain access to the eggs while being formed, and this explains why the disease is inherited only from the mothers. The hypothesis explained all the phenomena. Pasteur accordingly proposed to eradicate the disease by preventing the distribution of the plant-corpuscles, and wherever his plan has been carried out it has been successful. By his researches on fermentation he has rendered the same service to the vine-grower and vinegar-maker as to the cultivator of silkworms. Besides a large number of papers, his principal works are, 'Études sur le Vin, ses Maladies, &c.,' 8vo, Paris, 1866; 'Études sur le Vinaigre, ses Maladies, &c.,' 8vo, 1868; 'Lettres sur la Sériciculture,' 8vo, 1869; and 'Études sur la Maladie des vers à soie, &c.,' 2 vols. 8vo, 1870.

PATINIR, JOACHIM DE, was born at Dinant, about 1490, learned painting at Antwerp, and was admitted into the guild of painters in that city in 1515. He at first painted small figure-pieces with landscape backgrounds, but eventually landscapes only; and he passed from a hard, dry, and minute style, to one of greater breadth and freedom. He is regarded as the founder of the Netherland school of landscape-painting, and was probably the first to give special study to that branch of art. When Albert Dürer visited Antwerp in 1520, he was so much delighted with the works of Patinir, that he painted his portrait as a mark of his esteem, and was present at his wedding. Patinir was a man of dissipated habits, and only painted when constrained. He died in 1548. His works are scarce, and much prized. Antwerp Museum has a well-painted 'Flight into Egypt'; and others are at Brussels and Vienna. The National Gallery contains three small pictures by him—No. 715, 'The Crucifixion,' valuable for the broad landscape background; No. 716, 'St. Christopher carrying the Infant Christ'; and No. 717, 'St. John at Patmos.'

PATTINSON, HUGH LEE, metallurgic chemist, was born at Alston, Cumberland, in 1798. He was engaged for some years at a soap factory in Newcastle-on-Tyne: and, returning to Alston in 1828, was, on the recommendation of Mr. John Taylor, the mining engineer, appointed assay-master at the lead mines belonging to the commissioners of Greenwich Hospital. While thus engaged, he made a discovery which has been of great practical importance in the metallurgy of lead. Until that time, the silver which is nearly always found in lead ore could only be

separated by converting the whole of the lead into oxide or litharge, isolating the silver, and reconverting the litharge into metallic lead. Mr. Pattinson found, after a long series of experiments, that he could gradually separate the silver from the lead, by a process of crystallisation or granulation, without the double operation of making and unmaking litharge [LEAD MANUFACTURE, E. C., Arts and Sci. Div., vol. v. col. 149]. He removed again to Newcastle, and became manager of Mr. Beaumont's lead-smelting and refining works. A patent which he obtained enabled him to bring his discovery into operation; and as it was now found profitable to de-silver lead which contained only three ounces of precious metal to the ton (the former minimum having been twenty ounces), the "Pattinson process" became generally adopted. In partnership with Messrs. Lee and Burnett, he established, in 1834, the Felling Chemical Works, near Newcastle, which grew to be so extensive as to employ a thousand hands; and, in 1843, he founded other works at Washington, another suburb of the same city. Observations made by him at a neighbouring colliery led him to the discovery that steam becomes electric when rushing forth from an orifice—a discovery that suggested Mr. (afterwards Sir W. G.) Armstrong's hydro-electric machine. As a chemical manufacturer, Mr. Pattinson introduced new modes of preparing magnesia and oxychloride of lead. At his residence at Scots House, near Gateshead, he maintained a small observatory, from which a fine $7\frac{1}{2}$ inch equatorial, made by Cooke, of York, was lent to Professor Piazzi Smyth for his Tenerife observations. Mr. Pattinson, who was F.R.S., F.R.A.S., F.G.S., and F.C.S., wrote papers on his discoveries in the 'Philosophical Magazine.' He died, November 11th, 1868.

PAUL, SAINT VINCENT DE [VINOENT DE PAUL, SAINT E. C. vol. vi. col. 396].

PAULDING, JAMES KIRKE. [E. C. vol. iv. col. 697.] This very pleasing writer died on the 9th of April, 1860. His last years were spent in cheerful retirement on the banks of the Hudson, but he made no addition to the works mentioned in the above memoir.

PAXTON, SIR JOSEPH [E. C. vol. iv. col. 703], the designer of the Exhibition building of 1851, and the Crystal Palace at Sydenham, died at Rock Hills, Sydenham, June 8th, 1865.

PEABODY, GEORGE, an American merchant, distinguished for the philanthropic bestowal of his wealth, was born at Danvers, Massachusetts, February 18, 1795. He was descended from a family who emigrated from Leicestershire to New England with the Pilgrim Fathers; and many of his relatives had been Congregational ministers. After receiving a plain education at the district school of Danvers, he served a four years' apprenticeship with a grocer; then spent one year with his grandfather in Vermont; and at the age of sixteen joined his brother David in a drapery or dry-goods trade at Newburyport. A fire having destroyed the store, George served for two years as assistant to his uncle, Mr. John Peabody, a merchant at Georgetown, near Washington. When the war with England broke out in 1812, he volunteered into the United States army. The war being over, he joined in partnership with Mr. Elisha Riggs in the dry-goods trade; Riggs provided the capital, while Peabody, as bagman or traveller, journeyed on horseback through Maryland and Virginia, and through the western wilds of New York and Pennsylvania, gaining a large amount of experience in business by such a mode of life. In 1815 the firm removed to Baltimore, with branches at Philadelphia and New York. The retirement of Mr. Riggs, in 1830, left Mr. Peabody at the head of a large and flourishing establishment. He steadily declined all invitations to take part in political or municipal affairs; but his opinions and advice were highly valued, and his personal character much respected. In 1843, Mr. Peabody, having withdrawn from the Baltimore firm, came to London, and joined with other merchants in establishing the firm known as George Peabody and Co., merchants and money-brokers, of Warmond Court. They held deposits for customers, discounted bills, negotiated loans, bought and sold stock. In 1848 he acted as one of three commissioners to aid the State of Maryland in getting out of financial difficulties; he succeeded, and declined to receive any payment for his services; whereupon the Maryland legislature passed a vote of thanks to him. His name was potent in monetary negotiations for more than one of the American States. In 1851 he supplied funds for fitting up the United States department at the Great Exhibition; in 1852 he aided Henry Grinnell in fitting out the expedition in search of Franklin; and in the same year presented a fund, afterwards increased to 100,000*l.*, for establishing a Free Library and Educational Institute at his native town of Danvers. In 1857 he visited the

United States, after many years' absence; and while there, presented 100,000*l.* (afterwards increased to 200,000*l.*), for founding a Free Library, and an Institute of Art and Science, at Baltimore. Returning to England, he resumed his commercial pursuits, which were eminently successful.

Mr. Peabody's first gift to the poor of London was made in March, 1862. He placed a sum of 150,000*l.* in the hands of trustees: viz., Mr. C. F. Adams, American Minister in London; Lord Stanley, afterwards Earl of Derby; Sir J. E. Tennant; Mr. (afterwards Sir Curtis M.) Lampson; and Mr. J. S. Morgan, one of his partners. The money was to be expended in building model dwelling-houses for working men and their families, and letting them at rentals that would pay a small interest on the capital sunk, after defraying current expenses. A second donation of 100,000*l.* was made in January, 1866, and a third of 100,000*l.* in December, 1868. The first 150,000*l.* was to be applied as soon as the arrangements could be completed; the remaining 200,000*l.* to be held intact until July, 1869. By the end of 1868, the trustees had erected four clusters of "Peabody Buildings," comprising 498 tenements, which were occupied by 1971 persons belonging to the families of working men. These clusters are situated at Spitalfields, Islington, Shadwell, and Westminster; in 1869 and 1870, others were commenced at Chelsea and Bermondsey, out of the same fund. The second fund is being laid out in Brixton, Blackfriars-road, and elsewhere. Mr. Peabody, in 1866, received the freedom of the city of London, and was presented by the Queen with her portrait in enamel; but he declined a baronetcy and an order of knighthood. He went to America again in that year, and remained there till 1869. During his sojourn he presented large sums of money for the founding of schools in the Southern States; for the establishment of museums of American relics at Yale and Harvard Colleges; for a free museum at Salem; for the improvement of Kenyon College; and to assist the coffers of the State of Maryland. Although unmarried, he devoted much of his wealth to his relations; he distributed 400,000*l.* (2,000,000 dollars) among them, and erected a Memorial church to his mother. In March, 1867, the Congress of the United States voted special thanks to him for his public benefactions. Early in 1869, his health began to fail; he returned to England, with the intention of spending the forthcoming winter in the south of France; but did not live to fulfil his intention. He died at the house of Sir Curtis Lampson, Eaton Square, November 4th, 1869. When his will was opened on the day of the funeral, it was found that he had directed his executors, Sir Curtis Lampson and Mr. Charles Reed, to apply a further sum of 150,000*l.* to the Peabody fund, to come into force in 1873. This makes a total of half a million sterling devoted to the provision of dwellings for the artisan families of London. Four months before his death, a bronze statue of Mr. Peabody, by Story, was unveiled by the Prince of Wales, near the Royal Exchange. Other merchants have amassed larger wealth than Mr. Peabody; but it was his distinction to apply by far the greater part of his fortune to important benevolent purposes during his life, instead of retaining the whole of it till his decease.

PEACOCK, GEORGE, DEAN OF ELY, an eminent mathematician, was born at Thornton Hall, Denton, near Darlington, April 9, 1781. He was the son of a schoolmaster, author of some books on arithmetic. After receiving his education at Richmond, Yorkshire, he entered Trinity College, Cambridge, in 1809, obtained a scholarship in 1812, was second wrangler in 1813 (the late Sir J. F. W. Herschel being senior); elected fellow in 1814, assistant tutor and college lecturer in 1815; took holy orders in 1817; became full tutor in 1823, and sole tutor, of the "Peacock side," in 1835. When a young collegian, he was one of four (the other three being Herschel, Babbage, and Maule, afterwards judge), who set themselves the task of introducing the continental method of the differential calculus at Cambridge, where the method of fluxions had till then prevailed. They formed an Analytical Society, which published some memoirs in 1813; they prepared a translation of Lacroix's 'Differential Calculus,' in 1816; and, in 1820, 'A Collection of Examples of the Application of the Differential and Integral Calculus,' mostly written by Peacock. About the same time, they had the satisfaction of seeing the calculus, which continental mathematicians generally adopted, authoritatively introduced at Cambridge. In 1826, Mr. Peacock wrote an admirable 'Arithmetic,' for the 'Encyclopædia Metropolitana.' In 1830, he published his 'Treatise on Algebra,' the second edition of which (2 vols., 1842, &c.) was greatly enlarged, and almost re-written. In 1833 he prepared, for the British Asso-

ciation for the Advancement of Science, a 'Report on the recent Progress and present State of certain Branches of Analysis.' In 1837 he became Lowndes Professor of Astronomy at Cambridge. He was a zealous promoter of the scheme for the establishment of an observatory by the university. He was one of the founders of the Cambridge University Philosophical Society; was admitted a fellow of the Royal, the Royal Astronomical, the Geological, and other scientific societies; and, in 1838, was appointed one of the Commissioners for Standards of Weights and Measures. In 1839 he took the degree of D.D.; and in the same year was appointed to the deanery of Ely. He zealously promoted the restoration of Ely Cathedral, which he found in a very bad condition; the enforcement of the Public Health Act, in the much-neglected city of Ely; and he was equally active in other matters. In 1840 he published 'Observations on Plans for Cathedral Reform'; in 1841, 'Observations on the Statutes of the University of Cambridge.' He was prolocutor of the lower house of Convocation for the province of Canterbury, 1840-47, and again, 1852-57. In 1843 he was appointed member of another standards commission; in 1850, and again in 1855, he was on the commission of inquiry into Cambridge University. In 1855, he published a 'Life of Dr. Thomas Young,' and edited his 'Miscellaneous Works.' He also published 'Observations on the Episcopal and Capitular Estates Bill,' and wrote a series of answers to questions put to him by the Commissioners on Decimal Coinage, a subject in which he took much interest. Dean Peacock (who married the sister of Bishop Selwyn in 1847) died November 8th, 1858.

PEARSON, REV. WILLIAM, LL.D., astronomer, was born at Whitbeck, Cumberland, April 20th, 1767; and educated at Hawkshead Grammar School. In early life he evinced much ingenuity in the construction of astronomical instruments, such as an orrery, a planetarium, and a (so-called) satellian, for illustrating the motions of Jupiter's satellites. He became proprietor of a large school at East Sheen, near Richmond, where he fitted up a private observatory, well supplied with good instruments. In 1817 he removed to South Kilworth, Leicestershire, the living of which was presented to him by Lord-Chancellor Eldon. There he built a second and better observatory, and devoted much of his time to astronomy. In 1824 appeared his 'Introduction to Practical Astronomy,' 2 vols. 4to, in which the use and management of instruments are largely dwelt upon. This work gained for the author the gold medal of the Royal Astronomical Society. He wrote largely on astronomical subjects, in 'Rees's Cyclopædia.' In various scientific journals he wrote papers on portable electrical machines, on models to explain the motions of satellites, on the philosophical uses of a common pocket watch, on ocular micrometers, on micrometrical eye-pieces, on rock-crystal micrometers, on Troughton's three-foot azimuth and altitude circle (made for Mr. Pearson, and placed in the observatory at South Kilworth), on the occultation of the pleiades by the moon, on Halley's comet, and on the obliquity of the plane of the ecliptic. But the most useful of his labours were, the preparation of a catalogue of moon-culminating stars, and a larger catalogue of 520 stars within 6° north and south of the ecliptic. Dr. Pearson, who was for many years vice-president of the Royal Astronomical Society, died September 6th, 1847.

PECOCK, or PEACOCK, REGINALD or REYNOLD, *Latin* PECOCCIUS or PECOKUS, an Anglican bishop and precursor of the Reformation, a native of North Wales, was born, probably in the diocese of St. David's, about the year 1390. After receiving his preparatory education in his own country, he was entered of Oriel College, Oxford, where he was elected to a fellowship on the 30th of October, 1417. He was made acolyte and sub-deacon by his diocesan, Dr. Flemmyng, Bishop of Lincoln, on the 21st of December, 1420; admitted to deacon's orders on the 15th of February, 1421, and priested on the 8th of March following, on the title of his college fellowship; and took his degree of B.D. about 1425. He was soon afterwards summoned to court, and through the influence of Humphrey, Duke of Gloucester, was appointed, in 1431, to the mastership of the College of St. Spirit and St. Mary, then recently founded by the celebrated Whittington, Lord Mayor of London. He obtained the see of St. Asaph by papal provision on the 22nd of April, 1444, and the temporalities were restored to him on the 8th of June following; on the 14th of which month he was consecrated at Croydon, and at the same time admitted to the degree of D.D., possibly by royal mandate. In 1447, in a sermon preached at St. Paul's Cross, he affirmed seven conclusions touching the duty and prerogative of bishops, which afterwards led to considerable discussion. He maintained that the peculiar function of the bishop was oversight and guidance, and not preaching; nor was

residence in his diocese imperative, if it happened that its interests could be better served by his occasional absence. It became necessary for him to defend himself before the Archbishop of Canterbury against the charge of having preached on a needless or unnecessary subject, indefensible in its treatment, and savouring more of curiosity than of usefulness. On the 23rd of March, 1450, he was translated by papal bull to the diocese of Chichester, and on the 31st of the same month made his profession of obedience at Leicester. About this time he published a book entitled 'The Repressing of over much witing the Clergie,' lately re-issued under the editorship of Professor Churchill Babington, in the 'Rerum Britannicarum Medii Ævi Scriptores,' &c., with the title of 'The Repressor of over much blaming of the Clergy,' &c., 2 vols., 8vo, London, 1860, to which is appended 'Abbreviatio Reginaldi Pecok,' being a vindication of his sermon at Paul's Cross. The 'Repressor' is in fact, *inter alia*, a development and extension of this sermon and vindication, being an apology for several of the practices and dogmas of the Church which the followers of Wycliffe attacked. Some modifications of Pecock's line of conduct presently appeared; and he accused the monkish preachers, whom he called "pulpit-bawlers," of error, heresy, and superstition. In his opposition to the Lollards he became more than ever temperate and indulgent, admitting them to private discussion, and affirming that the only way to reclaim them was to give them full liberty of propagating their opinions, which were to be combated by argument and persuasion, not by violence. In his concern for the education and enlightenment of the laity he wrote books in English, according to Gascoigne, for twenty years together. These proceedings made him obnoxious to the clergy; and on the 22nd of October, 1457, he was cited to undergo an examination, with his books, before the Archbishop of Canterbury. He accordingly appeared at Lambeth on the 11th of November, when nine of his works were submitted to a commission of twenty-four doctors appointed for their investigation. An unfair and prejudiced report charged Pecock with having sought to establish the following articles or conclusions:—(1.) That it is not necessary to salvation to believe that our Lord Jesus Christ after his death descended into hell; (2.) That it is not necessary to salvation to believe in the Holy Ghost; (3.) That it is not necessary to salvation to believe in the communion of saints; (4.) That the universal Church may err in those things which are of faith; and (5.) That it is not necessary to salvation to believe and hold that what a general council and the universal Church appoints, approves, or determines in favour of the faith, and for the salvation of souls, is to be approved of and holden by all the faithful members of Christ. Pecock was condemned, and when the archbishop placed before him the alternatives of the stake or recantation, he chose the latter; and having read his recantation before the archiepiscopal court at Lambeth, repeated it on the following day, Sunday, December 4th, at St. Paul's Cross, in the presence of twenty thousand people. A fire was kindled at the Cross; and Pecock with his own hands delivered three folios and eleven quartos of his own composition to the executioner, who threw them into the flames. His works were burned at Oxford a short time afterwards. His surprise and bewilderment, not to say cowardice, hurried him into a retraction of errors which he had never uttered, and of utterances which he believed to be true. He was deprived of his bishopric, and condemned, after a short sojourn at Canterbury and at Maidstone, to solitary confinement in Thorney Abbey, in Cambridgeshire, where he died in some unascertained year about 1460. A list of his works, extant, not known to be extant, English, Latin, and doubtful, is given in Babington's edition of the 'Repressor'; but one important treatise, besides the one already described, should be especially mentioned, written about 1450, but probably not published earlier than 1454, entitled a 'Treatise on Faith,' and edited by Henry Maurice, with a preface by Henry Wharton, as 'A Treatise proving Scripture to be the Rule of Faith,' 4to, London, 1688. A biography of Bishop Pecock was written by the Rev. John Lewis, and published with the title of 'The Life of the learned and Right Reverend Reynold Pecock, S.T.P., Lord Bishop of St. Asaph and Chichester, in the Reign of King Henry VI., faithfully collected from Records and MSS., being a Sequel of the Life of Dr. John Wiclif, in order to an Introduction to the History of the English Reformation,' &c., 8vo, London, 1744, new edition, 8vo, Oxford, 1820.

PELISSIER, AIMABLE-JEAN-JACQUES, MARÉCHAL, DUC DE MALAKOFF. [E. C. vol. iv. col. 719.] In April, 1858, the Duc de Malakoff superseded M. de Persigny as am-

bassador to the English Court, and retained the post till the outbreak of the war in Italy, when he was recalled and appointed to the command of the army of observation stationed at Nancy, but he had no opportunity of displaying his military prowess. In July 1859, he was nominated grand-chancellor of the Legion of Honour, and in November, 1860, governor-general of Algérie, which office he held at his death, May 22nd, 1864.

PENNETHORNE, SIR JAMES. [E. C. vol. iv., col. 730.] The Record Office, mentioned in the above memoir as being then in progress, has been gradually carried forward, the east wing having been completed in 1870; but the western portion which will have its principal frontage towards Chancery Lane, has not yet been commenced, though the designs have long been prepared. The alterations in Buckingham Palace and Marlborough House, the erection of a provincial post-office or two, and other works appertaining to his duties as surveyor of Land Revenues, besides numerous designs for new buildings and metropolitan improvements, of which only a few were carried out, provided Mr. Pennethorne with ample occupation. The only important new architectural work that devolved on him was the London University, a singularly chaste and graceful Italian edifice, the grand façade of which in Burlington Gardens, with its rich display of statuary, has met with very general admiration, while the convenience and appropriateness of the interior have been equally recognised. Before he had completed this, his latest and noblest work, Mr. Pennethorne's connection with the government had ceased; but the opening of the new building by the Queen afforded the opportunity of acknowledging the ability of the architect, and his merits as a public servant, by conferring on him the honour of knighthood. His professional brethren had already marked their esteem, by awarding him the gold medal for architecture, May 29th, 1865. Sir J. Pennethorne had but brief enjoyment of his title. He died at his residence, Worcester Park, near Malden, Surrey, September the 1st, 1871, aged 70.

PENNY, EDWARD, R.A., was born in 1714, at Knutsford, in Cheshire. His friends, fancying he showed a talent for painting, placed him with Hudson, the master of Reynolds, and he completed his studies at Rome, under Benefali. He chiefly painted small portraits, but he did not disdain to paint sign-boards, at a time when signs were universally hung out from London shops, and tradesmen who wished to distinguish themselves by a display of superior taste willingly paid a handsome sum for the work of painters of standing. Penny also painted subjects of a sentimental character, and occasionally historical pieces. His most noted work in this line was his 'Death of General Wolfe,' painted in avowed rivalry of West's more famous picture of the same subject. It was engraved by Sayer, and enjoyed considerable popularity. His Hogarthian pair, 'Virtue Rewarded' and 'Profligacy Punished,' also formed popular prints. Penny was one of the original members of the Royal Academy, and its first professor of painting, an office he held till 1783, when he resigned on account of failing health. He died November 15th, 1791. Penny was an indifferent painter, but he holds a position of some historical interest in the British school of painting.

PEPPERELL, SIR WILLIAM, BART., the captor of Louisburg, was sprung from a Cornish family who, holding strong Nonconformist principles, had settled with the Pilgrim Fathers in North America. He was born in 1696; became by his skill in ship-building, and good fortune in commerce and in the fisheries, the richest subject of the Crown in America, and one of the most influential of colonial magistrates. In 1745, when Louisburg was seized by the French, he invested the town with a force composed mainly of his own dependents, sailors, and militia; and having carried on the siege actively, on the strictest military and scientific principles, for three months, he forced the French general to surrender. The importance of this capture arose from the fact that Louisburg commanded the mouth of the river St. Lawrence. For this exploit, he was presented by King George II. with a commission as a major-general in the English army, and created a baronet, being the first American colonist on whom that honour was conferred. He died at his residence at Kittery, U.S., in 1759, when his title became extinct. The baronetcy, however, was revived in 1774, in favour of his son-in-law, William Sparhawk, who took the name of Pepperell, and who sacrificed his vast property in his adherence to the cause of royalty. Coming over to England, he acted for many years as the acknowledged head and representative of the American Loyalists, as they were called; but the title and name became again extinct at his decease, which hap-

pened at his residence in Portman-square, London, in December, 1816. (Smollett's *History of England*; Usher Parson's *Life of Sir W. Pepperell*.)

PERIGRINI, DA CESENA, a celebrated Italian engraver and worker in niello, who flourished in the early part of the sixteenth century. Nothing whatever is known of his life. He was an imitator, perhaps a scholar, of Francesco Francia, whose nielli of Hercules and of Orpheus he copied. From all the prints which have the monogram of Perigrini being of small size, and the figures being detached from a black ground as in nielli, Duchesne was led to conclude that they were really proofs of nielli; but, though some were, it is certain that many were not, as several copies often occur of the same print. Passavant ingeniously suggests that they were prints published for the use of goldsmiths—patterns, in short, to be copied by the workers in niello. Duchesne describes several nielli by Perigrini; Bartsch and Nayler give a catalogue of sixty-four prints by him, consisting chiefly of religious, mythological, and allegorical subjects; and the number has been increased by Passavant to seventy-two ('*Peintre-Graveur*,' vol. i., 248, &c., and vol. v., 205-220). The earliest date on a print by Perigrini is 1511.

PERKINS, JACOB, engineer and mechanical inventor, was born at Newburyport, Massachusetts, in 1766. He was early distinguished among his countrymen for his aptitude in devising new labour-saving contrivances and ingenious machines of various kinds. He stamped copper coins for the State of Massachusetts, under the old Confederacy. In 1790, he invented a machine for cutting and heading nails at one operation, with water-power as a substitute for hand labour; this led to the establishment of a factory which afterwards became one of the largest nail works in the United States. He invented a new mode of engraving the plates for bank notes, at a time when forgery was very prevalent: the engraving was effected on iron or soft steel, which was afterwards case-hardened, and used as a matrix for reproducing copies by intense pressure on soft steel, which was in its turn case-hardened. Mr. Perkins came to England with this invention in 1819. He did not succeed in obtaining the support he expected from the Bank of England; but his plans, improved by later inventions, were eventually carried out by the firm of Messrs. Perkins and Heath [BANK NOTE MANUFACTURE, E. C., Arts and Sc. Div. vol. i., col. 860; and E. C. S., col. 232]. In 1820 the Society of Arts awarded him medals for his inventions of a method of warming and ventilating rooms, and ventilating the holds of ships; a method of fastening the seams of hose for fire-engines, and of connecting two or more hose together; an improved ships' pump; and a method of drawing off waste water from water-wheels. In 1824 his steam-gun attracted great notice at the Adelaide Gallery; he made one of a similar kind for the French government; but the danger attending the use of steam so intensely high in pressure as that which he employed, deterred alike the English government from adopting his steam gun, and engineers from adopting a steam-engine which he devised on a similar principle. Between the years 1820 and 1837, papers by him were published on the compressibility of water; on an instrument called the "piezometer," for measuring this compressibility; on a new form of steam-engine; on the causes of the explosion of steam-boilers; and on the economy of using highly elastic steam expansively. They appeared in the '*Philosophical Transactions*,' the '*Edinburgh Philosophical Journal*,' the '*Journal of the Franklin Institute*,' and other scientific journals. He read a paper, in 1837, on the application of superheated steam to the locomotive, before the Institution of Civil Engineers, of which he was a member. His application of the high-pressure hot-water system of warming large buildings has come extensively into use. Mr. Perkins retired into private life in 1834; and died in London, in 1849.

PERON, FRANÇOIS, traveller and naturalist, was born at Cérilly, in the department of Allier, August 22, 1775. He attended the college at Cérilly, and in 1792 joined the army. He was wounded at the battle of Kaiserslautern, made prisoner, and confined at Magdeburg until released in 1794. Being incapacitated by the loss of his right eye from military employment, he went through a course of study in medicine and natural history at Paris, in order to qualify himself for the medical profession. When the great voyage of discovery was organised in 1800 by the French government, he urgently solicited that he might join the expedition. The proposed number of officers had already been appointed; but he drew up a paper on the importance of having a medical man and naturalist on the staff, which was submitted to the Institute, and the result was that he was appointed to the post as a supernumerary. Amongst the crew

was C. A. Lesueur, with whom he formed a lasting friendship, and under whose name in this Supplement will be found a brief account of Peron's work. During the long voyage Peron experienced much suffering and illness, and returned to France with his constitution much weakened. The exertions he made to carry out the wishes of the French government, in drawing up an account of the voyage, tended still further to enfeeble his system. Repose was ordered by his medical attendant; he wintered at Nice, and rallied somewhat; but the resumption of work brought on a renewed attack of illness, and he died at Cérilly, December 14, 1810.

* PERSIGNY, JEAN GILBERT VICTOR FIALIN, DUC DE, a French politician, was born on the 11th of January, 1808, at Saint-Germain-Lespinasse, Loire; and after receiving his earlier education at the college of Limoges, entered, on the 25th of July, 1826, the cavalry school of Saumur, which he left in 1828 to join the 4th Regiment of Hussars. He withdrew from active service in 1831, and repaired to Paris, where he found employment as a journalist. He now assumed the title of Vicomte de Persigny, which, formerly the style and dignity of his family, had been for generations allowed to continue in abeyance. In 1834 he commenced a review entitled '*L'Occident Français*,' in which he published an elaborate apology for the Imperial system; and from this time he began to be regarded as the completest representative of the '*Idées Napoléoniennes*.' Although the review did not proceed beyond the first number, it procured for its editor the favourable regards of Prince Louis Napoleon, then resident at Arenenberg. M. de Persigny was the principal instigator and contriver of the Strasburg Expedition in 1836; of the failure of which, after he had taken refuge in England, he wrote an account, entitled '*Relation de l'Enterprise du Prince Napoléon-Louis*,' &c., 8vo, London, 1837, and other editions, both in this country and America. For his share in the Boulogne Expedition in 1840, M. de Persigny was sentenced to twenty years' imprisonment, the circumstances of which were made so easy that he was able to elaborate a theory of the Pyramids, which he published in a volume entitled '*De la Destination et de l'Utilité permanente des Pyramides d'Egypte et de Nubie contre les Irruptions sablonieuses du Désert. Développement du Mémoire adressé à l'Académie, suivis d'une nouvelle Interprétation de la Fable d'Osiris et d'Isis*,' 8vo, Paris, 1845. The Revolution of February, 1848, put an end to his detention, and he hastened to Paris, where he laboured in every way in the interests of Louis Napoleon, who in December of the same year was triumphantly returned at the head of the candidates for the Presidency of the French Republic. He continued his active partisanship after his election to the Legislative Assembly in 1849; and on the 22nd of January, 1852, his services in general, and during the then recent *coup d'état* in particular, were recognised by his appointment to be Minister of the Interior, in which capacity he countersigned the decree confiscating the property of the Orleans family. On the 31st of December, 1852, four weeks after the proclamation of the Empire, he was promoted to the Senate; and, resigning his portfolio in 1854, on account of ill-health, was appointed ambassador to England in May, 1855, and continued in this function till the beginning of 1858. On the 16th of June, 1857, he was admitted Grand Cross of the Legion of Honour, having received his first decoration in 1849. He was again accredited to the Court of London on the 18th of May, 1859, from which he was recalled in November, 1860, to re-assume the office of Minister of the Interior. His policy was generally more Imperialist than that of the Emperor himself; and he resigned office, in the face of the comparatively adverse result of the elections in Paris and other large towns, on the 23rd of June, 1863; and, on the 13th of September following, was promoted to a dukedom. Latterly he showed a spirit of concession to the liberal measures which were forced upon the Emperor by the disposition of the times; but his progressive convictions wanted the frankness and thoroughness required before it could be reckoned expedient to entrust him with a share of the administration.

PESELLO, FRANCESCO DI, better known as PESELLINO, an early Italian painter, was born at Florence, in 1422. His father dying whilst Francesco was a child, he was brought up by his grandfather, Giuliano Pesello, and hence called Pesellino. He is said to have been the scholar of Filippo Lippi, whose manner he imitated. He died at Florence, on the 29th of July, 1467. His works are mostly at Florence; the Louvre possesses a predella by him, and there is another and very good one in the Liverpool Institution. In the National Gallery is a large '*Trinity*' (No. 727), ascribed to him, which was formerly in the

church of the Santissima Trinità, Pistoja; Waagen, however, attributes it to the grandfather, Giuliano Pesello.

PETERS, HUGH, a fanatical divine, son of a merchant at Fowey, in Cornwall, was born in 1599, and was a member of Trinity College, Cambridge, from which society he is said to have been expelled for irregular behaviour. This disgrace occurred to him after he had taken his degrees in arts—that of B.A. in 1618, and that of M.A. in 1622. "He afterwards betook himself to the stage, where he acquired that gesticulation and buffoonery which he so often practised in the pulpit." He was ordained by Dr. Mountaine, Bishop of London, and became lecturer of St. Sepulchre's in that city. Having been prosecuted for an offence against the laws which defend the sanctity of marriage, he fled to Holland, and became pastor of the English church at Rotterdam. It is only fair to Peters to state in this connection, that when at the extremity of life, and in the most testing circumstances, he very solemnly denied his criminality in this particular, in 'A Dying Father's Last Legacy to an only Child: or, Mr. Hugh Peters' Advice to his Daughter,' 8vo, London, 1660. At Rotterdam he was the colleague of Dr. William Ames, whose 'Lectiones ad Psalmos' Peters edited and published in London in 1647. From Holland, Peters repaired to America, and prolonged his stay there for seven years, returning to England when the troubles between the king and the parliament seemed to open up a way for employment and preferment to a man of his peculiar cast of character and politics. He became one of the most violent declaimers against Charles I., and promoted all the measures of the extreme Republican party. He was thus a valuable instrument in the hands of Cromwell wherewith to influence the army, and to sway the lower orders of the people. Sir William Warwick says that when Charles was brought to London, Hugh Peters "was truly and really his jailer." And Dr. Kennett avers that he bore a colonel's commission in the civil war; that he was vehement for the death of the king; and that it was strongly suspected that he was one of the masked executioners who put his majesty to death. After the Restoration, Peters was apprehended, and committed to prison in the Tower, where he wrote the 'Last Advice,' to which allusion has been made. At his trial, to the various charges which were sworn against him, imputing to him the "most horrid crimes that any man could be guilty of," he contented himself, for the most part, with a plea of innocence; calling witnesses to prove, however, that at the time when he was charged with a guilty presence and assistance at his late majesty's execution, he was in fact confined to his house and bed by an attack of illness. He was convicted, and sentence of death was recorded against him; and after three days' detention in Newgate, he was carried on a sledge to Charing Cross, and there executed, "exhibiting," it has been said, "the most cowardly demeanour." But this is a misapprehension; for Peters suffered with commendable intrepidity. To a person who upbraided him with the death of the king, and bade him now repent, he answered, "Friend, you do not well to trample on the feelings of a dying man. You are greatly mistaken. I had nothing to do in the death of the king." His last moments were those of a victor, and, with a smile on his countenance, he died, on the 16th of October, 1660, his head being afterwards exposed on a pole on London Bridge.

The most remarkable of the works of Hugh Peters are his occasional sermons, of which may be mentioned one which was published with the title of 'God's Doings and Man's Duty: opened in a Sermon preached before both Houses of Parliament, the Lord Mayor and Aldermen of the City of London, and the Assembly of Divines, at the last Thanksgiving Day, April 2, 1646,' which was delivered at Christ Church, and, upon its publication, was dedicated to the Lord Mayor and Aldermen; and another sermon preached before the House of Commons in their parish church of St. Margaret, on the occasion of the fast celebrated on the 20th of December, 1648. In the direct bearing which this sermon is reported to have had upon the fate of the unhappy Charles, it may be reckoned as amongst the most important and startling discourses ever delivered within the walls of an English church. One of the articles charged against Peters on his trial had special reference to this sermon, preached nearly twelve years before. The indictment set forth "that at St. Margaret's, Westminster, he preached upon these words, 'Not this man, but Barabbas;' comparing all along his majesty to Barabbas, and bloodily inciting his auditory to kill the king; intimating that God would bring every tyrant to justice, signifying that there was no exception for king, or prince, or any of that rabble."

PETERSEN, NIELS MATTHIAS. [E. C. vol. iv. col. 764.] The contribution to the History of Danish Literature, 'Bidrag til den Danske Litteraturs Historie,' on which Petersen was engaged at the date of the above memoir, he did not live to complete; but the sixth and final volume was published after his death. He died at Copenhagen on the 11th of May, 1862, in the 71st year of his age.

PETHER, ABRAHAM, landscape-painter, son of William Pether, the engraver, was born at Chichester, in 1756, and learned painting of George Smith, of that city. Abraham Pether, or Old Pether, as he is often called, to distinguish him from his son, is best known by his moonlight scenes, which are very clear, though often mannered and feeble. He was a man of considerable attainments, much ingenuity, and of the most unassuming habits. He was a good musician, having been brought up as a chorister in Chichester Cathedral, and intended for an organist; a clever mechanic, he made microscopes, telescopes, and other philosophical instruments; and an amateur astronomer, and lecturer on astronomy and electricity. Perhaps, partly from frittering away his time and energy in so many pursuits, he lived and died in poverty. After a long and lingering illness, he died, April 13th, 1812.

PETHER, SEBASTIAN, eldest son of the preceding, was born in 1790, learned painting from his father, imitated his manner, and, like him, became known as a painter of moonlight scenes. But he was of inferior skill, and having early fallen into the hands of the picture-dealers, was never able to extricate himself, and closed a long struggle with poverty and ill-health. March 18th, 1844.

PETHER, WILLIAM, a celebrated engraver, was born at Carlisle in 1731. He was a pupil of Thomas Frye, a mezzotint engraver of note in his day; but Pether soon outstripped his master, and ultimately took a foremost place among the practitioners in that branch of the art. He engraved some plates from his own designs, and portraits and subject-pieces after Wright, Penny, and other contemporary artists; but his best prints are those from Rembrandt. He died in 1795.

PÉTION DE VILLENEUVE, JÉRÔME, one of the leaders in the first French Revolution, was born at Chartres in 1753. He was practising as an advocate in that town when the States General were convened in 1789; and took his seat in the Tiers Etat as deputy for Chartres. He at once assumed a lead among those who demanded, not merely reforms, but the establishment of republican institutions. Though not a man of much ability, he gained power by facile oratory and daring opinions, and often combated the more moderate views of Mirabeau. In September, 1790, he was appointed member of the committee for the revision of the constitution; he inveighed frequently against the queen; joined Barnave and Lameth in demanding for the legislature the power of making war and peace; and became president of the National Assembly towards the close of the year. For a time he held friendly relations with Robespierre; and those Republicans who named Robespierre the "Incorruptible" gave to Pétion the designation "Vertueux." In June, 1791, when the royal family made their ill-starred attempt to escape from France, Pétion was one of the commissioners sent to bring them back; his unfeeling and unmanly conduct on this occasion, especially towards the queen, was among the worst trials which the captives had to endure. During the chief part of this year he was at the head of the Republicans; and when made Maire of Paris in November, he used his power in a way disastrous alike for monarchy and for regular government of any kind. During the terrors of the August and September massacres in 1792, he was still in office; he neglected taking the steps which might have lessened the bloodshed; and yet he lost influence with the mob by deprecating violence. When the National Convention was formed, he was elected deputy for Eure-et-Loire; he became soon afterwards president of the Convention; and his vanity tempted him to assume a kind of state which earned for him the sobriquet of "King Pétion." His influence in the Convention remained great until the spring of 1793, when Robespierre, who had begun to envy and to hate him, accused him of complicity with the defection of Dumouriez. His answer was so feeble that he fell into disfavour at once. He was proscribed on the 31st of May, fled on the 2nd of June, and remained in concealment for more than twelve months, well knowing that capture would speedily be followed by the guillotine. On the 17th of June, 1794, he quitted an asylum he had found at St. Emilion, near Bordeaux; and a few days afterwards the bodies of Pétion and a companion were found in a corn-field, half devoured by wolves. This is all that was ever known of his death.

PETRIE, GEORGE, LL.D., an eminent Irish archæologist, was born in Dublin in January, 1789. The son of a portrait-painter, his inclinations towards art were so decided that his father, who wished him to be a surgeon, gave way. Under his father's guidance he made such rapid progress that in his 14th year he obtained the silver medal of the Dublin Academy for a group of figures, and was soon competent to act as his father's assistant. A sketching excursion made in Wicklow stimulated an interest already excited in the ancient remains of Ireland, and he began to make careful notes as well as drawings of the various objects he met with. A journey in Wales in the following year strengthened this feeling, and determined his adoption of landscape-painting as his special branch of art. He visited London in 1813; examined the collections of art, and formed useful connections. His drawings and paintings found purchasers; and in 1816 two of his pictures, 'Glendalough' and 'Glenmalur,' gained admission to the Royal Academy exhibition. The taste for illustrated works having sprung up, Petrie's accurate pencil was soon in requisition for views of Irish scenery and antiquities. For Cromwell's 'Excursions through Ireland' he made nearly a hundred elaborate drawings; for 'Ireland Illustrated,' twenty-three; and many others for the 'Beauties of Ireland,' Fisher's 'Ancient and Modern Dublin,' Wright's 'Wicklow,' 'Killarney,' and 'The Northern Tourist.' The practice of making monochrome drawings for engraving has been supposed to have had an influence in producing a monotony of colour complained of in his paintings; but their fidelity, feeling, and the prominence he gave to scenes and objects illustrative of national antiquities raised them far above the rank of ordinary topographical landscapes; he was recognised as one of the best artists in Ireland; his pictures had a prominent place at the first exhibition of the Royal Hibernian Academy in 1826, as well as those of following years. In 1827 he was elected an academician, and in 1830 accepted the office of librarian.

For some years Petrie had been in the habit of contributing to journals occasional papers of a descriptive or antiquarian character; but the establishment of the 'Dublin Penny Journal,' in 1832, seemed to offer so fair an opportunity of interesting his countrymen in their national antiquities, that he at once joined its staff; was for a time joint editor with the Rev. Cesar Otway, and contributed to it a large number of valuable articles. The journal lasted about four years; but Petrie felt so strongly the value of such a work, that in 1840 he started one of a nearly similar character, and, during the year of its continuance, acted as its sole editor, besides contributing a paper to almost every number. But whilst thus engaged in popularising the knowledge of Irish antiquities, he was no less earnestly occupied in extending a more scientific study of them. In 1828 Petrie was elected a member of the Royal Irish Academy, and the following year a member of the council; and with characteristic zeal he threw all his energy into an effort to rouse it from the inert condition into which it had declined. One of his first objects was to increase the collection of Irish manuscripts, and the funds available being entrusted to him he was able to purchase a goodly number on easy terms, among them being the autograph copy of a portion of the first and the whole of the second part of the 'Annals of the Four Masters,' and others of scarcely inferior interest. He also laid the foundation, and very largely assisted in the formation, of the magnificent collection of antiquities now possessed by the Academy; and further contributed a series of papers on Irish antiquities and the condition of the arts during the earliest periods of Irish history, which are not untruly said to have for the first time placed the study of Irish archæology on a sound basis. When, under the direction of Captain (afterwards General) Larcom, it was decided to make the Ordnance Survey of Ireland embrace the investigation of its antiquities, economic state and social condition, as well as its physical and topographical features, Petrie's unrivalled knowledge and patient industry pointed him out as the fittest person to assist in the work. He was accordingly appointed, 1833, to conduct the antiquarian and orthographical investigations, and for six years devoted himself with untiring zeal to his duties, training at the same time an equally zealous band of young assistants, more than one of whom became subsequently eminent. In 1839 the survey was broken up, just as the system had come into full operation and the materials were being rapidly accumulated for a more thorough knowledge of the former and present condition of Ireland than it will now probably ever be possible to obtain. The 'Memoir of the County of Londonderry,' 1839, a large series of maps, drawings, and sketches, and "468 large volumes relating to the topography, language, history, and antiquities of

Ireland," are the evidence of what was aimed at and what was accomplished. Petrie was now constrained to return to the practice of his profession, of course with greatly diminished chances of success. It was, however, in this second period of his artistic career that he painted some of his best and most poetic pictures. But, whilst depending on his pencil, he spent much time with his pen: the first volume of his great work, the 'Inquiry into the Ecclesiastical Architecture of Ireland,' 1845, a work which grew out of his memoir on the Round Towers of Ireland, which gained the prize of the Royal Irish Academy, and excited very general attention when published in their Proceedings, modified and extended by the knowledge and experience acquired whilst engaged on the Ordnance Survey. This is in many respects the most important contribution that has been made to the archæological literature of Ireland. It obtained for its author the honorary distinction of LL.D. His promised essay on the Military Antiquities of Ireland, which would have completed the inquiry into the early architectural remains of Ireland, was never completed. His work on the 'Ancient Music of Ireland' was published by the Society for the Publication of the National Melodies of Ireland in 1835. Petrie's antiquarian labours, however valuable and appreciated, brought him little pecuniary gain, and the bestowal of a pension of 300*l.* from the civil list in 1849 furnished a welcome addition to his means, and enabled him to pursue his favourite studies in comparative comfort. He continued to work as long as his strength would permit, and then sank quietly to rest, January 17th, 1866, at the age of seventy-seven. (W. Stokes, M.D., D.C.L., *The Life and Labours in Art and Archæology of George Petrie, LL.D., M.R.I.A.*, 8vo, 1868.)

PETTIGREW, THOMAS JOSEPH, F.R.S. [E. C. vol. iv. col. 777.] Well advanced in years at the date of the memoir above cited, and retired from the practice of his profession, Mr. Pettigrew made no further independent contributions to general or professional literature, but he wrote occasional papers in the 'Archæological Journal,' and continued to take an active share in the proceedings of the Archæological Association, and attended its congresses at Ipswich, in 1864, and Durham, in 1865. He died November 23rd, 1865, at the age of 74.

PFEIFFER, MADAME IDA REYER [E. C. vol. iv. col. 779], traveller, died at Vienna, October 27, 1868.

* PFEIFFER, LUDWIG GEORG KARL, malacologist, was born at Cassel, July 4, 1805. After proceeding through a course of studies for the medical profession at Göttingen, Marbourg, Paris, and Berlin, he, in 1826, settled down in Cassel as a medical practitioner. In 1831 a revolution broke out in Poland, and he was called into active service with the army. This afforded him an opportunity of traversing many parts of Europe, and of following up his natural-history pursuits. At this time his attention was more especially given to Cactuses. In 1838 he visited Cuba, and made a careful examination of the molluscan fauna of the island. He has written some works on botany; but his attention has been chiefly given to the air-breathing gasteropoda, on which subject he is one of the principal authorities and most voluminous writers of the day. Thus, for example, he drew up the lists of the *Phaneropneumona*, *Auriculida*, *Truncatellida*, and allied families contained in the collections of the British Museum, forming two volumes of the official series of the Catalogue. He wrote a 'Monographia Heliceorum viventium,' 2 vols. 8vo, Lipsæ, 1847—48, to which additions have been added from time to time, the last being the third supplement to the sixth volume, which appeared in 1869. The work is the fullest record of the species published. Besides this, we have 'Monographia auriculaceorum viventium,' 8vo, Cassel, 1856; 'Monographia pneumonoporum viventium,' 8vo, 1852; and 'Novitates conchologicae,' which was commenced in 1854, and is still being continued. In this last work Pfeiffer has charge of the department relating to land mollusca, the marine species being taken by Dunker and others. He has also written upwards of 250 papers, which are mostly descriptive, and relative to mollusca; but the substance of them is for the most part incorporated in his larger and independent works. He is also editor of the 'Malakozologische Blätter,' which was first started in 1845, under the title of 'Zeitschrift der Malakozoologie.' His botanical works include some three or four volumes on Cactuses, and about as many giving an account of the flora of Heese Cassel. He has written a few medical books, and contributed to numerous publications by other persons, such as the last edition of the work on Mollusca, by Martini and Chemnitz, and Philippi's description of little-known shells.

PHILIP, JOHN, R.A., was born of humble parentage at Aberdeen, on the 19th of April, 1817. Apprenticed to a house-

painter and glazier, without having had any regular instruction, he early began to paint portraits. A visit to London, in 1834, gave him a long-desired opportunity of seeing the exhibition of the Royal Academy and other galleries of pictures, and he returned with clearer notions on art, and a firm resolve to be a painter. He worked hard, and found patrons, and in 1837 was enabled to come to London and enter as a student in the Royal Academy. In 1839 he returned to Aberdeen, and remained there a couple of years, gaining money and fame as a portrait-painter. He then settled in London, and after a few years began to attract attention at the Academy exhibitions by his pictures of homely Scottish life—'A Presbyterian Minister Catechising his Flock' (1847), 'A Scotch Fair' (1848), 'Baptism in Scotland' (1850), and the like. There was true native feeling in them, some humour, and a free dashing style of execution, and the painter was recognised as a rising man. But when the last named picture was exhibited, his strength seemed fast failing: he was told that he must not stay another winter in England, and was recommended to try Spain. Grievous as seemed this check to his career, it proved to be the making of his fortune as a painter. He stayed in Spain nearly seven years, and when he returned to England he was already famous. As his health improved he studied the pictures of Velasquez and Murillo, and quickly developed a new, more rapid, and more brilliant manner than that in which he had hitherto painted, and he found in the Spanish towns and Spanish people subjects, costumes, and colour exactly fitted for its exercise. 'Life among the Gipsies at Seville,' which he sent to the Royal Academy exhibition in 1853, and 'A Letter-Writer of Seville,' 1854, were thoroughly successful; the latter, as well as the next year's contribution, 'Il Pasco,' being purchased by the Queen. On his return to London in 1857, Mr. Philip was elected A.R.A., and at the earliest period allowed by the laws of the Academy, 1859, he became R.A. 'Spanish Contrabandistas' and 'A Daughter of the Alhambra,' 1858; 'A Huff,' 1859; 'Gossips at a Well,' 1861; 'Water-Drinkers,' 1862; 'A Spanish Wake,' 1864; 'The Early Career of Murillo,' 1865; and 'A Chat round the Braserio,' 1866, with numerous others of a like kind, showed the apparently inexhaustible resources of the field he had opened, while each year seemed to add to his appreciation of character, brilliancy of colour, and power and facility of execution. His style was marked, yet free from mannerism; and if the execution seemed at times verging on carelessness, it was excused by the brightness and sparkle of the effect; whilst he escaped the monotony to which the repetition, year after year, of Spanish life and costume would seem almost inevitably to lead, by frequently renewing his studies in Spain itself, instead of trusting to old and fading recollections. But, though Spanish pictures continued to form the staple of his productions, he did not confine his pencil to them. He painted a portrait of the Prince Consort, 1858, for his native city, and in the following year received the royal command to paint 'The Marriage of H.R.H. the Princess Royal,' in which he was considered to have been successful, far beyond what is customary with these royal ceremonials, and which had great success when engraved. In 1863 he exhibited 'The House of Commons, 1860,' and succeeding years saw several vigorously painted portraits from his pencil. But in mid-career he was seized with a low fever, paralysis followed, and he died, after about a month's illness, on the 27th of February, 1867, not having completed his 50th year. The pictures he left nearly finished, and which appeared at the Royal Academy in the May following his decease, 'Antonia,' 'A Highland Lassie Reading,' and 'O Nannie, wilt thou gang with me?' whilst they showed unabated powers, were further interesting as indications of a purpose to return to his earliest class of subjects.

PHILLPOTS HENRY, D.D., Bishop of Exeter. [E. C. vol. iv., col. 811.] Born at Bridgewater, Somersetshire, on the 6th of May, 1778, Bishop Phillpots had long passed the age when he could efficiently conduct the episcopal duties of his vast diocese. Suffering from partial loss of sight and enfeebled health, he had for many years performed most of his episcopal functions by proxy; the last time he appeared in public was on occasion of his triennial visitation in 1862. At length, on the passing of the Resignation of Bishops Act, August 1869, he notified to the Archbishop of Canterbury (September 9th) his desire to resign his see; but, before the necessary measures were completed for giving legal force to his resignation, he had ceased to live. He died at his marine villa, Bishopstowe, near Torquay, on the 18th of September, 1869, in his 91st year. He had been Bishop of Exeter 39 years, having been nominated to the see in October, 1830.

PHILPOT, JOHN, D.C.L., an English reforming divine and

martyr, son of Sir Peter Philpot, and member of an old Hampshire family, was born at Compton, in that county, about 1511, and was educated successively at Winchester and at New College, Oxford, where he was admitted, in 1534, to a law fellowship, which he forfeited, in 1541, "because of absence, being then on his travels." For several years he had been dissatisfied with the dogmas and the system of the Church of Rome, and he returned home from Italy, the country in which he principally travelled, and from Rome, the city in which he principally resided, with views strongly determined towards the Reformation. To these views he gave expression in the lectures on St. Paul's Epistle to the Romans which he read in the cathedral of Winchester, and which gave offence at once to the clergy and the citizens. At some unascertained date after the accession of Edward VI. he was made Archdeacon of Winchester. In the convocation of the clergy which assembled in October, 1553, the year of Queen Mary's accession, the catechism which had been published a short time before the late king's death was condemned as "pestiferous and full of heresies;" and for his determined refusal to subscribe this condemnation, Philpot was subjected to various examinations, of which he has left a vivid and interesting account; and, after a rigorous imprisonment of eighteen months, was condemned to the stake. In his defence he exhibited great courage and ability, and even an eagerness for disputation, provoked thereto by the cruelty of his inquisitors. He denied the assumed identity of the Church of Rome with the Catholic Church, the supremacy of the Pope, and the doctrine of transubstantiation. He met his fate triumphantly, being burned in Smithfield on the 18th of December, 1555.

Philpot was a man of extensive philological attainments, of which he gave evidence in his works, 'De Vero Christiani Sacrificio,' 'Epistolæ Hebraicæ,' 'De Proprietate Linguarum,' 'Translation of Calvin's Homilies,' and 'Translation of St. Chrysostom against Heresies.' None of the above works are extant; but an account of his Disputation in the Convocation House was printed in English at Basel, and in Latin at Rome, with the title of 'Vera Expositio Disputationis,' &c., 1554. Many of his works were preserved by Fox, who translated the narrative of his examinations into Latin; and these were reproduced in one of the volumes of the Parker Society, entitled 'The Examinations and Writings of John Philpot,' &c., 8vo, Cambridge, 1842, which contained (1) a 'Biographical Notice of Philpot;' (2) 'Examinations of John Philpot;' (3) 'Disputation in the Convocation House, October, 1553;' (4) 'Letters of Master John Philpot;' 'Apology for Spitting upon an Arian;' and (5) a 'Defence of the true and old Authority of Christ's Church, by Cælius Secundus Curio, translated by John Philpot.' Many years previous to this publication, the Rev. Legh Richmond had devoted part of the fourth volume of his 'Fathers of the English Church,' &c., 8 vols. 8vo, London, 1807—12, to 'The Life, Examinations, and Selections from the Writings of John Philpot,' &c., 1809.

PICHLER, JOSEPH ANTON, a gem-engraver, was born at Brixen, in the Tyrol, April 12th, 1697. He studied gem-engraving in Naples. From 1750 till his death, in 1779, he lived in Rome, holding a high position as an engraver both of intaglios and cameos. His subjects were chiefly mythological, but he engraved also numerous heads after the antique, and some of modern personages.

PICHLER, JOHANN VON, son and pupil of Joseph Anton Pichler, was born at Naples, January 1st, 1734. He was an earnest student of the antique, and was by many thought to have nearly approached his models in beauty of design and execution. He enjoyed a European reputation, and is still regarded as one of the best of modern gem-engravers; and he has the credit, almost alone among the gem-engravers of his time, of never fabricating antiques. He was greatly admired and patronised by the Emperor Joseph II., who named him court-engraver, and gave him titles of nobility. Johann von Pichler died at Rome, January 25th, 1791. Besides his cameos and intaglios, he painted in pastel, and executed several engravings on copper after Raffaele's paintings in the Vatican.

* PIERCE, FRANKLIN, 14th President of the United States of America, was born at Hillsborough, New Hampshire, November 23rd, 1804. His father, Brigadier-General Benjamin Pierce, had fought in the War of Independence, and had afterwards filled various municipal and state offices in New Hampshire. Franklin finished his education at Bowdoin College, Maine, where he was, in 1822, officer of a college military company, in which Nathaniel Hawthorne was one of the privates. He graduated in 1824; studied law under Judge Howe and

Senator Woodbury; and was admitted to the bar in 1827. He was elected representative for Hillsborough in the State Legislature in 1829, Speaker of the State House in 1831, and Member of Congress in 1833. He took sides with the Democrats, under General Jackson, supporting the South against the North. In 1837 he became a senator, remaining steady to his party, but not taking a prominent part in debate. He was successively offered the posts of Attorney-General and of Secretary of State from President Polk, and of nomination to the governorship of New Hampshire, but declined all these offers. Quitting the Senate in 1842, he established himself as an advocate at Concord, and became distinguished at the bar. On the breaking out of the Mexican war in 1846, he volunteered as a private in the army; rose to the rank of brigadier-general in 1847, under General Scott; and led his brigade against the enemy at the battles of Contreras and Churubusco. He acted as one of the Commissioners for negotiating a peace with Mexico; but this failing, the war proceeded, and he was engaged at Molino del Rey, Chapultepec, and the final conquest of the capital. Returning home, he resigned his military commission, and recommenced as an advocate. In 1850 he acted as President of the Convention intrusted with the revision of the Constitution of New Hampshire. In 1852 he was elected President of the United States, his nomination being the result of a compromise between conflicting sections of the Democratic party, to which all the States but four assented. In his Inaugural Message, 1853, he defended slavery, denounced anti-slavery agitation, and supported the Fugitive Slave Law. During his five years' term of office, he settled a fishery dispute with England; sent an expedition to explore a railway route over the Rocky Mountains; and brought about the repeal of the Missouri Compromise Act of 1820. By this act, slavery was not to be introduced into any new States of the Union; but, by its repeal, the troubles arose which distracted Kansas and Nebraska. Other measures connected with his presidency were the signing of commercial treaties with England and Japan; and the attempt, by means of the Ostend Conference, to compel Spain to sell Cuba to the United States—an intrigue which brought the American Government into bad odour with foreign powers. In 1855 Walker's filibustering expedition to Central America, and the angry remonstrances of the President against the alleged attempts of the English Government to raise recruits in the Union for the Crimea, created much irritation between the two countries. Mr. Pierce, although held in high personal esteem, was not popular as a president. When his term of office expired, in 1857, he visited Europe, and travelled for two or three years. During the civil war, he supported the Federals against the Confederates, but took no active part in the struggle. He was appointed a judge in 1863. Before Mr. Pierce's election as President, in 1852, his 'Life' was published by Nathaniel Hawthorne; also by Mr. Hermitage ('Life of General Franklin Pierce, the Granite Statesman,'); and by Mr. Bartlett. On the completion of his term of office, sketches of his administration and services were published by Carroll, Cooley, Robinson, and other writers.

PIERO DI COSIMO, an eminent Florentine painter, was the son of Lorenzo, a goldsmith of Florence, in which city he was born in 1462. He was a scholar and assistant of Cosimo Roselli; accompanied him to Rome, and from his connection with him was named Di Cosimo. In the early part of his career, Piero was regarded as the rival of Leonardo da Vinci, but he had neither the depth of feeling nor the comprehensive genius of that great master. He was, however, superior to most of the Florentine painters of his time. He is described as of a gloomy turn of mind, and something of his natural sombreness is reflected on his canvases. He was fonder than his predecessors of subjects from classical mythology, and these afford the most favourable examples of his pencil. His chief works are in Florence, but most of the great galleries of Europe possess specimens by him. The Berlin Museum has 'Venus playing with Love,' which is much admired; the Louvre, a 'Coronation of the Virgin;' and our own National Gallery, 'The Death of Procris,' which affords a good illustration of the general character of his style, and the kind of landscape background for which he was celebrated. He died at Florence in 1521.

* PILS, ISIDORE-ALEXANDRE-AUGUSTIN, French painter, was born at Paris, July 19th, 1813. He studied under M. Picot, and in the École des Beaux-Arts. In 1838 he carried off the grand prize of Rome by a picture of 'St. Peter at the Gate of the Temple;' and the pictures he painted at Rome, and for some time after his return to Paris, were chiefly of a religious character. In 1854 he visited the East and the Crimea, and has

BIOG. DIV.—SUP.

since painted several battle-pieces, which have won great applause in France. 'The Landing of the French Troops in the Crimea' was one of the chief attractions of the Exposition of 1857; 'The Battle of the Alma,' painted for the Government in 1861, and placed in the Museum of Versailles, was the most attractive of the many French battle-pieces in the International Exhibition of 1862, and the largest picture in the building. He was appointed professor of painting at the École des Beaux-Arts on its reorganisation in 1863. M. Pils received the medals of the second class in 1846 and 1855; of the first class in 1857; a grand medal of honour in 1861; and the Cross of the Legion of Honour in 1857.

PINAIGRIER, ROBERT, celebrated French painter on glass, was born in Touraine about 1490. It is thought that he learned his art in Italy. He acquired celebrity by an allegorical design in a window in the Church of St. Hilaire, Chartres, executed about 1520. He painted windows in other churches of the same city. At Paris he executed windows for the Abbeys of St. Victor, St. Jacques-de-la-Boucherie, and various churches. Little of his work remains uninjured. The windows, illustrative of the history of Joseph, in the Church of St. Merry, Paris, are perhaps the best. He died in or before 1530, at Tours, where his children long continued the glass-painting works with great credit.

PIRKHEIMER, WILIBALD, *Latine* PIRCKHEIMERUS, BILIBALDUS, a distinguished German scholar, was born at Eichstätt, on the 5th of December, 1470; and, after having received a careful education, and travelled with his father, a man of considerable reputation as a royal councillor and a patron of letters, was placed at the court of the Bishop of Eichstätt, where he cultivated all the arts, whether athletic or æsthetic, which then went to make up the character of a gallant gentleman. After a brief period of military service, he repaired, in 1490, to Padua for the study of law, which he further prosecuted three years afterwards at the University of Pisa. Returning to his native place in 1497, he became a member of the senate, by which assembly he was entrusted with several important affairs, and in particular in 1499, when he was appointed to the command of the troops sent to assist the Emperor Maximilian I. against the Swiss cantons. On the conclusion of the war, of which he wrote an account, 'Historia Belli Suitensis,' afterwards translated into German by Münch, and published with the title of 'W. Pirkheimers Schweizerkrieg,' &c., 8vo, Basel, 1826, he was honoured with the dignity of imperial councillor. After the performance of various important domestic and diplomatic services, he retired to private life in 1522, and devoted his leisure to scientific and literary pursuits, the advancement of education, and the society or the correspondence of his friends, amongst whom he numbered the foremost minds of the time. He wrote Latin versions of portions of the works of Plato, Xenophon, Plutarch, and others, and produced several volumes conversant about the history of Germany. One of his most popular works is a humorous production entitled 'Apologia seu Podagræ Laus,' 4to, Nürnberg, 1522, and often reprinted, German translation, 'Vertheidigung oder Lob des Padagra,' &c., 8vo, Nürnberg, 1831, English translation, 'The Praise of the Gout: or, the Gout's Apologie. A Paradox both pleasant and profitable,' 4to, London, 1617. Pirkheimer died on the 22nd of December, 1530; and eighty years after this event his works were collectively issued with the title of 'Opera politica, historica, philologica, et epistolica, adjectis Opusculis Pirkheimeri Auspicio concinnatis. Omnia nunc primum edita, collecta, recensita, ac digesta a Melch. Goldasto,' folio, Frankfurt, 1610.

PISTRUCCI, BENEDETTO, a celebrated Italian gem-engraver and medallist, was born at Rome in 1782, and worked there as an engraver of gems and cameos. A fabrication of a head of Flora, in a sard of three strata, which he imposed upon the noted collector Payne Knight (it is said at the suggestion of Mr. Hamilton, a rival collector) as a very fine antique cameo, brought him into note. He came to England in 1816, and was introduced to the Prince Regent (afterwards George IV.), who, thinking the cozening of a virtuoso at once a capital joke and a sure sign of merit, gave him a commission to engrave his portrait; and, approving of that, appointed him to engrave the dies for the new coinage. Although another held the title, Pistrucci was chief engraver to the Mint till about 1822, when he offended the king by declining to engrave Chantrey's more youthful profile, in place of his own. Pistrucci, however, retained his official connection with the Mint, with the title of medallist to the king; and the title was continued in the following reigns; but he was

not again employed on the coinage. His claims and position were the subject of a tedious controversy, which has long ceased to have any interest. Pistrucci was essentially a gem-engraver, and his coins and medals partake more of the character of gem-engraving than is desirable. It is said that to the last he cut his dies with the gem-engraver's lathe and diamond, instead of the customary steel tools. He obtained for his gems remarkably high prices. Mr. King, in his work on *Antique Gems*, says that he received for a cameo of the heads of Augustus and Livia the unprecedented sum of 800*l.*; forty years later (1859) this cameo, a blue chalcedony, was sold at the Herz sale for 30*l.*, a noteworthy illustration of the eccentricities of fashionable connoisseurship. Pistrucci's crown-pieces, with the St. George on the reverse, have been much admired; but the St. George, however prettily modelled, is too palpable an outrage on common sense. The coronation medal of George IV. is a fine work; but Pistrucci was accustomed to speak of his great Waterloo medal, on which he had been more or less engaged for above twenty years, as his masterpiece. The die proved, however, when completed, to be of too elaborate a character to admit of working successfully. Pistrucci died on the 16th of September, 1855, aged 73.

* PIUS IX., GIOVANNI MARIA MASTAI FERRETTI. [E. C. vol. iv. col. 862.] In June, 1859, an insurrection broke out in the Romagna, Bologna, and Ferrara, and initiated a series of movements, both political and military, the general tendency of which was unfavourable to the temporal power, and which culminated, in November, 1860, in a vote of annexation, the practical effect of which was to merge nearly all the "ancient patrimony of Saint Peter" into the Sardinian monarchy. Protests against the course of events were not wanting on the part of the Pope, who, in bestowing his benediction on the French army of occupation on the 1st of January, 1860, characterised the pamphlet '*Le Pape et le Congrès*,' then just issued under the inspiration of Napoleon III., as a "signal monument of hypocrisy, and an ignoble tissue of contradictions;" and who, on the 28th of September following, pronounced an allocution in severe condemnation of the Sardinian government.

On the 8th of December, 1864, being the tenth anniversary of the declaration of the dogma of the Immaculate Conception, the Pope issued an Encyclical Letter, accompanied by an Appendix consisting of eighty propositions directed against the principal religious and political vices and heresies of the age. These were scheduled as pantheism, naturalism, rationalism, religious indifference, errors and offences against the Church, errors in philosophy, errors with regard to the doctrine and practice of Christian marriage, the assertion of liberty and independence, and antagonism to the temporal sovereignty of the Pope. The operations of Bible Societies were censured, and the adherents of Socialism and the members of secret societies, as the Freemasons, were condemned; as also were those persons who held the possibility of salvation without the pale of the Church, or who believed that Protestantism was only another form of the true faith, and was equally pleasing to God. The public reading of this Encyclical—which was generally regarded as the expression of the pontifical wrath against the convention between Victor Emmanuel and Napoleon III., by which it had been stipulated, on the 15th of September previous, that the troops of the latter should evacuate Rome in two years from that date—was prohibited to the French clergy by an imperial decree of the 5th of January, 1865, which, however, the Archbishop of Besançon and some other prelates had the hardihood to disobey. In pursuance of the convention just mentioned, the last detachment of the French troops quitted Rome on the 11th of December, 1866, when General Montebello received a farewell benediction from the Pope, with the assurance of the pontifical intercession for the temporal and spiritual welfare of the Emperor. The patriotic impatience of Garibaldi and his followers, who had invaded what was left of the papal territory, and had repulsed the papal troops at Monte Rotondo, brought about a renewal of the French occupation on the 30th of October, 1867, and the utter discomfiture of the Italian invaders at Mentana on the 4th of November, on the 18th of which month the Pope celebrated a solemn service for the repose of the victims in the battle which had respite the temporal sovereignty. An allocution of the 20th of December expressed the pontifical gratitude that "while Satan and his satellites and sons ceased not to let loose, in the most horrible manner, their fury against our divine religion, the God of mercy and of goodness sent the valiant soldiers of the Emperor of the French, who rejoiced to come to our aid, and fought with the utmost zeal and ardour, especially at Mentana and Monte Rotondo, thus covering their names with

glory." In another allocution, written with reference to the religious affairs of Austria, and dated June 23rd, 1868, the Pope deplored and condemned as abominable the marriage and other laws depriving the Church of control over schools, and establishing the freedom of the press and liberty of conscience, declaring these laws null and void, censuring those concerned in their initiation, approval, or execution, praising the conduct of the Austrian bishops as defenders of the Concordat, and expressing a hope that the Hungarian prelates would follow in their footsteps. On the 29th of June, 1868, the supreme Pontiff issued a bull (*Æterni Patris*), fixing the opening of the Œcumenical Council, which had been announced on the 8th of December, 1867, for the 8th of December, 1869. On the 11th of April, 1869, the "jubilee of the priesthood of Pope Pius IX.," or the fiftieth anniversary of the celebration of his first mass, was observed with great fervour at Rome, and generally throughout Roman Catholic Christendom; and it is stated that the gifts of the faithful on this occasion, whether of the clergy or the laity, throughout Europe and America, reached the value of more than three-quarters of a million sterling.

The interest of the present incumbency of the Roman See groups itself around the efforts made by the Pope for the perpetuation and security of the temporal power, which finally fell as a sequel to the withdrawal of the French troops from Rome in 1870; and the efforts which he has made to compensate the probable loss of territorial sovereignty by the extension of his spiritual prerogative and domination. Of the last class of efforts the Œcumenical Council of 1869-70 was at once the most audacious, the most exhaustive, and the most disastrous; resulting, as has been already historically ascertained, in wide-spread dissatisfaction, in mingled contempt, horror, and amusement without the Church, and disaffection, defection, and probable disruption within. The whole Christian world was summoned to the Council. A special invitation was sent to the Patriarch of Constantinople, who refused it as not recognising the assumption of universal authority on the part of the Bishop of Rome; and Protestants were invited, as was elicited by Dr. Cumming, only on condition of silent acquiescence and submission. The invitation, given on such terms, was not accepted.

A Pre-Synodal Congregation assembled in the Sistine Chapel on the 2nd of December, 1869, when the Pope delivered an allocution, and received the oaths of the officers of the approaching Council, which was opened according to programme, on the 8th of December, being the anniversary of the declaration of the Immaculate Conception, with the ringing of bells and the salvoes of artillery. The inaugural ceremony took place in St. Peter's Church, whither the Pope marched in the rear of a procession composed of nearly eight hundred ecclesiastics—prince-archbishops, cardinals, patriarchs, archbishops and bishops, abbots, and generals of religious orders; to whom, after mass and an inaugural discourse, the Pope gave his blessing, and subsequently received the homage of the faithful. The appointed prayers followed, and the Pope three times invoked the aid and presence of the Holy Spirit at the deliberations of the Council. After a session extending over more than six months, during which between ninety and a hundred "General Congregations" and four "Public Sessions" were held, and in the course of which leave of absence was frequently refused to malcontents, and discussion and opposition were stifled, a majority of 451 out of the 601 members of the Council then present—many of whom were dependent upon the Pope for their maintenance during their stay at Rome—outvoting a minority of 150 dissentients, or *non placets*, and of those who gave a qualified assent (*placet juxta modum*) carried a measure, at the fourth public session, July 18th, 1870, affirming the infallibility of the Pope. The fourth chapter of the *Schema* incorporating this doctrine concluded as follows:—"With the approval of the Sacred Council, we inculcate and define as a dogma of faith, that, in virtue of the Divine assistance, the Roman Pontiff, of whom it was said in the person of St. Peter, by our Lord Jesus Christ, 'I have prayed for thee,' &c., cannot err when, fulfilling his mission as supreme teacher of all Christians, he defines by his Apostolic authority what the Universal Church must hold in matters of faith and morals, and that the prerogative of inerrancy, or infallibility, extends over the same matters to which the infallibility of the Church is applicable. But if any man shall presume—which may God forbid!—to controvert our present definition, let him know that he departs from the truth of the Catholic faith and the unity of the Church."

In a letter addressed by King Victor Emmanuel to the Pope, dated from Florence, September 8th, 1870, the former adverted

to the necessity, in the interests of his own crown and of the spiritual power of the supreme Pontiff, and in the face of the events then agitating Europe, that he should occupy Rome, and assume the protectorate of the Holy Father. The Pope, who had previously refused to recognise the kingdom of Italy, protested energetically against such an occupation as a "great sacrilege and an injustice of high enormity;" notwithstanding that it was undertaken to be effected without loss of the papal revenue or dignity, and without prejudice to the full jurisdiction and sovereignty of the Pope over the Leonine city. On the 20th of September, sixteen days after the downfall of the Emperor Napoleon III., and in spite of the famous "jamais" of M. Rouher, who, in a debate in the Legislative Assembly, December 5th, 1867, had, in the name of France, declared that "Italy should never seize upon Rome," the troops of Victor Emmanuel entered Rome, after a short resistance by the Pope's soldiers, who had received orders to yield to violence when violence should be offered. A slight breach in the walls of Rome, through which General Cadorna entered, was thus the signal for the cessation of the defence of the Holy City. A plébiscite of the Papal dominions was taken early in October, when an almost unanimous vote of 133,681 against a minority of 1,507, was recorded for the annexation of Rome and its dependencies to the kingdom of Italy. Perfect freedom of action was left to the Pope, either to remain at Rome or to leave it; and the Italian government undertook, for itself and on the part of the people, that, whatever might be the determination of the Holy Father, he should "never fail to be surrounded with all the honours and all the proofs of respect which were due to him."

Pius IX. belongs to a long-lived family; and he has the compensation, amongst all his troubles, of being the first occupant of the chair of St. Peter who, since the death of that apostle, has held office for the full term of twenty-five years. This term the present Pope has already, October, 1871, a little more than completed, his accession having taken place on the 16th of June, 1846; but it was only on the 23rd of August that his reign reached the duration which tradition ascribes to that of the Apostle—twenty-five years, two months, and seven days. So singular a falsification of the warning given at the coronation ceremony "Non videbis annos Petri" could scarcely pass without notice; and the event of the "Pope's Jubilee" was celebrated by sermons, masses, and religious ceremonies of imposing solemnity, from which the occurrence of political demonstrations, involving the death of one victim and the arrest of several rioters, somewhat detracted. The Pope was also the recipient of splendid gifts and offerings in honour of his protracted incumbency.

PLÜCKER, JULIUS, was born 16th July, 1801, at Elberfeld. He studied in the Gymnasium of Düsseldorf, and in the Universities of Bonn, Berlin, and Heidelberg; he also passed some years in Paris. In 1825 he became a privatdocent of mathematics in Bonn, and in 1828 professor extraordinarius in that university. In 1833 he went to Berlin in the same capacity. In 1834 he became professor of mathematics in the University of Halle; and in 1836 he obtained a similar professorship in the University of Bonn. His writings on analytical geometry placed him among the first mathematicians of his time. He became professor of physics in 1847, and made a series of brilliant discoveries in physics, such as that of magnecrystallic action and the action of powerful magnets on the luminous electric discharge in glass tubes containing highly rarefied gas. He also showed that certain elementary substances give each two totally different spectra at different temperatures. He was elected a foreign member of the Royal Society in 1855; and the Copley medal was awarded to him in 1866. He died at Bonn, 22nd May, 1868.

PLUMIER, CHARLES, botanist, was born at Marseille in 1646. He was a man of varied accomplishments, being well skilled in arts of so different a nature as painting, turning, and making philosophical instruments. It was owing to hearing some lectures by Tournefort, that he commenced to give particular attention to plants. He went on an expedition to the West India Islands for the purpose of introducing into France such plants as would be most useful; and he discharged his duties so well that he was appointed botanist to Louis XIV. He also collected, figured, described, and made copious notes respecting a very large number of species belonging to the animate world generally. Besides his published works, he left an immense quantity of unpublished material, and several thousand well-executed figures. Many of the genera which he founded were adopted by Linnæus, or have been established by more

recent observers. His principal works are, 'Description des Plantes de l'Amérique,' fol., Paris, 1693; 'Nova plantarum Americanarum,' 4to, Paris, 1703; 'Plantarum Americanarum, fasciculi X.,' edited by J. Burmann, folio, Paris, 1755—1760; 'Traité des Fougères de l'Amérique,' folio, Paris, 1705; and 'L'Art de Tourner,' folio, Lyon, 1701. The botanical works are illustrated by nearly 600 plates of capital figures, all engraved from his designs or paintings. He died at Puerto San Maria, near Cadiz, in 1704.

POERIO, BARON CARLO, an Italian lawyer and politician, was born at Naples, in 1803, and was early called upon to share in the successive sentences of exile passed upon his father, Baron Giuseppe Poerio, the leader of the Neapolitan bar, for his liberal opinions. The first six years of the administration of Ferdinand II., who succeeded to the throne of the Two Sicilies on the 8th of November, 1830, were tempered by the benign influence of his first wife, Maria Christina of Savoy; and the house of the elder Poerio during this period became one of the principal centres of liberal opinion and of literary and general culture at Naples. The second marriage of the king, in 1837, with the Archduchess Maria Theresa, brought him more completely under the domination of Austria, to which he had for some years been gravitating; and during the next ten years, Carlo Poerio, who was always ready to undertake the defence of political offenders, and whose name and reputation made him an object of extraordinary jealousy and suspicion, was more than four times arbitrarily arrested and immured in the royal dungeons. Early in the revolutionary year 1848, Poerio exchanged a state of intermittent captivity for office, first as Prefect of Police, and afterwards as Minister of Public Instruction. The hope of a permanently liberal régime was shaken, however, by the coup d'état of the 15th of May, 1848, and shattered by the dissolution of the Chambers on the 12th of March, 1849; after which Poerio, who refused to flee, was brought before a court and condemned, in June, 1850, to twenty-four years' imprisonment. The tortures he was now called upon to endure stirred up the eloquent indignation of Mr. Gladstone, who by his famous letter to Lord Aberdeen shocked Europe by the revelations of the atrocities of King Ferdinand's government. After a detention of nearly nine years, the sentence of a terminal imprisonment was commuted into one of perpetual exile; and Poerio and other political prisoners were forced to embark, in March, 1859, for South America, on board a vessel the captain of which they compelled to land them at Cork. Poerio's modesty, dignity, worth, and affability favourably interested many of the most influential people in England; and he left this country for Piedmont, where he refused the advances of King Francis, who had succeeded his father Ferdinand, and who wished him to return to Naples. He did not revisit his native country until after the flight of King Francis, in October, 1860, and just before the annexation of his kingdom to the Italian monarchy, during which short interval Poerio joined the Fanti cabinet as a minister without portfolio. He was promptly returned as a member of the House of Deputies; and in March, 1861, was elected Vice-President of this Assembly, an office which he retained until his death at Florence, on the 28th of April, 1867. He was buried at the public expense, and with uncommon expressions of respect and regret, at Naples, the syndic of which city immediately opened a subscription for the purpose of erecting a monument to his memory. An oration, in review and eulogy of his career, was published with the title of 'Della Vita e de' Tempi di Carlo Poerio: Discorso recitato dal Socio S. Baldacchini,' 4to, Naples, 1867.

Poerio left behind him the reputation of the purest and most elevated patriotism, caring nothing for party, but giving up all to his country. A record of the chief legal process instituted against him was edited by G. Tofano, and published with the title of 'Atti e Difesa della Causa di Carlo Poerio ed Altri,' 8vo, Naples, 1850; and two English volumes have been conversant about phases of the same event, 'Speech of Carlo Poerio, in his Defence before the Grand Court Extraordinary at Naples. Translated from the authentic Original,' 8vo, London, 1851; and 'Carlo Poerio and the Neapolitan Police. The Defence made by that Nobleman on his Trial before the Grand Court of Naples,' &c., 8vo, London, 1858.

* POGGENDORFF, JOHANN CHRISTIAN, a German physicist, was born at Hamburg, December 29th, 1796. The son of a merchant, he was educated first at the Johanneum in Hamburg, and then at Schiffbeck. Preferring science to commerce, he studied pharmacy, and removed in 1820 to Berlin, where he went through a regular course in physics and chemistry. In the following year appeared his first scientific paper in the

'Isis,' on the magnetism of the voltaic pile, especially relating to the galvanomultiplier. In 1824 he succeeded Gilbert as editor of the *Annalen der Physik und Chemie*, which had long been one of the leading scientific journals in Germany, and which became still more influential under his management. In 1826 he introduced a new magnetometer; in 1834 was appointed professor at the University of Berlin; and in 1838 was elected member of the Académie des Sciences. In 1853 appeared his *'Lebenslinien zur Geschichte der exacten Wissenschaften,'* Berlin, 8vo; which was followed ten years afterwards by a larger work in the dictionary form, *'Biographisch-literarisches Hand-Wörterbuch zur Geschichte der exacten Wissenschaften,'* Berlin, 2 vols. 8vo. He was also associated with Liebig and Wöhler in the compilation of the first volume of their *'Wörterbuch der Chemie,'* 1856. His labours have, however, been chiefly directed to the *'Annalen.'* For more than forty years this journal has been especially rich in papers relating to electricity and magnetism; Poggendorff himself has contributed nearly a hundred and fifty papers, mostly on these sciences. A few papers by him have also appeared in the Berlin Memoirs and in the Transactions of various societies.

POINSOT, LOUIS, French mathematician, was born at Paris, January 3rd, 1777. He studied in l'Ecole Polytechnique, which he left in 1795, to become an engineer in the corps of Ponts et Chaussées. Nearly all the subsequent changes in his career were due to his skill as a mathematical teacher and writer. He became professor of mathematics at the Lycée Bonaparte in 1804; inspector-general of the University of Paris in 1806; and professor of analysis at l'Ecole Polytechnique in 1809. In 1813 he succeeded Lagrange in the section of geometry at the Academy of Sciences; and in 1816 became examiner and member of the council at l'Ecole Polytechnique. In 1840 he was appointed a member of the Council of Superior Instruction; and, in 1843, Geometer to the Bureau des Longitudes. In 1846, he sat in the Chamber of Peers, and, in 1852, was made a senator. M. Poinot's scientific writings extended over a period of more than half a century. In 1803, appeared his *'Éléments de Statique,'* in which he developed the theory of statical couples. This work was highly praised by Fourier; it has passed through many editions, and an English translation by Sutton was published at Cambridge in 1847. In 1808 M. Poinot prepared the analysis placed at the beginning of Lagrange's *'Traité de la Résolution des Equations numériques.'* In 1825, appeared his *'Recherches sur l'analyse des Sections Angulaires,'* and, in 1835, *'Théorie Nouvelle de la Rotation des Corps.'* He published a great number of papers on mathematical and philosophical subjects, in the *'Journal de l'Ecole Polytechnique,'* the *'Mémoires des Savants Étrangers,'* the *'Mémoires de l'Institut,'* the *'Mémoires de l'Académie des Sciences,'* the *'Comptes Rendus,'* the *'Bulletin des Sciences Mathématiques,'* Liouville's *'Journal,'* and the *'Nouvelles Annales Mathématiques.'* These papers (many of which were read before the Institute, and some of them afterwards published in a separate form) relate, among other subjects, to circular arcs; the general theory of the equilibrium of systems; the composition of moments and areas; the theory of numbers; the fundamental principles of the differential calculus; the transformation of differential functions; the invariable plane of the solar system; the principle of virtual velocities; the theory of the rotation of bodies; Foucault's experiment to demonstrate the earth's diurnal rotation; and the theory of rolling circular cones. M. Poinot died at Paris, in his 83rd year, December 15th, 1859.

POLK, JAMES KNOX, eleventh President of the United States of America, was born in Mecklenburg county, North Carolina, November 2, 1795. He was the son of a farmer, who removed to Tennessee in 1806, and early placed him as a clerk in a store; but, in 1815, he entered the University of North Carolina, where he graduated in 1818 with high honours. In 1819 he commenced the study of the law, and in 1820 was admitted to the bar. His political career commenced in 1823, when he was elected a member of the State Legislature of Tennessee. He entered Congress in 1825, and joined the Democrats. He opposed federal appropriations of money for internal improvements, a protective tariff, and the establishment of a national bank; and he was a staunch adherent of President Jackson. In 1833 and 1834 he was chairman of the committee of ways and means; and Speaker of the House of Representatives from 1835 to 1839, greatly trusted by the House during his five years' occupancy of this post. On retiring from Congress in the last-named year, he was elected governor of the State of Tennessee. He failed in an election for Vice-President

of the Republic in 1840, in a re-election as governor of Tennessee in 1841, and again in 1843; but, in 1844, an unexpected complication in party tactics gave him the highest position in the United States. Dissensions among the Democrats respecting the nomination of Mr. Clay as an opponent of Van Buren, led to a compromise, by which Mr. Polk was elected President. He formed a strong government, with Buchanan, Bancroft, and Marcy among the ministers. In his four years of office, 1845 to 1849, the Oregon dispute with England was settled. He had headed the party which demanded a boundary line as far north as 54°40' N., so as to include the whole of the Oregon territory within the United States; but negotiations led to the adoption of 49° as the latitude of the boundary, with the assignment of Vancouver Island to England. This treaty lessened his popularity with his countrymen. On entering office, he had announced as part of his intended policy, the annexation of Texas; this annexation, effected in 1846, brought on a war with Mexico, which resulted in the treaty of 1849, by which a territory of 800,000 square miles, including California and New Mexico, was added to the United States. His advocacy of permissive slavery in newly formed or annexed territories, his preference of free trade as contrasted with protective duties, and his maintenance of State rights, caused him to lose favour with Congress. He established the independent Treasury system, whereby the revenue of the government was raised in specie, without the aid of banks; he founded the Department of the Interior, and, admitted the Wisconsin Territory to the rank of a State. His term of office ceased in March, 1849, and he died on June 15th, in the same year.

POLK, LEONIDAS, Bishop of Louisiana, and lieutenant-general in the American Confederate army, was one of the few modern examples of a bishop-militant. He was born at Raleigh, North Carolina, in 1806; graduated at West Point Military Academy in 1827; and entered the army as second lieutenant of artillery. Resigning his commission in the autumn of the same year, he took orders, and in 1830 became a deacon of the Protestant Episcopal Church. In 1838, as missionary-bishop, he took charge of a large region in the south-west of the United States; but in 1841 limited his functions to those of Bishop of Louisiana. When the civil war broke out in 1861, he vehemently sided with the South, being himself a slave-owner; his military ardour awakened after a slumber of thirty years; and, with the advice of General Lee, he accepted a commission in the Confederate Army offered to him by Jefferson Davis. As major-general, he headed a force in the valley of the Mississippi, where he constructed strong works at Fort Donelson and other places. In 1862 he joined Johnstone and Beauregard, and took part in the engagements at Corinth, Shiloh, Perryville, Murfreesboro, and Chicamunga. Having given dissatisfaction to General Bragg, he was suspended for a time; but was restored to a command in 1863, and was raised to the rank of lieutenant-general. In 1864 he was placed in command of the department of the Mississippi. He joined Johnstone in an attempt to check the advance of Sherman upon Atlanta. While reconnoitring on the Pine Mountains on the 14th of June, he was killed by a cannon ball. He had retained his bishopric, and had intended to resume episcopal functions if he survived the war.

PONCELET, NICOLAS, a distinguished French engraver, was born at Paris, March 12th, 1746. He studied engraving under Fessard and Delaunay. He was employed on the *'Galerie du Palais Royal,'* the *'Musée Laurent,'* and other important works of a similar character; the illustrations to the Bible by Mavillier; Cochin's designs in Dussieux's edition of Ariosto; editions of Voltaire, Rousseau, &c. His principal separate plates are the *'Battle of Marengo,'* after C. Vernet; *'Restoring the Blind Man to Sight,'* by Le Sueur; and the *'Marriage of the Virgin,'* by Vanloo. M. Ponce wrote and translated several artistic dissertations, which were collected under the title *'Mélanges sur les Beaux-Arts,'* 8vo, 1826; read several papers before artistic and literary societies, and published some political pamphlets. He died at Paris, March 27, 1831.

PONCELET, JEAN VICTOR, was born at Metz, July 1st, 1788. He studied mathematics at the Lycée Impérial of Metz, and was afterwards admitted at the École Polytechnique. He became sub-lieutenant of engineers at the École d'Application at Metz, and left it in March, 1812, in order to assist in constructing the defensive works of Ramekens, in the island of Walcheren. In June, 1812, he joined the Russian invading army, and in August took part in the battle of Smolensk. On the 19th he was employed in throwing bridges over the Dnieper under fire of the Russian batteries on the opposite bank. He deceived the

enemy by pretending to cross at a particular spot, while he constructed bridges at other points, better protected from the Russian fire. During the retreat from Moscow, he was taken prisoner, and after a painful march of four months through snow, and often with the mercury at the freezing point, he arrived at Saratof, on the Volga. After recovering from an illness brought on by the hardships he had endured, he resolved to occupy his leisure with the study of descriptive geometry; but he found that what he had learnt had been totally effaced by his privations and sufferings. Without the aid of books, he had to construct piecemeal the elementary propositions required for the line of research he had determined on. The results of his labours were afterwards published in Gergonne's 'Annales,' from 1817 to 1821, and the original manuscripts were published in 1862. At the conclusion of peace in 1814, he returned to France. From 1815 to 1825, as captain of engineers, he superintended the construction of machinery in the arsenal of Metz. From 1825 to 1835, he was professor of mechanics, and he not only instructed young officers in this branch of their profession, but, at the suggestion of Baron Dupin, delivered gratuitous evening lectures on geometry to the artisans of Metz, and thus contributed "to the establishment of those courses of public lectures that have brought the most fertile results of scientific research within the grasp of the whole nation." Poncelet published various works and memoirs on geometry and applied mechanics. His undershot water-wheel with curved buckets is known throughout Europe by the name of Poncelet's wheel, which nearly doubles the useful effects of a given water power. He became chef de bataillon in 1831, and member of the Institute in 1834. From 1835 to 1848, he was on the committee for constructing the fortifications of Paris. He also became professor of mechanics at the Sorbonne and at the Collège de France. He became general of brigade in 1848, and governor of the École Polytechnique. In June, 1848, he led his pupils through the barricades to the Luxembourg, where they formed a guard of honour for the protection of the provisional government; for which important service he was appointed to the command of the National Guards of the department of the Seine. He was also elected a member of the Constituent Assembly. As president of the Scientific Commission sent to the English Exhibition of 1851, he drew up a Report on the Progress of the Arts, involving the application of science during the last half-century. He wrote a large number of memoirs and scientific reports, and was a member of various learned societies. He died in Paris, 23rd December, 1867, after a long and painful illness.

PONTE, GIOVANNI DA, an eminent Venetian architect, was born at Venice in 1612. He built the Hall of the Great Council; the Store-house of the Arsenal, 900 feet long; the Church of S. Croce, and other important edifices; and rebuilt, among other things, the Collegio of the Ducal Palace. The Public Prison, completed in 1589, a spacious Doric building, with a single row of windows and a rusticated basement, was one of his best buildings, being remarkable for its appropriate air of stern, solid majesty. This building he united to the Ducal Palace by the famous Bridge of Sighs. But his most celebrated work was the Bridge of the Rialto over the Grand Canal, a single arch of 98 feet span, and a width of 66 feet, and which has always ranked among the chief architectural features of the city. Da Ponte is said to have died in penury in 1597.

* PÖPPIG, EDWARD, traveller and naturalist, was born at Plauen, in Saxony, in 1797. He was educated at Leipzig. In 1822 he went to Cuba, and spent two years in examining the island. He then rested for a short time in the United States, and in 1826 recommenced his explorations, which lasted until 1832, the new field of his exertions being South America. During this period he visited many parts of Chili, Peru, and Brazil; and formed valuable collections of the plants and animals which inhabit those countries. On returning to Germany he was appointed professor of zoology at the University of Leipzig. The results of his researches have appeared in articles contributed to German scientific periodicals, and to Ersch and Gruber's Encyclopædia, and in the following works:—'Reise in Chili, Peru, und auf dem Amazonenströme, während des Jahre 1827—1832,' 2 vols. 4to, Leipzig, 1835; and 'Nova Genera ac Species Plantarum quas in regno Chilensi, Peruviano, ac Terra Amazonica annis 1827—1832 legit,' 3 vols. 8vo, 1835—1845. In the last-mentioned work he was associated with M. H. Endlicher. A large number of new species are described in it.

PORPORA, NICOLO, musical composer, was born at Naples, probably in 1687. After studying under Scarlatti, at the Conservatorio di Santo Onofrio, he composed psalms and motetts

for the convents and chapels of Naples, became maestro at the Conservatorio, and afterwards filled a similar position in another establishment. He founded a new school of singing, which proved to be his chief passport to fame; his pupils including Farinelli, Caffarelli, Mingotti, and Gabrielli. Between 1724 and 1728, he resided alternately at Vienna, Rome, and Venice, composing much music for the church and the theatre, and, for a part of the time, directing the Conservatorio di Ospedaleto, at Venice. In 1728 he was at Dresden, as music-master to the Princess of Saxe, and director of the Chapel Royal and the theatre. His residence in England from 1729 to 1738, was marked by the celebrated rivalry between him and Handel; he, however, acquired more reputation in this country as a teacher of vocal music. The remaining thirty years of his life were marked with few incidents, save his meeting with Haydn at Vienna, in 1754, and his struggles against poverty in his advanced years, when he seems to have been ungratefully forgotten by pupils who had risen to fame and wealth. He died in 1766, according to Gazzaniga, in 1767 according to Villarosa. Among Porpora's compositions are more than 50 operas, beginning with 'Ariana e Teseo,' in 1717, and ending with the 'Trionfo di Camillo,' composed when he was nearly eighty years old, with his powers decayed. Among his many oratorios, the names of three are preserved—'Gedeone,' 'Il Verbo Incarnato,' and 'Davide.' His other works in church and chamber music were numerous and varied.

PORPORATI, CARLO ANTONIO, a celebrated Italian engraver, was born at Volterra, near Turin, in 1741. He studied engraving at Paris, under Beauvarlet, and J. G. Wille, but formed a style of his own—clear in line, pure in drawing, true and graceful in colour and expression, but deficient in strength and vigour. His 'Jupiter and Leda,' after Correggio, and 'Madonna with the Rabbit,' after Raffaele, are among his best prints. Porporati worked for some time in Paris, and was elected a member of the French Academy; but afterwards settled in Turin, where he was received into the Academy and nominated professor of engraving, and where he died, June 16th, 1816.

PORRETT, ROBERT, was born 22nd September, 1783. His father held the office of ordnance storekeeper in the Tower, and resided there. Robert became his father's assistant, succeeded him, and eventually rose to be chief of the department. He devoted his leisure to chemistry, before the introduction of the atomic theory, and was among the first to apply the new doctrine to the verification of chemical analysis. He discovered hydro-ferro-cyanic and hydro-sulpho-cyanic acids, and published accounts of them and of their salts, between 1809 and 1819, in the 'Philosophical Transactions' and elsewhere. He also examined, in 1813, the newly discovered formidable preparation of chloride of nitrogen. He also showed that a fluid, under the action of the electric current, is made to pass against gravity through a membrane when the connecting wires of a battery are connected with water placed at different levels on each side of the membrane. This is described by German writers as "das porrettsche Phänomen." After an interval of twenty-six years, namely, in 1846, he again published some original papers, on gun cotton. He retired from official duty in 1850, after a service of 55 years. He became fellow of the Royal Society in 1848, and died on the 25th November, 1868.

PORTA, GIACOMO DELLA, a distinguished Italian architect, was born at Milan in the early part of the 16th century. According to Milizia, he was a worker in stucco under Gobbo, and afterwards studied architecture under Vignola. The first building known to have been erected by him was the Church of Sta. Catarina de' Funari, in 1564. His most celebrated work was the dome of St. Peter's at Rome, the completion of the cathedral having been confided to him in conjunction with Fontana, on the death of Michelangelo. They altered the outline of the cupola, from that designed by their great predecessor, and it may be questioned whether judiciously; but, generally, carried out his intention. Porta also continued the buildings of the Campidoglio, after Michelangelo's designs. His other works in the capitol include the Collegio della Sapienza (1576); the churches of Sta. Maria, Madonna de' Monti, San Luigi, the Greek Church, &c.; the Palazzi Ercolani, Nicolini, Spada, Marescotti; and the Popolo, the Campidoglio, and other fountains. He commenced the Aldobrandini Palace at Frascati, but did not live to complete it. His death happened suddenly about 1598, from eating too much melon and ice on his return to Rome from Frascati with Cardinal Aldobrandini. The buildings of Della Porta, though not free from faults, display much grandeur of style, and are admirable for the employment and distribution of sculpture.

PORTA, GUGLIELMO DELLA, an eminent sculptor, the nephew of Giacomo della Porta, was born about 1512. He went to Rome, in 1537, and became the favourite pupil and assistant of Michelangelo, and the most successful of his imitators. His Mausoleum of Pope Paul III. is one of the very finest works of its kind extant; and the recumbent nude female figures of Justice and Prudence—since Guglielmo's time partly draped—have always been particularly admired. His figures of the Prophets in the first arch, and others on the altars of St. Peter's, are also excellent. Vasari mentions a series of fourteen reliefs, illustrative of the life of Christ, which would be surpassingly beautiful if finished and cast in bronze; but he adds that Fra Guglielmo has finished nothing since he received the office of Lead-seal to the Pope in 1547, to the present year 1567, "it being the peculiarity of this office that it renders him who fills it fat and lazy." Guglielmo seems to have done little afterwards. He died about 1577. His son, GIOVANNI BATTISTA DELLA PORTA (born at Polizza, 1542, died at Rome, 1597), also attained eminence as a sculptor. A colossal marble statue of S. Domenico, executed for the church of Sta. Maria Maggiore, at Rome, is reckoned his masterpiece.

* **PORTER, DAVID D.**, admiral in the United States navy, was born in Pennsylvania, in 1817; he was the youngest son of Commodore Porter, who had taken part in the war with England in 1812. As a boy, he made many voyages with his father, and then entered the United States navy as a midshipman in 1829. After varied service afloat, he became lieutenant of the ship 'Congress' in 1841; and was engaged in the Mexican war in 1846. For a time he quitted the service of the state, accepting the post of commander of one of the Pacific mail steamers; but returned to the navy, 1853, with the rank of captain. When the civil war broke out in 1861, Rear-Admiral Porter (his rank at that time) was placed in command of the Mississippi flotilla, under Admiral Farragut; he assisted in the capture of New Orleans in April, 1862, and then aided General Grant in achieving the victories at Vicksburg and Alexandria. All opposition on the part of the Confederates in that quarter being now nearly ended, Admiral Porter remained, with his flotilla, in undisturbed control over the Mississippi till October, 1864, when he was raised to the command of the North Atlantic squadron. He had to watch Wilmington, almost the only port at which the Confederates could succeed in breaking the blockade, to export cotton and bring in varied supplies. To watch James River, Albemarle Sound, and Pimlico Sound, to ward off the Confederate ironclads, and to bombard and capture Fort Fisher, were operations in which military and naval forces combined were needed. General Butler co-operated with Admiral Porter; but some difference of view between them led to a recall of the former. Fort Fisher, which was captured in January, 1865, was described by the admiral as stronger and more formidable than the Malakoff at Sebastopol, which he had visited during the Crimean war. During the remainder of the war he held his fleet in James River ready to facilitate the military operations at and near Richmond.

PORTLOCK, JOSEPH ELLISON [E. C. vol. iv. col. 947]. He was born in 1794, and was educated at the Royal Military Academy. Before he became connected with the Ordnance Survey of Ireland, he had seen some active service with the army in Canada. In the concluding portion of the preceding memoir, his connection with the Geological Society (not Geographical, as it has been misprinted) is mentioned. His presidency lasted through the years 1857 and 1858. In 1851 he was appointed inspector of studies at the Royal Military Academy at Woolwich; and in this capacity he made many improvements in the course of education at that establishment, especially by procuring increased attention to scientific subjects. In 1856, a sense of public duty induced him to resign this post; but the subject of military education still occupied much of his thoughts, and when the Council of Military Education was appointed, he was selected as one of the councillors. In 1862 a sudden illness caused him to retire to the neighbourhood of Dublin, and on February 14, 1864, he died.

POSTEL, GUILLAUME, *Latine*, **POSTELLUS GULIELMUS**, a French scholar and visionary, was born on the 26th of May, 1505, or, according to other authorities, five years later, at Dolerie, near Barenton. When very young, he lost both his parents by the plague; and, being extremely poor, sought to acquire the means of study by teaching others more ignorant than himself. He repaired to Paris, and presently entered the Collège Sainte-Barbe as a domestic, where he acquired, unassisted, the Hebrew and Greek languages. To these he added

the acquisition of Arabic, in the course of a visit to the East, from which he brought back many precious MSS.; and, after his return, was appointed by Francis I., in 1539, to be professor of mathematics and oriental languages at the Collège de France. His prospects were ruined in consequence of his attachment to Chancellor Poyet, in whose disgrace he was involved through the influence of the Queen of Navarre, deprived of his academical preferments, and banished from France. He now wandered eastward; and having stayed for some time at Vienna, where he found scope for his oriental learning, and having escaped from the trouble in which he found himself involved, on account of his accidental likeness to a Franciscan monk, who had murdered a brother of his order, he reached Rome in 1544. He was attracted to this city as offering the most promising scene for the fulfilment of a purpose for which he believed himself to have been divinely commissioned, of uniting all mankind, by the sword or by the pen, under the authority of the Pope and the King of France. The Society of Jesus seemed to present the best instrumentality for the accomplishment of his mission; and Postel accordingly applied for admission into the Order. After a novitiate of two years, however, he was definitively excluded from the Society, the members of which were forbidden to hold any communication with him. Having propounded his visionary ideas in certain writings, he was cast into prison; but he escaped, and repaired to Venice, where he was denounced to the Inquisition, the judges of which, after examination, contemptuously dismissed him as being less a heretic than a madman. Here he formed an attachment for an old maid, whom he had infected with his own folly, in whom he pretended that the redemption of women, hitherto incomplete, was now perfected, and that they were to have universal dominion over men. In this connection may be mentioned his singular work, the result of his visions, entitled, 'Très-merveilleuses Histoires des Femmes du Nouveau Monde,' 1553. The accounts of Postel's movements during the next four years diverge considerably; but, after various wanderings and a public retraction of his opinions, he was reinstated in his former professorship at the Collège de France, at Paris, whither he was recalled in 1562. He held this appointment for a short time only; and, after another outbreak of his madness, became, either by choice or by force, an inmate of the monastery of Saint-Martin des Champs, where he passed the last eighteen years of his life, attracting veneration with increasing age, and receiving the respectful visits of princes and nobles. He died on the 6th of September, 1581.

Notwithstanding the fitful extravagance and wildness of his conduct, Postel was a man of profound scholarship, and of wide and varied information. His principal works are, 'Linguarum duodecim Characteribus differentium Alphabetum, Introductio, ac legendi Modus,' otherwise entitled, 'De Originibus seu de Hebraicæ Linguae et Gentis Antiquitate, deque variarum Linguarum Affinitate Liber,' 4to, Paris, 1538; 'Syriacæ Descriptio,' 8vo, 1540; 'De Magistratibus Atheniensium Liber,' 4to, Paris, 1541; 'De Orbis Terræ Concordia Libri quatuor, cum Annotationibus,' folio; 'De Etruriæ Regionis Originibus, Institutis, Religione, et Moribus,' 4to, Florence, 1551; 'Signorum cælestium vera Configuratio,' 4to, Paris, 1553; 'Divinationis sive divinæ Summæque Veritatis Discussio,' 8vo, Paris, 1571; 'De Nativitate Mediatoris ultima, nunc futura,' 4to; and 'Des Histoires orientales, et principalement des Turchiques et Schitiques ou Tartaresques et aultres qui en sont descendues,' 8vo, Paris, 1575.

* **POTT, AUGUST FRIEDRICH**, a German scholar, and one of the founders of the science of comparative philology, was born at Nettelrede, Hanover, on the 14th of November, 1802, and, having received his school education at Hanover, repaired to the University of Göttingen for the prosecution of his theological and philological studies. In 1825 he became a teacher at the Gymnasium of Celle, which he left in 1827, in order to assume the functions of a tutor in the University of Berlin. In 1833 he was appointed professor of comparative philology at the University of Halle; and in the same year signalised his philosophical acquaintance with the leading languages of the world, by commencing the issue of his elaborate work entitled *Etymological Researches*, &c., 'Etymologische Forschungen auf dem Gebiete der Indo-Germanischen Sprachen, mit besondern Bezug auf die Lautumwandlung im Sanskrit, Griechischen, Lateinischen, Litauischen und Gothischen,' 2 vols. 8vo, Lemgo, 1833—36, second edition, enlarged and with modified title, 2 vols. 8vo, Lemgo, 1859—67. The events of the life of Professor Pott, who, on the 17th of December, 1869, was elected a corresponding member of the French Académie des Inscriptions et Belles-Lettres, are

chiefly to be found in his academical activity, and in the publication of his works. Amongst the latter, in addition to many articles which have been allowed to remain in the condition of contributions to various learned periodicals, may be mentioned two dissertations entitled, 'De Borusso-Lithuanice tam in Slavicis quam Letticis Linguis Principatu Commentatio i.,' 4to Halle, 1837, 'Commentatio ii.,' 1841; 'The Gypsies in Europe and in Asia,' 'Die Zigeuner in Europa und Asien. Ethnographisch-linguistische Untersuchung, vornnehmlich ihrer Herkunft und Sprache, nach gedruckten und ungedruckten Quellen,' 2 vols. 8vo, Halle, 1844-45, which received the prize of the French Institute; 'the Quinary and Vigesimal System all over the World,' 'Die quinare und vigesimale Zählmethode bei Völkern aller Welttheile. Nebst ausführlicheren Bemerkungen über die Zahlwörter Indo-germanischen Stammes und einem Anhang über Fingernamen,' 8vo, Halle, 1847; 'Origin of proper Names, and especially of Family Names,' 'Die Personennamen, insbesondere die Familiennamen und ihre Entstehungsarten, &c., Eine sprachliche Untersuchung,' 8vo, Leipzig, 1853 and 1859; 'Difference between the Races of Men, especially from a Philological Point of View,' 'Die Ungleichheit menschlichen Rassen, hauptsächlich vom sprachwissenschaftlichen Standpunkte,' &c., 8vo, Lemgo, 1856; 'Studies upon Greek Mythology,' 'Studien zur griechischen Mythologie,' 8vo, Leipzig, 1859, reprinted from the third 'Supplementbande der Jahrbücher für classische Philologie,' and 'Die Sprachverschiedenheit in Europa an den Zahlwörtern nachgewiesen sowie die quinare und vigesimale Zählmethode,' 8vo, Halle, 1868.

* **POUCHET, FÉLIX ARCHIMÈDE**, biologist, was born at Rouen, August 26, 1800. He studied at Rouen and Paris, taking his degree of M.D. in 1827. He then became the director of the Museum of Natural History at Rouen, one of the finest in France, and soon after professor of natural history. He has written several works and papers, the most noteworthy of which are those on ovulation in Mammalia, and on spontaneous generation. On the latter subject, Pouchet has been one of the most powerful opponents of the doctrines supported by Pasteur, one of the foremost of the party which maintains that all individuals have been derived from individuals previously existing. The particular form of heterogeny, or abiogenesis, supported by M. Pouchet, is that ovules may originate independently of a living being, by the application of the same forces upon organizable matter as concur to the formation of ovaries in organisms. This controversy has led to his publishing 'Hétérogénie, ou traité de la génération spontanée basé sur nouvelles expériences,' 8vo, Paris, 1859; 'Nouvelles expériences sur la génération spontanée et la résistance vitale,' 8vo, Paris, 1864, and numerous papers. Of his other publications, the more important are, 'Histoire des Sciences Naturelles au moyen âge,' 8vo, Paris, 1853; and 'Théorie positive de l'ovulation spontanée et de la fécondation des mammifères et de l'espèce humaine, basée sur l'observation de toute la série animale,' 8vo, with a 4to atlas, Paris, 1842. Besides the works mentioned, he has written others on fermentation, palæontology, botany, the physiology of mollusks, infusoria, and insects, and a volume entitled 'L'Univers,' intended to popularise science.

POWELL, THE REV. BADEN [E. C. vol. iv. col. 956], was the eldest son of the late Rev. Baden Powell, of Langton, in Kent, and was born at Stamford Hill, near London, August 22, 1796. In 1820 he entered into holy orders, and in the following year obtained the vicarage of Plumstead, in Kent. To the works enumerated in the memoir above cited, he added in 1859 a treatise entitled 'The Order of Nature considered with reference to the claims of Revelation,' and in the following year an essay 'On the Study and Evidences of Christianity,' which formed a part of the volume entitled 'Essays and Reviews.' The opinions expressed in these excited much criticism and some controversy. He died in London, 11th June, 1860.

POZZO, FATHER ANDREA, was born at Trent, in the Tyrol, November 30th, 1642; entered the Society of Jesus at the age of 23; became one of the most accomplished painters of his day; was regarded as a skilful architect, and especially celebrated for his knowledge of perspective. As a painter Pozzo was most noted for his extraordinary facility and fine colour, he being considered by contemporary critics to have united the qualities of Rubens with those of Titian and Correggio. His paintings are chiefly of a decorative character. The ceiling of S. Ignazio at Rome is his best-known painting, as the florid altarpiece in the same church is his best known architectural effort. Milizia describes this altar as the richest in Rome, perhaps in Europe, but still more extravagant than rich. Many of his frescoes

are at Turin, Genoa, Modena, and Arezzo. His celebrity for decorative work was so great that he was invited to Vienna by the Emperor of Austria. He had executed but a few works in Vienna, when his career was arrested by death, August 31st, 1709. Father Pozzo, who was an enthusiast in perspective, wrote a 'Trattato di Prospettiva de' Pittori ed Architetti,' 2 vols. folio, with many fine plates, Rome, 1693, which rapidly acquired celebrity as 'The Jesuit's Perspective,' and of which new and revised editions were issued in 1702 and 1764, and an English translation, 'Rules and Examples of Perspective, proper for Painters and Architects: in Latin and English. By John James,' with plates by Sturt, folio, London, 1693; new edition, 1707.

PREISLER, JOHANN MARTIN, a celebrated German engraver, was born at Nürnberg, March 14th, 1715. Of a family of engravers, he learned the rudiments of his art from his elder brother, George Martin Preissler (born 1700, died 1754), an engraver of considerable ability, but completed his studies under G. F. Schmidt. J. M. Preissler engraved with great neatness and precision the 'Madonna del Seggio' of Raffaele; 'Christ bearing the Cross,' by P. Veronese; and others, by Guido, Salvator Rosa, and other eminent masters; many plates of antique statues, and several contemporary portraits. He went to Copenhagen in 1744; was appointed professor of engraving, and engraver to the King of Denmark; was elected member of the Academy of Copenhagen; and died in that city, November 17th, 1794.

PRESCOTT, WILLIAM HICKLING [E. C. vol. iv. col. 963]. Mr. Prescott only lived to complete a third volume of his 'History of Philip the Second, King of Spain,' which appeared in 1859, and which brings the work down to the death of Philip's fourth wife, Anne of Austria, in 1580. He died suddenly at Boston, January 28, 1859; his unexpected death calling forth very general regret in England as well as in America, his writings being equally esteemed in both countries. A full and interesting 'Life of W. H. Prescott,' by his friend Mr. George Ticknor, was published in 1864.

PRESTEL, JOHANN GOTTLIEB, a German engraver, was born at Grünenbach, in Suabia, in 1739. He completed his studies at Vienna under Joseph Wagner. Prestel settled in Nürnberg, and there engraved above one hundred and forty prints, including several after Raffaele, Albert Dürer, and others of the great masters; but many of them are slight, being merely etchings finished in aquatint. Several of his engravings are from his own designs. He also painted some pictures. He died at Frankfurt in 1808. In many of his earlier plates he was assisted by his wife, **MARIA CATHARINE PRESTEL**; but in consequence of some disagreement they separated, and she came to England (1786), where she engraved landscapes in mingled etching and aquatint, after Gainsborough, Webber, and other English artists, as well as the old masters. She died in London in 1794. Her prints must not be confounded with those of her daughter Catherine, who engraved in a similar manner.

PREVITALI, ANDREA, an eminent Italian painter, was born at Bergamo in the last quarter of the 15th century. He was a scholar of Giovanni Bellini; painted many pictures for the churches of Bergamo, and was much esteemed as a portrait painter. An altar-piece at Borgo Sant' Antonio, dated 1506, is the earliest work known by him; one at San Spirito, of St. John the Baptist and other saints, is his most celebrated production. His works are not often met with in galleries. In the Berlin Museum is a picture of three female saints. The National Gallery possesses a 'Holy Family' (No. 695), which is marked by much quiet grace and nobleness of expression. Previtali died of the plague at Bergamo, November 7th, 1528.

PRÉVOST, LOUIS CONSTANT, geologist, was born at Paris, June 4, 1787. He was educated for the law; but his inclinations, stimulated by the teachings of Cuvier and Brongniart, led him to give his time and thought to geology and palæontology. He accounted for the association of freshwater shells with marine animal remains in the older tertiary beds of the Paris basin on the supposition that from time to time the swollen rivers carried down their charge of organic and inorganic matter far into a bay of the old ocean—a view which has been generally accepted in the cases where marine and freshwater species are intermingled in the same strata, or where there are frequent alternations of their beds containing some marine species only, and others freshwater or brackish-water species; but not in those where the changes are of greater magnitude, which changes are held to imply that the area was at one time submarine and another subaerial. He correlated the tertiary

of the Paris and Vienna basins, as also the secondary strata of the north of France, with those of Great Britain. He made a careful study of the extinct and active volcanic area of central France and Italy, as also of the temporary volcanoes of Graham's Island; and was led to advocate that, in all these cases, the cones were formed by the piling up of ejected matter, not by the protrusion of the solid ground. He demonstrated that, at every period of the world's history, volcanic action and the deposition of sediment have been proceeding contemporaneously; and drew up a chronological list of strata. He wrote a large number of papers; was a member of several societies, one of which, namely, the Geological Society of Paris, he helped to found; and was professor of geology at the Sorbonne from 1831 onwards. He died at Paris, August 16, 1856.

PRÉVOST-PARADOL, LUCIEN ANATOLE, a French journalist, politician, and historical writer, was born at Paris on the 8th of August, 1829, and was educated successively at the Collège Bourbon and the École Normale; at the former of which he carried off the first prize for French composition at the general competition of 1848, and the first prize for philosophy in 1849. He left the École Normale in 1851, and, devoting himself to literary pursuits, obtained the prize of eloquence offered by the Académie Française, for his 'Éloge de Bernardin de Saint-Pierre.' In August, 1855, he was admitted docteur-ès-lettres, on which occasion he exhibited a French essay, or *thèse*, afterwards published with the title of 'Elisabeth et Henri IV. (1585—1598). Ambassade du Hurlaut de Maisse en Angleterre, au Sujet de la Paix de Vervins,' 8vo, Paris, 1855, third edition, forming part of the 'Bibliothèque Contemporaine,' 12mo, Paris, 1863; and a Latin *thèse*, which he afterwards expanded and published as 'Jonathan Swift. Sa Vie et ses Œuvres,' 8vo, Paris, 1856. After holding for a year the appointment of professor at the Faculté des Lettres, Aix, M. Prévost-Paradol entered upon the more congenial duties of a journalist, by accepting, towards the end of 1856, the principal editorship of the 'Journal des Débats,' of which he continued almost to the last a faithful collaborateur—writing chiefly the leading articles, the premiers-Paris—with the exception of a few months in 1860, when he temporarily associated himself with the 'Presse.' In fact, his anti-imperial advocacy of a responsible ministry, and a proposal to confer the power of initiating laws on the Chamber, which had at once brought upon him a warning from M. de Persigny, had been systematically followed by other attacks and other warnings, until, in order to save the 'Débats' from suspension, the temporary secession, at least, of M. Prévost-Paradol became a necessity. The censorship, which seemed to discover treason against the system of personal government in everything he wrote, even in the discussion of topics of purely literary significance, kept a jealous watch over every organ of public opinion to which he contributed; and especially on the 'Courrier du Dimanche,' which, after a series of constant checks and annoyances, was suppressed on the 2nd of August, 1866, for an article more than usually obnoxious to the Imperial Government. Prévost-Paradol's manner of attack was allusive and collateral, rather than direct or violent. He was keen and brilliant in his irony, stabbing the imperial pretensions by reducing them to an absurdity, and treating them rather as matter for ridicule than as worthy of serious discussion. There was no subject, whether of ancient or modern times, which, in revolving through his mind, did not radiate a light, sparkling, and blighting condemnation. M. Prévost-Paradol was twice an unsuccessful candidate for a seat in the Chamber of Deputies—once, in 1863, for the sixth electoral circumscription of Paris, and again for the second circumscription of the Seine Inférieure in 1869. He was more fortunate with the Académie Française, of which he was elected a member on the 6th of April, 1865, in succession to M. Ampère, by a majority of three votes over his colleague of the 'Débats,' M. Jules Janin; and his public reception, by M. Guizot, took place on the 8th of March, 1866. Heartily but discriminatingly admiring the institutions of England, he had a singular command over the language of his country, in which language he delivered, in November, 1869, two lectures before the members of the Edinburgh Philosophical Institution, on the 'Social State of France,' immediately afterwards published as 'France,' &c., 8vo, Edinburgh, 1869; and in which for a considerable period he contributed to the 'Times' a weekly review of French politics, in the character of "A Parisian Correspondent." The time at length came when he believed that the Empire had separated itself from the past, and had frankly and fully adopted the principle of parliamentary government—of "an executive," as he defined it, "submitting in good faith

to a parliament elected by fair means"—of which, through many years of sore discouragement, he had been the persistent advocate. In the early days of January, 1870, he consented to serve the Emperor; and, although a single month was sufficient to modify his confidence in the hearty liberalism of the renovated Empire, and the feeling of misgiving was only strengthened by the course of events, he yet, in circumstances of peculiar difficulty and delicacy, and undeterred by the angry recriminations of former friends and political allies, elected to carry out the compact with Napoleon III., by which he had accepted the post of envoy to Washington. Early in July he sailed for the United States, and, on the very day on which he landed in America, war was declared against Prussia; and although, coinciding generally with M. Thiers, he held that a struggle for pre-eminence with Prussia was not only inevitable, but desirable, for France, he had always regarded an antecedent liberalism as a necessary condition of the undertaking, and now probably regarded the pretext and the time as ill chosen, and the enterprise as full of peril. It was his mortification to find himself, in the words of the "French Correspondent" who succeeded to his connection with the 'Times,' "far away, holding a post of empty honour, without real power, tongue-tied, pen-bound, the official servant and representative of Napoleon III. In an evil hour he had cast in his lot with the man who was about, perhaps, to bring defeat on France, or, if victory was hers, with the restorer of triumphant Cæsarism. He would either be buried under the ruins of that Empire which he had so long and so gloriously opposed, or he would go down to posterity as the accomplice of those who had used war as a means for defeating liberty. The thought must have been intolerable." The extreme heat of the weather affected his bodily health, and assisted in overturning the equilibrium of his mind; so that on the 20th of July, 1870, five days after his arrival in America, he committed suicide by shooting himself. His remains were embalmed, forwarded to New York, and placed on board the French steamer 'Lafayette'—which had carried him to America—for Brest, from which they were conveyed to Paris, and interred at the church of Notre Dame de la Lorette, on the 8th of August.

The works of M. Prévost-Paradol include, 'Revue de l'Histoire universelle,' 8vo, Paris, 1854, new edition, 2 vols. 18mo, Paris, 1865; 'De l'Impiété systématique,' 8vo, Paris, 1855; 'Du Rôle de la Famille dans l'Éducation,' 8vo, Paris, 1857, which obtained the prize of the Académie des Sciences Morales; 'De la Liberté des Cultes en France,' 8vo, Paris, 1858, first published in the 'Revue des Deux Mondes'; 'Essais de Politique et de Littérature,' 3 vols. 8vo, Paris, 1859—63, and 3 vols. 12mo, 1863, a collection of articles contributed to the 'Journal des Débats'; 'Les Anciens Partis,' 12mo, Paris, 1860, a brochure which was seized, and the author condemned to a month's imprisonment, and a fine of a thousand francs; 'Du Gouvernement parlementaire. Le Décret du 24 Novembre,' 8vo, Paris, 1861; 'Les Elections de 1863,' 8vo, Paris, 1863; 'Études sur les Moralistes français,' &c., 12mo, Paris, first two editions, 1865; 'Quelques Pages d'Histoire contemporaine. Lettres politiques,' 4 vols. 12mo, Paris, 1862—66, a collection of letters contributed to the 'Courrier du Dimanche'; and 'La France Nouvelle,' 8vo, Paris, 1868, a work which excited uncommon attention.

PRÉVOST, ZACHÉE, French engraver, was born at Paris, June 21st, 1797. He was a scholar of Regnaud and of Berwic, and published on his own account some vignettes, after various masters, in 1822. His first important picture was the 'Corinne' of Girard, which obtained a medal at the Exposition of 1827. M. Prévost engraved a large number of plates after the old masters and the principal modern French painters. His two great prints are 'Jesus in the House of Simon,' 1857, and the 'Wedding at Cana,' after the famous pictures in the Louvre by Paolo Veronese. M. Prévost's manner was peculiar, but effective. Except in his largest works, he made more use than usual of etching, reserving the graver for the heads and more important parts. In his slighter manner were executed the 'Improvisateur,' and other plates, after Leopold Robert, which were far more popular than his more elaborate productions. M. Prévost obtained a medal of the first class in 1839, and the cross of the Legion of Honour in 1852. He died March 27th, 1861.

PRICE, STERLING, general in the American Confederate army, was born in Prince Edward County, Virginia, in September, 1809. He settled as a young farmer in the State of Missouri; became a member of the State Legislature, and in 1844 entered Congress. When the Mexican war broke out, soon afterwards, he resigned his seat in Congress, raised a regiment of volunteer cavalry, put himself at the head of it, and joined the United

States army at Fort Leavenworth. On one occasion, with only 300 men, he besieged Taos, and compelled its garrison of 1300 men to surrender. For his services he was made brigadier-general, and military governor of Chihuahua. On the termination of the war in 1847, he returned home; engaged again in political life, and was in 1853 elected governor of Missouri by the Democratic party. In 1857 he was one of the Bank Commissioners for that State. When the civil war commenced in 1861, he was one of the delegates selected to meet in convention to decide whether the State of Missouri should throw in its lot with the North or the South; he became president of the convention, and his influence joined with that of others to adopt the latter course. As major-general of the Missouri forces, he concerted plans with other confederate leaders; and after retiring before the Federals at St. Louis, Booneville, and Carthage, he collected from various quarters a force of 10,000 men near the Arkansas. Joined by General McCulloch with another force of 5000 men, he advanced on August 7th against a Federal army under Generals Lyon and Sigel: Lyon was killed, and Sigel was defeated with great loss. A disagreement between Price and McCulloch interfered for a time with the proceedings of both; this was the means of allowing the Federals to gain a hold in the Missouri State, which they never afterwards lost. Price, it is true, advanced with his own force, and defeated the Federals at Lexington on the 16th of September; but the victory was barren of results. In a later phase of the war he was commander of a division at Corinth. In the latter part of 1864 he made another attempt to wrest Missouri from the Federals, but without success. On the conclusion of the war in 1865, he went to Mexico, and obtained a post in the Government Board of Immigration. He returned to the United States two years afterwards, with health and fortune shattered; and died at St. Louis, September 27th, 1867.

PRIM, JUAN, Marquis de los Castillejos, Count de Reuss, Viscount del Brueusch, a field-marshal and grandee of Spain, son of Pablo Prim, a colonel of infantry, was born at Reuss, in Catalonia, on the 6th of December, 1814. Very early in life he bore arms as a cadet in the Spanish service; and on the breaking out of the war of succession, which followed the death of Ferdinand VII. (September 29th, 1833), identified himself with the interests of the Queen Isabella, at that time not quite three years old. His skill and valour procured for him various military distinctions; and, having been promoted in his 22nd year to the command of a company, he attained, three years later, the rank of colonel. The peace of Bergara put an end to the civil war in 1839; and Prim, throwing himself into political life, displayed much zeal and capacity as a deputy in several parliaments, and as an organiser of political clubs. After the termination of the regency of Queen Christina, October 12th, 1840, and her retirement to France, Prim associated himself with the Progresistas in their opposition to Espartero, who, on the 8th of May, 1841, assumed the Regency. In 1842, Prim took refuge in France from the consequences of a suspected complicity with the insurrection at Saragoza; and, attaching himself to Queen Christina, participated in the measures concocted for her restoration. The amnesty of 1843 permitted his return to Spain; and he took his seat in the Cortes as deputy for Tarragona. He played a prominent part in the insurrectionary movements which resulted in the overthrow of Espartero; as a sequence to which event he was raised to the rank of brigadier-general, was made Governor of Madrid, and created Count de Reuss. In May, 1844, Narvaez was named President of the Council; and Prim, who had incurred disgrace with the Queen for the dilatoriness of his military measures against the revolt in Catalonia, was accused, November, 1844, of being a member of a conspiracy for the assassination of Narvaez, convicted, and sentenced to six years' seclusion in a fortress; but this sentence was revoked by the Queen. He was liberated on the 24th January, 1845, and he took up his residence at Madrid. Later in the year he proceeded to France, where, and in Spain, he passed several years of ostensible retirement from public life. In 1853, at the breaking out of the war with Russia, he joined the Turkish army on the Danube, and was present at the battles of Oltenitza and Silistria; and being named Spanish military commissioner to the camp of the Allies, took part in the earlier affairs of the Crimea. On his return from the East, of his experience in which he published an account, he passed through Paris, where, in 1856, he married a Mexican lady of large fortune, the Señora Echevarria. In 1856, he was rewarded for his support of the O'Donnell ministry by being promoted to the rank of lieutenant-general; and, in 1858, was raised to the Senate, having been,

BIOG. DIV.—SUP.

in 1857, the only member of the Progresista party returned to the Cortes. In October, 1859, war was declared by Spain against Morocco, and Prim was appointed to the command of the division of reserve. In this capacity he advanced his previous reputation by a variety of exploits, of which the most notable was his heroically courageous rallying of the fugitive regiment of Cordova, which had the effect of deciding favourably to the Spanish arms the Battle of Castillejos, January 1st, 1860. For his conduct in this critical position, Prim was rewarded with the title of Marquis de los Castillejos, and the rank of a grandee of Spain. The Moors were decisively defeated at Guadel-Ras, on the 23rd of March following, and a treaty of peace was soon afterwards concluded. In the following year, 1861, General Prim was appointed to the command of the Spanish contingent—being charged at the same time with the duties of a minister plenipotentiary—in the joint expedition undertaken against Mexico by France, England, and Spain, from which the troops of the last two powers presently retired. Having withdrawn his troops to the Island of Cuba, and personally paid a visit to New York, Prim returned to Spain in July, 1862. He now gave all his influence to advance the interests of the Progresistas, and accepted the presidency of many of their committees. In January, 1866, he placed himself at the head of several revolted regiments which made demonstrations against the government of O'Donnell; but the insurrection was suppressed, and Prim, having made good his retreat, with the bulk of his followers, into Portugal, afterwards repaired to London, where for several months he remained in comparative seclusion. The organisation of a counter-movement afforded him the opportunity of returning to Spain; and, after some fluctuations of fortune, he finally succeeded, September 29th, 1868, in driving Queen Isabella from the throne, for which, as minister of war, and the ruling spirit of the provisional government, he laboured for more than two years to find a suitable and willing candidate. The Spanish crown was at length definitely accepted by the Duke of Aosta, second son of the King of Italy, who landed at Carthagena on the 30th of December, 1870. On the evening of the same day, Marshal Prim died of wounds which he had received on the evening of the 28th, having been shot by six assassins as he was proceeding in his carriage along the Calle Alcalá, on his way from the Cortes to the Ministry of War. He lay in state in the Church of Atocha; and thither the youthful sovereign, Amadeus I., who had never seen him alive, proceeded immediately after his arrival at Madrid, January 2nd, 1871, to pay homage to the remains of the king-maker, with biographies of whom, a few months after his death, Madrid was said to be "inundated."

Prim was a man considerably below the middle height, with a small and slender, but apparently wiry and extremely active frame, a bright, lively, and intelligent countenance, with a very bad complexion, the visible result of a liver complaint from which he was known to suffer. His eyes were large and expressive, and his features tolerably regular, with no other marked peculiarity than the high cheek-bones. His manners were courteous and winning; he was fluent in discourse, and expressed himself forcibly, and not inelegantly, both in his native language and in French.

PROUDHON, PIERRE JOSEPH, a French socialist and political writer, was born on the 15th of July, 1809, at Besançon; and, as the eldest of the five children of a cooper in poor circumstances, was at first designed to follow the trade of his father. Being assisted, however, with the means of acquiring an elementary education, by friends who were attracted by his talents, he was able to commence his career as a compositor in a printing-office. Whilst employed in this printing-office, which he afterwards occupied on his own account, he recommended himself by his production of an 'Essai de Grammaire générale' to the Académie of Besançon, which awarded him (1838) the triennial prize of 1500 francs, founded by Madame Suard. He now repaired to Paris, where he spent some time, occupying himself in philosophical, philological, and theological studies, and contributing a number of articles to the 'Encyclopédie Catholique.' In 1839 he entered into competition for a prize offered by the Académie of Besançon on the keeping of the Lord's Day; but as his essay contained views on social matters which the Académie could not countenance, Proudhon himself undertook the responsibility of publishing it, with the title 'De la Célébration du Dimanche, considérée sous les Rapports de l'Hygiène publique, de la Morale, des Relations de Famille et de Cité,' 12mo, Besançon, 1840, fourth edition, 12mo, Paris, 1850. It was under the same conditions that he produced, in 1840, his famous memoir, entitled,

'Qu'est-ce que la Propriété? ou, Recherches sur le Principe du Droit et du Gouvernement,' 2 vols. 12mo, 1840—41, new editions, 1848, 1850, &c., in which he affirmed, as an answer to the interrogative title, the monstrous proposition that 'La Propriété, c'est le Vol,' a formula in which the various notions of the author may, for practical purposes, be regarded as epitomized. The impression produced by the treatise on Property was renewed from time to time by subsequent works, including a volume entitled 'De la Création de l'Ordre dans l'Humanité: ou, Principes d'Organisation politique,' 12mo, Paris, 1843, second edition, 1848; 'Système des Contradictions économiques: ou, Philosophie de la Misère,' 2 vols. 8vo. Paris, 1846, second edition, 2 vols. 12mo, 1849; and two *livraisons* of a work intended to be completed in about twenty, but the publication of which was interrupted by the Revolution of February, 1848, entitled 'Solution du Problème Social,' 8vo, Paris, 1848. A year of revolution would naturally favour the production of social and economical theories, and Proudhon published his 'Le Droit au Travail et le Droit de Propriété,' 12mo, Paris, 1848; 'Résumé de la Question Sociale, Banque d'Échange,' 12mo, Paris, 1848; 'Organisation du Crédit et de la Circulation, et Solution du Problème social, sans Impôt, sans Emprunt,' &c., 8vo, Paris, 1848, second edition, 1849; and a 'Proposition relative à l'Impôt sur le Revenu, présentée le 11 Juillet, 1848, par le Citoyen Proudhon; suivie du Discours qu'il a prononcé à l'Assemblée Nationale, le 31 Juillet, 1848,' 12mo, Paris, 1848, the latter of which was regarded as an odious attack on the principles of public morals. A little more than a month previous to the delivery of this speech he had been elected to the National Assembly as representative for the Department of the Seine; but his various eccentricities made his parliamentary life a failure, and he fell back for influence upon the pen. On the 1st of April, 1848, he had undertaken the editorship of a daily journal called 'Le Représentant du Peuple,' which was suspended in the following August; after which he edited 'La Peuple,' from the 23rd November, 1848, to April, 1849; 'Le Voix du Peuple,' from the 1st of October, 1849, to the 16th of May, 1850; and 'Le Peuple de 1850,' from the 15th of June to the 13th of October, 1850. All of these short-lived organs of obnoxious opinion were in turn condemned and suppressed; and his establishment of a "Banque du Peuple," in 1849, was not more successful. Upon his release, in 1852, from a lengthened term of imprisonment, to which he had been condemned three years before, he married, and retired into private life, devoting himself to the dissemination of his theories in books and pamphlets until his death on the 20th of January, 1865.

The most remarkable of his works, besides those already mentioned, are 'Les Confessions d'un Révolutionnaire, pour servir à l'Histoire de la Révolution de Février,' 12mo, Paris, 1849; 'La Révolution sociale, démontree par le Coup d'État du 2 Décembre,' first six editions, 1852; 'Manuel du Spéculateur à la Bourse,' 12mo, Paris, 1853, fifth edition, enlarged, 1857, German translation, 8vo, Zurich, 1857; 'De la Justice dans la Révolution, et dans l'Église. Nouveaux Principes de Philosophie pratique,' &c., 3 vols. 12mo, Paris, 1858, which was seized, and the author condemned to a fine and a short imprisonment; 'Théorie de l'Impôt,' 12mo, Paris, 1861; 'Les Majorats littéraires,' 12mo, Brussels, 1862; 'Les Démocrates assermentés et les Réfractaires,' 12mo, Paris, 1863; 'De la Capacité politique des Classes ouvrières,' 12mo, Paris; 'La Bible annotée. 1. Les Evangiles,' 12mo, Paris, 1865, which was seized as being hostile to religion, and the publishers condemned by a judgment. A number of Proudhon's works, published since his death, assume the form of instalments of a complete issue of his 'Œuvres Posthumes.'

PURKINJE, JAN EVANGELISTA, physiologist, was born at Libochowitz, near Leitmeritz, in Bohemia, December 17, 1787. He pursued his medical studies at Prague, and in 1819 he became the assistant professor of anatomy and physiology. He was professor of pathology and physiology at Breslau from 1823 to 1849, when he returned to Prague, where he resided till his death, July 28, 1860. Purkinje was one of the most eminent physiologists of his time. His most important researches were on embryology, physiological optics, and vibratile cilia, which he and Valentin discovered to be very general on the moist mucous

membrane of the vertebrate animals, the prevalent idea having been that they were almost restricted to the invertebrates. Purkinje also wrote somewhat extensively on the Slavic language and literature.

* PYAT, FELIX, a French journalist, dramatic author, and politician, was born on the 4th of October, 1810, at Vierzon, in the department of Cher; and, after having gone through his preliminary studies with distinction, proceeded to Paris, where he devoted himself to law, and was called to the bar in 1831. Although bred a royalist by his father, who was an advocate, Pyat, even whilst a law-student, had prominently signalled his republican sympathies; and he speedily vacated his hopes of professional advancement as a lawyer for the sake of the greater political liberty to be enjoyed as a journalist and dramatic writer. In 1833 he undertook the direction of the *feuilleton* department of the 'Siècle'; and from 1835 to 1841 shared in the editorial management of the 'National.' For an attack on M. Jules Janin, in 'La Reforme' of the 4th of January, 1844, he was sentenced to six months imprisonment; and after an interval, during which his most remarkable productions were of the dramatic order, he was brought into prominence by the events of February, 1848, as one of the *commissaires généraux* of his department of Cher, by which he was also returned as a representative to the Constituent Assembly, where he identified himself with the party known as the Mountain, and frequently spoke in advocacy of their opinions. After the abortive attempt at insurrection in Paris and elsewhere, and at establishing a Montagnard convention *en permanence* at the Conservatoire des Arts et Métiers in June, 1849, M. Félix Pyat, who had co-operated with Ledru Rollin in this movement, took refuge successively in Switzerland and Belgium, and during his exile produced his 'Loisirs d'un Proscrit,' 2 vols. 16mo, Paris, 1851. Afterwards he repaired to Jersey, which he was obliged to quit in 1855, in consequence of an insolent letter, signed by himself and M.M. Rouger and Jourdain, as the "Committee of the Revolutionary Commune," and addressed to Queen Victoria, who had just before returned the visit which the Emperor of the French had paid to England in the April of that year. Against his expulsion M. Victor Hugo and others protested in a declaration dated October 17th, 1855, an English translation of which, as well as of the offensive letter, was published as 'The Letter of the Jersey Exiles to the Queen of England. To which is added the Declaration of M. Victor Hugo and others,' 4to, London, 1855. In 1858, being then in England, he created some scandal and rendered himself obnoxious to legal proceedings before an English court—which resulted, however, in his dismissal—by the publication of a *brochure* which was charged with being an apology for the attempted assassination of the Emperor of the French on the 14th of January of that year; and the same *animus* betrayed him, about twelve years after, into the offer of a reward, to the extent of the whole of his "modest fortune" to any one who would summarily deliver France from the rule of Napoleon III. He spent several years in London, devoting himself to journalistic and other literature; and returned to France in virtue of the amnesty granted to political offenders in honour of the centenary of the birth of the Emperor Napoleon I. He soon transgressed so violently, however, in his writings in the 'Rappel' and elsewhere, that he again found it advisable to repair to London; from which he was summoned to Paris by the political movements which preceded the military disasters of France in the war against Prussia. On the 20th of September, 1870, he issued a wild manifesto in advocacy of a war of races, in which he proposed a coalition against the Teutonic race of the Latin peoples—French, Italians, and Spaniards. An ardent member of the Commune, M. Félix Pyat advocated in successive journals at once a war of extirpation against the enemies of France, and of opposition to the moderate Republic sanctioned by the Assembly at Versailles. During the time that the Commune held the fortunes of Paris in its hands, M. Pyat was a member of its government; but contrived to escape after the triumph of the Versailles troops, and is now, October, 1871, said, with considerable probability, to be in England.

PYNE, JAMES B., landscape-painter [E. C. vol. iv. col. 1022], died after a long and lingering illness on the 29th of July, 1870, in his 70th year.

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QUAIN, JONES, anatomist [E. C. vol. iv., col. 1034], died, January 31, 1865.

* QUATREFAGES DE BRÉAU, JEAN LOUIS ARMAND DE, zoologist, was born at Berthezene, near Valleraugue, in the department of Gard, February 10, 1810. From the college of Tournon he proceeded to Strasbourg, where he took the degree of doctor of mathematics in 1830, of medicine in 1832, and of natural science in 1840. His career as a naturalist, however, commenced long before he acquired his degrees, for very soon after he went to Strasbourg in 1827 he was appointed to assist the professor in physics and chemistry, and he also assisted Duvernoy in comparative anatomy, by preparing his diagrams. His first important papers were on the embryology of *Lymnaea*, *Planorbis*, and *Anodon*, written in 1834 and 1835. In 1835 he took a prominent share in the scientific congress held at Toulouse, and in 1838 was selected to lecture on zoology at the college of that town, but resigned in 1840, and went to Paris. Here he supported himself by writing for the 'Revue des Deux Mondes,' the proprietors of which paid the expenses incurred by him while travelling, in order to collect the materials for a series of papers entitled 'Souvenirs d'un Naturaliste,' afterwards collected into a book with the same title, forming 2 vols. 8vo, 1854, and which is one of his most popular productions. An English translation appeared in 1857. In 1850 he began a course of natural history at the Napoléon Lyceum, Paris, and in 1852 was appointed the professor; but in 1855 he resigned this post on becoming the professor of anthropology at the Museum of Natural History. He is a member of numerous societies both in France and other countries, and in August, 1863, was nominated an officer of the Legion of Honour. Although he takes high rank as a scientific observer, a large share of his writings has been devoted to the popularising of science. He has contributed largely to our knowledge of annelids, on which subject he is a leading authority, the diseases of silkworms, and embryology. Besides a great number of articles, and the works already mentioned, he has written, 'Unité de l'espèce humaine,' 12mo, Paris, 1861; 'Études sur les maladies actuelles des vers à soie,' 4to, 1859; 'Nouvelles recherches faites en 1859 sur les maladies actuelles du ver à soie,' 4to, 1860; 'Fertilité et culture de l'eau,' 8vo, 1862; 'Physiologie comparée. Métamorphoses de l'homme et des animaux,' 12mo, 1862; 'Histoire naturelle des annélés marins et d'eau douce,' 2 vols. 8vo, 1865; 'Les Polynésiens et leurs migrations,' 4to, 1866; 'Rapport sur les progrès de l'anthropologie,' 8vo, 1867; and 'Histoire naturelle générale,' 8vo, 1869.

QUATREMÈRE, ÉTIENNE MARC, a distinguished French Orientalist, was born on the 12th of July, 1782, at Paris, where his father, who was engaged in commercial pursuits, and who was elected to a municipal office in 1789, was guillotined in 1794. His earlier education was preparatory to the course of the École Polytechnique; but, being attracted to the study of the Oriental languages, he attended the Arabic lectures of Silvestre de Sacy, and also devoted himself, for the most part without assistance, to the acquisition of Hebrew, Chaldee, Coptic, Syriac, Persian, Turkish, and Armenian. In 1807 he was appointed to the charge of the MSS. at the Bibliothèque Impériale; and in the following year produced a work in demonstration of the fact that the modern Coptic is the direct descendant and representative of the language of the ancient Egyptians. This work, by which he at once became famous, and the discovery contained in which has been of great utility in the deciphering of hieroglyphic inscriptions, he entitled 'Recherches critiques et historiques sur la Langue et la Littérature de l'Égypte,' 8vo, Paris, 1808. This was speedily followed by two other works on the history and geography of Egypt, entitled respectively 'Mémoires géographiques et historiques sur l'Égypte et sur quelques Contrées voisines. Recueillis et extraits de Manuscrits Cophtes, Arabes, &c., de la Bibliothèque Royale,' 2 vols. 8vo, Paris, 1810; and 'Observations sur quelques Points de la Géographie de l'Égypte, pour servir de Supplément aux Mémoires historiques et géographiques sur l'Égypte,' &c., 8vo, Paris, 1812. In 1809 he became professor of Greek literature at the Académie de Rouen; was admitted, in 1815, to the membership of the Académie des Inscriptions et Belles-Lettres; in 1819 was ap-

pointed professor of the Hebrew, Chaldee, and Syriac languages and literature at the Collège de France, and in 1827 professor of Persian at the École des Langues orientales vivantes. He was made a member of the Société Asiatique in 1828; and in 1829 a member of the Legion of Honour. He died at Paris, on the 18th of September, 1857.

Many of the works of M. Quatremère, which are of great learning and value, and which the fulness of more recent investigation has not yet superseded, were at first furnished to periodical literature, and as contributions to the Transactions of learned societies. The principal of his substantive works, in addition to those which have been already mentioned, are, 'Chrestomathie en Turc oriental,' &c., 8vo, Paris, 1842; 'Histoire des Sultans mamlouchs de l'Égypte, écrite en arabe, par Takin Eddin Ahmed-Makrizi, traduite en français et accompagnée de Notes philologiques, historiques, géographiques,' &c., 2 vols. 4to, Paris, 1837—41; and 'Mélanges d'Histoire et de Philologie orientale,' 8vo, Paris, 1861.

QUEKETT, JOHN THOMAS, was born at Langport in Somersetshire in 1815. He was educated at Langport Grammar School, of which his father was head master. Being destined for the medical profession, he was apprenticed to his brother Edwin, then lecturer on botany at the London Hospital, where he pursued his medical studies. In June, 1840, he obtained by competition the appointment of student of human and comparative anatomy in the Museum of the College of Surgeons, where at the expiration of his term he became assistant curator. In this museum he had abundant opportunity of gratifying his taste for microscopical research; and here too he made that fine collection of specimens of the tissues of plants and animals and injections, which afterwards formed the illustrations of his lectures when in 1844 he was appointed by the council to explain the methods and resources of microscopical study. When Professor Owen retired in 1856, Quekett was appointed conservator of the Hunterian Museum and professor of histology. In 1848 he published his well-known treatise on the microscope. He was one of the founders of the Microscopical Society, and acted as its honorary secretary during nineteen years, until he became president in 1860. He contributed many papers to its Transactions. He also prepared the 'Descriptive and Illustrated Catalogue of the Histological Series contained in the Museum of the Royal College of Surgeons of England,' of which the first volume appeared in 1850, and the second in 1855. He also published, 1852—4, two volumes of 'Lectures on Histology.' He died 20th of August, 1861. He was a fellow of the Linnean Society, and was elected into the Royal Society the year before his death.

QUÉRARD, JOSEPH-MARIE, a celebrated French bibliographer, was born on the 25th of December, 1797, at Rennes, the capital of the department of Ile-et-Vilaine; and, after receiving a slender education in the school of his native town, was placed in 1807 in the book-trade, and thenceforward began to develop a liking for books which grew into a life-long passion. In 1812 he repaired to Paris; which he quitted in 1819 to enter upon a five years' connection with a firm in Vienna, where he devoted his spare time and energy to the preparation of a bibliographical work, for the publication of which he returned to Paris, and which bore the title of 'La France littéraire: ou, Dictionnaire bibliographique des Savants, Historiens, et Gens de Lettres de la France, ainsi que des Littérateurs étrangers qui ont écrit en français, plus particulièrement pendant les XVIII^e. et XIX^e. Siècles,' &c., 10 vols. 8vo, Paris, 1827—39. He resumed the main title of this work for two volumes which he published several years afterwards as 'La France littéraire. Corrections. Additions. Auteurs, pseudonymes et anonymes dévoilés,' with a second title of 'Les Écrivains pseudonymes et autres Mystificateurs de la Littérature française pendant les quatre derniers Siècles, restitués à leurs véritables Noms,' 2 vols. 8vo, Paris, 1854—64. A work which may be regarded as complementary to 'La France littéraire,' was entitled 'La Littérature française contemporaine au XIX^e. Siècle,' 6 vols. 8vo, Paris, 1842—57, in which, after conducting it to page 282 of the second volume, M. Quérard was adjudged by arbitration, June, 1844, to have forfeited his rights of authorship, on the ground, *inter alia*, that the length of the biographies would have enlarged the

work beyond the three volumes promised in the prospectus. Henceforth Quérard was constantly at feud with M. F. Daguin, the publisher, and MM. Charles Louandre, Maury, and Félix Bourquelot, the continuators of his work. The immediate result of the adverse judgment, however, was an imprisonment of some months' duration on account of pecuniary obligations which he had lost the power of meeting, and from which the annual allowance of a thousand francs which he received from the minister of public instruction, was insufficient to extricate him, even when supplemented by the subsidies of his "Mæcenas," M. Serge Poltoratzky of Moscow, the patron of the various publications in which he engaged up to the year 1854. It was in connection with this gentleman that he attempted to found a journal with the idea of elevating the literature of bibliography, of which only one number was published, entitled 'Le Bibliothécaire. Archives d'Histoire littéraire de Biographie, de Bibliologie, et de Bibliographie,' &c., 8vo, Paris, 1844. In the following year M. Quérard produced a small work entitled 'Les Auteurs déguisés de la Littérature française au XIX^e Siècle,' &c., 8vo, Paris, 1845, the merit or value of which was presently absorbed by a larger work, of which it was in fact a specimen, entitled 'Les Supercheries littéraires dévoilées. Galerie des Auteurs apocryphes, supposés, déguisés, plagiaires, et des Editeurs infidèles de la Littérature française pendant les quatre derniers Siècles,' &c., 5 vols. 8vo, Paris, 1845-60, a second edition of which, commenced by the author in the year of his death, was afterwards produced under the joint care of MM. G. Brunet and P. Jannet, in 8vo, Paris, 1869, &c. Having failed in 1850 to procure an adequate number of subscribers for a vast work of which he issued a prospectus, 'Encyclopédie du Bibliothécaire,' M. Quérard was more successful in founding a bibliographical journal, which he entitled, after his own name, 'Le Quérard. Archives d'Histoire littéraire de Biographie et de Bibliographie française. Complément périodique de la France littéraire,' 2 vols. 8vo, Paris, 1855-56, which, although handsomely subscribed by the literary public of Europe and America, collapsed before a conviction obtained against the editor in a suit instituted by M. de Saint-Albin. The publication of several works followed, as it had also preceded, this venture, many of which were extracts or adaptations from his larger productions, and the particular titles of which it would be of little interest to record; and he also produced brochures in bibliographical controversy, characterised by the bitterness of disappointment at the want of public patronage and of state recognition. He received the decoration of the Legion of Honour in August, 1865, and died at Paris on the 3rd of December following.

QUERCIA, JACOPO DELLA, one of the earliest of the great Italian sculptors of the Revival, was born near Siena about 1374. Till towards the close of his life, Della Quercia worked chiefly in Lucca, Bologna, and Florence. He studied more directly from nature than his predecessors, and was one of the first among modern sculptors who was really successful in rilievo. In Lucca he executed a mausoleum for the wife of Paolo Guinigi, in the church of San Martino, which was greatly admired, and of which some of the rilievi are now in the gallery of Florence; also a magnificent marble altar for the church of S. Friano. At Bologna his principal work was the great doorway of the church of S. Petronio. On this, which was in marble, and decorated with rilievi from the Old Testament, statues of the Virgin and Child, S. Petronio, &c., Della Quercia was engaged for twelve years, and it was thought to surpass any previous work of the kind. On its completion he went to Florence, where he carved the Assumption of the Virgin above the doorway of Sta. Maria del Fiore. Returning to his native place he was employed to erect the great fountain on the piazza of Siena, a magnificent work (now ruinous), in the centre of which he placed a figure of the Virgin surrounded by the Cardinal Virtues, and on the base rilievi of subjects from the Scriptures. Thenceforward the artist lived in honour in Siena, designated by his fellow-citizens *Jacopo Della Fonte*, in testimony of the great work with which he had adorned the city. He died at Siena in 1442.

QUESNOY, FRANÇOIS DU. [DUQUESNOY, FRANÇOIS, E. C. S. col. 492.]

* QUETELET, LAMBERT ADOLPHE JACQUES, was born at Ghent, 22nd February, 1796. He studied at the Lyceum of that place, to which, in 1814, he became professor of mathematics. He was the first who graduated as doctor of science

in the university then lately established at Ghent. In 1819 he was advanced to the chair of mathematics at the Athenæum of Brussels. Some time after this he was sent by King William I. to Paris for the purpose of studying astronomy, and on his return in 1826 he was appointed to superintend the construction of the Royal Observatory of Brussels, of which he became director in 1828, and he was appointed professor of astronomy in 1836.

Quetelet is known for the pleasant popular style in which he treats of a great variety of scientific subjects, such as astronomy, physics, meteorology, terrestrial magnetism, the theory of probabilities, various problems connected with social science, and biography; and he even indulges the taste of a cultivated mind in writing original poetry. He is member of various learned societies, including the Royal Society of London.

* QUINET, EDGAR, a French author, poet, and politician, was born at Bourg, the capital of the department of Ain, on the 17th of February, 1803. He completed his education at the University of Heidelberg; and after his return to his native country, published a translation, with an introduction, of Herder's work on the Philosophical History of Mankind, under the title of 'Idées sur la Philosophie de l'Histoire de l'Humanité,' 3 vols. 8vo, Paris, 1827. He was appointed a member of the scientific commission which proceeded to the Morea, in 1828; and whilst in Greece prepared the materials for his work entitled 'De la Grèce moderne et des Rapports avec l'Antiquité,' 8vo, Paris, 1830. He contributed largely to periodical literature, especially to the 'Revue des Deux Mondes,' to which he supplied numerous articles on questions of poetical, critical, philosophical, religious, and political interest, amongst the most remarkable of which was a poem afterwards issued separately with the title of 'Ahasverus,' 8vo, Paris, 1833, which promptly obtained a place in the Roman *index expurgatorius*. He was made a member of the Legion of Honour in 1838, and acted as professor of foreign literature to the faculty of letters at Lyons from 1839 to 1842; and in the latter year was appointed to the chair of the languages and literature of Southern Europe, then newly instituted in the Collège de France, and which he converted into a propaganda of revolutionary principles until his deprivation in 1846. He now made a tour in Spain, of which the literary result was a work in thirteen *livraisons*, entitled 'Mes Vacances en Espagne,' 8vo, Paris, 1846. Long identified with the extreme liberals, he was an active partisan of the Revolution of February, 1848, and actually assumed military command as colonel of the 11th Legion; and in the elections which followed, was returned as a member of the Assemblée Constituante, in which capacity, as well as the subsequent one of member of the Législative, he ranged himself along with the extreme Left. The freedom of his opinions and his audacity in expressing them, entailed upon him the penalty of exile from the French territory and from Algeria, by a decree dated January 9th, 1852. He retired successively to Brussels and to Vétoux, in Switzerland; and refused to avail himself of the amnesties within which he might have been comprehended. Returning to France, however, on the deposition of the Bonaparte dynasty, September, 1870, he was elected a member of the Assembly, where he has given proof of the retention of his former political and social opinions.

M. Quinet is the author of a multitude of dramatic, political, and other works, which have been variously published, periodically, separately, and collectively. Those which had been already issued in 1858 are sufficiently accounted for by naming his 'Œuvres Complètes, précédées de "Edgar Quinet. Sa Vie et son Œuvre," par Charles Louis Chassin,' 10 vols. 8vo and 12mo, Paris, 1857-58. His later works include a philosophical allegory entitled 'Merlin l'Enchanteur,' 2 vols. 8vo, Paris, 1860; 'Histoire de la Campagne de 1815,' 8vo, Paris, 1862; 'La Révolution,' 2 vols. 8vo, Paris, 1865, fifth edition, 1868, of which a defence followed with the title of 'Critique de la Révolution,' 8vo, Paris, 1867; and others.

QUOY, JEAN (RENÉ) CONSTANT, naturalist, was born November 10, 1790. He entered the navy in 1807, and, after filling various posts in the medical department, became inspector-general of the health of the navy in 1848; he retired from the service in 1858; and died at Rochefort, July, 1869. He is noticeable on account of the scientific work he performed in association with M. Gaimard, for details of which see GAIMARD, E. C. S. col. 564.

BIOGRAPHY.

SUPPLEMENT: PART III.

The abbreviations E.C. and E.C.S. signify the English Cyclopædia and the English Cyclopædia Supplement (Biographical Division).

The asterisk * prefixed to the name indicates that the subject of the memoir is still living.

1017

RACHEL, MADEMOISELLE.

RADCLIFFE, MRS. ANNE.

1018

R

RACHEL, MADEMOISELLE, a distinguished French tragédienne, whose true name was Elisabeth Rachel Félix, was born, according to different accounts, on the 28th of February or the 24th of March, and alternatively in the year 1820 or 1821, at the village of Münf, in the Swiss canton of Aarau, where her parents, who were Jew pedlars, halted for a while in the course of their wanderings. During a more lengthened stay at Lyons, where her mother established an old-clothes shop, she attended her elder sister Sarah, for the purpose of collecting the small sums which rewarded the vocal performances of the latter in the streets and cafés of the city. About 1830 the family removed to Paris, and the sisters resumed in the capital the street-life which they had commenced at Lyons; until at length they attracted the attention of M. Choron, one of the founders of the Conservatoire Royal de Musique, who received them into that institution. It was soon perceived, however, that the *forte* of the younger sister was less musical than declamatory; and she was transferred to the care of M. St. Aulaire, for the development of her dramatic abilities. The direction of her taste did not at first, and perhaps never did, completely coincide with that of her genius; and she made her début, as Mademoiselle Félix, on the 24th of April, 1837, at the Gymnase, in a two-act vaudeville, entitled 'La Vendéenne,' which had been written for her by M. Duport. She met with a substantial, though qualified, success; and after the withdrawal of 'La Vendéenne,' and after taking part in other pieces, which called forth the expression of great admiration from discerning criticism, she placed herself under the direction of M. Samson, who gave her the benefit of his instruction, and of his experience as a player and dramatic author. Her first appearance as Mademoiselle Rachel—a name by which she presently afterwards came to be acknowledged as the first tragédienne not only of France, but of the world—took place on the 12th of June, 1838, at the Théâtre Français, in the part of Camille in Corneille's 'Les Horaces.' The merit of the discovery of the surpassing dramatic genius of Rachel is generally referred to M. Jules Janin, who, in a *feuilleton* in the 'Journal des Débats' for September 10, 1838, laid the foundation of her subsequent fortune and triumph. Two or three years after, Rachel paid a visit to London, where she played at the Italian Opera House; and for a second time repaired to that city in July, 1846, for a short series of nights at the St. James's Theatre, where she was enthusiastically welcomed.

During the early stages of the Revolution of February, 1848, Rachel, who was an ardent republican, signalled her political creed by singing the Marseillaise at the close of the performance of Ponsard's tragedy of 'Lucrèce.' There was a terrible sublimity about her rendering of the Hymn; and, as she knelt and pressed the tricolour to her heart, the entire theatre broke out into a long,

loud, and uncontrollable burst of transport. Her manner was grand, but rather with the grandeur of hatred and revenge than of patriotism; yet it produced the effect desired by the artist herself, in the way of political propagandism, and also by the members of the provisional government, many of whom were present at the performance.

Mademoiselle Rachel's engagement at the Théâtre Français allowed a six months' annual congé, which she turned to account by frequent foreign tours; and the monetary result of her professional activity was the realisation of a large income, out of which she generously provided for her father, and a splendid fortune, which at her death fell to be divided among the different members of her family. In 1853 she undertook a very lucrative engagement at St. Petersburg; and in 1855 visited North America and the West India Islands, especially Cuba. She had always been of a fragile and delicate frame of body, but it was whilst engaged in this trans-Atlantic expedition that she first manifested grave symptoms of a pulmonary disease, which she sought to surmount by returning home, and by paying a subsequent visit to Egypt, in the course of which she made serious investigations into the evidences of Christianity. This circumstance gave rise to an unfounded rumour that she had embraced Catholicism, before her death at Cannet, near Toulon, on the 3rd of January, 1858.

Several critical estimates of her talent, and several biographical memoirs of her career, were published both before and after her death. Hers was the consummate art of simplicity and naturalness in the representation of passion, vengeance, and indignation; and her most wonderful results were attained by the slightest of means—a tone, gesture, or look, which, however, it was objected were so exactly reproduced in time, place, and manner, that frequent representations of the same piece caused a feeling of monotony and want of fresh interest on the part of the audience. Great as were the powers of Mademoiselle Rachel, the impartial critic could find grave defects in the tragédienne, as the exacting moralist could discover grave imperfections in her personal character. Her greatest success was achieved in the delineation of the sterner and darker passions; the perfect power over the softer, sweeter, and purer emotions was beyond one whose mind was wanting in the requisites of goodness and repose.

RADCLIFFE, MRS. ANNE, a celebrated romance writer, was born in London, July 9, 1764, the daughter of a respectable tradesman named Ward. In 1787 she married Mr. William Radcliffe, who afterwards became proprietor of the 'English Chronicle;' and about two years later she began publishing those exciting romances, which, for a time, so strongly riveted the attention of the reading public. They appeared in the following order: 'The Castles of Athlin and Dunbayne, a Highland

Story,' London, 12mo, 1789; 'A Sicilian Romance,' 2 vols. 12mo, 1790; 'The Romance of the Forest,' 3 vols. 12mo, 1791, and 'The Mysteries of Udolpho,' 4 vols. 12mo, 1794, the two most characteristic and popular of her stories; 'The Italian; or, the Confessional of the Black Penitents,' 3 vols. 12mo, 1797. It has seldom fallen to the lot of an English female novelist to have her writings, comprised within a period of eight years, commented on by so many distinguished men. Warton, Fox, Sheridan, Scott, Byron, Hazlitt, Prescott, Allan Cunningham, Leigh Hunt, and Talfourd, have criticised the Radcliffe romances either as a whole or separately. There has been a general admission of the authoress's power in dealing with the vaguely terrible, the picturesque, the exciting. In the words of a contemporary authoress, Mrs. Barbauld, "she seems to scorn to move those passions which form the interest of common novels; she alarms the soul with terror, agitates it with suspense, prolonged and wrought up to the most intense feeling by mysterious hints, and obscure intimations of unseen danger." The romances are now, however, seldom read. Mrs. Radcliffe travelled on the continent in 1794, and published the result in 'A Journey made, in 1794, through Holland, &c., with Observations during a Tour to the Lakes,' 4to, 1795, a work that exhibited as much imagination as any of her romances. She lived a quiet, domestic life, and died on the 7th of February, 1823. After her decease, appeared, in 1826, in four volumes, a patchwork of minor productions, comprising (1), 'Gaston de Blondville; or, the Court of Henri III. resting in Ardennes;' (2), 'St. Alban's Abbey,' a metrical tale; and (3), 'Poetical Pieces:' to these were prefixed a 'Life of the Authoress,' by Sir T. N. Talfourd. This work (afterwards subdivided and published separately) attracted but little public attention.

* RADDE, GUSTAV FERDINAND RICHARD, a well-known explorer of the geography and natural history of Eastern Siberia and the Caucasus, was born at Danzig, November 27, 1831. His travels commenced in 1852, when the Entomological Society of Stettin commissioned him to make an exploration of the Crimea, and the country along the shores of the Black Sea, for natural-history purposes. An account of this journey was given in the 'Bulletins' of the Imperial Society of Naturalists at Moscow, for 1854 and 1855. In 1855 the Imperial Russian Geographical Society of St. Petersburg organised and equipped, at its own cost, an expedition to explore Eastern Siberia. Herr Radde was one of the principal members, and was charged with the biological department, special instructions having been given to him by Professor Brandt. Radde reached Irkutsk, May 30, 1855, and the following summer was spent in preparations for a long journey, and in exploring Lake Baikal. The winter was passed at Irkutsk. On March 1, 1856, he and others left Irkutsk, crossed the Appel range, proceeded along the frontiers of Mongolia, and returned to Irkutsk on January 8, 1857. In the following April he went down the Amur to its junction with the Ussuri, and wintered at the foot of the Bureja mountains, in a hut built for the purpose; the object being to have the advantage of examining the district as soon as spring commenced. This event occurred at the end of March, and the rest of the year was spent in examining the Bureja mountains. Irkutsk was again reached, January 17, 1859. He then visited the high mountains to the west of Lake Baikal, ascended to the summit of Munku Sardik, and made observations on Kossogol, one of the largest lakes in Mongolia. His expedition ended by his return to St. Petersburg, in January, 1860. A full account of his researches appeared in the 'Reisen im Süden von Ost Sibirien in den Jahren 1855—59.' Bd. I. 'Die Säugethier-Fauna,' 4to, St. Petersburg, 1862; Bd. II. 'Die Festlands-Ornis des südöstlichen Sibirien,' 1863. The other departments have been treated by Schrenck and others. In the volume on mammalia, particulars are given respecting 94 species; in that on birds, 368 species are noticed, whereas the number previously known from the same area, comprising the larger portion of the basin of the Amur, was only 190. These volumes are especially valuable on account of the full details they give of the geographical distribution of the fauna, both from a general and a specific point of view. Radde also collected copious notes respecting the plants, insects, and fishes. Since 1863 he has lived at Tiflis, as keeper of the natural history museum at that place. He has made several excursions into the Caucasus range, and has published the results in Petermann's 'Mittheilungen,' and in 'Berichte über die biologisch-geographischen Untersuchungen in der Kaukasus-länder,' 4to, Tiflis, 1866.

RADETSKY DE RADETZ, FIELD-MARSHAL COUNT JOSEPH. [E. C. vol. v. col. 6.] Count Radetzky enjoyed but a

short time his hard-earned retirement. He died, after a brief illness, at his residence, the Villa Reale, Milan, January 5, 1858, in his 92nd year.

RAFN, CARL CHRISTIAN. [E. C. vol. v. col. 12.] This great Icelandic scholar died at Copenhagen, on the 20th of October, 1864, aged 70.

RAIBOLINI, FRANCESCO. [FRANCIA, FRANCESCO, E. C. vol. ii. col. 988.]

* RAMMELSBERG, KARL FRIEDRICH, mineralogist and chemist, was born at Berlin, April 1, 1813, and was educated at the same place from 1833 to 1837, his most influential teachers being Professors Rose and Weiss. In 1837 he took his degree of doctor. In 1845 he became professor of mineralogy and chemistry in the University of Berlin. He founded an analytical laboratory, which has been attended by many who have since followed successful careers, including Englishmen, Americans, and others not of German nationality. His most important labours have been in the chemistry of minerals, on which subject he has contributed a large number of papers to Poggendorff's 'Annalen der Physik und Chemie,' and numerous independent works. His greatest production is the 'Handbuch der Mineralchemie,' 8vo, Leipzig, 1860, which is the best work of its kind. It is the last edition of his 'Handwörterbuch des chemischen Theils der Mineralogie,' 8vo, Berlin, 1841, to which supplements were added in 1843, 1845, 1847, 1849, and 1853; when it was remodelled. His other works comprise an edition of the 'Neues chemisches Mineralsystem,' by Berzelius, 8vo, Stuttgart, 1847; 'Anfangsgründe der quantitativen mineralogisch und metallurgisch analytischen Chemie durch Beispiele erläutert,' 8vo, Berlin, 1845; 'Handbuch der Krystallophischen Chemie,' 8vo, Berlin, 1845; 'Lehrbuch der chemischen Metallurgie,' 8vo, 1850; 'Lehrbuch der Krystallkunde,' 8vo, 1852; and 'Grundriss der anorganischen Chemie gemäss den neueren Ansichten,' 8vo, Berlin, 1867.

* RAMSAY, ANDREW CROMBIE, geologist, was born in 1814, and educated at Glasgow. In 1841 he became connected with the Geological Survey of Great Britain, of which he was soon afterwards appointed the local director; and a few years ago, when Mr. A. Geikie was nominated the special director, he retained the post of director of the English branch of the Survey. In 1851 he accepted the office of professor of geology at the Royal School of Mines in Jermyn Street. He has received several honorary distinctions for his researches. In 1862 and 1863 he was president of the Geological Society; and in 1866 and 1868 he presided over the geological section of the British Association. In his official capacity he has taken an active share in surveying the geology of Great Britain, and in the preparation of the maps and memoirs resulting from that survey. His most important work has been effected in North Wales, of which he has written an elaborate account in his 'Geology of North Wales,' forming vol. iii. of the 'Geological Survey Memoirs,' 1866. As superintendent he has had a considerable share in the surveying of various other parts of England and Scotland. He is the author of 'The Physical Geology and Geography of Great Britain,' 8vo, 1863; second edition, 1864, a small volume containing his lectures to working men; and he is a joint author of 'A Descriptive Catalogue of the Rock Specimens in the Museum of Practical Geology,' 8vo, 1859. The arrangement of these specimens was to a large extent his work. The catalogue has passed through several editions. Besides some other books, he has written numerous articles and scientific papers. The subjects which have been most advanced by him are the formation of lake basins, the occurrence of the old glaciers of this country, denudation, and the time represented by the principal known gaps in the succession of strata. We believe he was the first to show that the uniform gradients represented by the tops of the highest hills of many mountainous areas are approximately planes of ancient marine denudation. He is one of the principal advocates of the subaerial theory of denudation, a theory which mainly attributes the orographic features of the land to other denuding agents than the sea.

* RANKINE, PROFESSOR WILLIAM JOHN MAC-QUORN, F.R.S., civil and mechanical engineer, was born in 1805, and was educated at the University of Edinburgh. He adopted the profession of engineering, receiving part of his instruction from Sir John McNeill. As professor of mechanics and civil engineering at the University of Glasgow, member (and some time president) of the Institution of Engineers of Scotland, in several different years president of the mechanical section of the British Association for the Advancement of Science, and consulting en-

gineer to the Highland Agricultural Society, Professor Rankine has made valuable contributions to the theory and practice of engineering, especially in connection with mechanism. His papers in scientific journals are numerous, relating to thermodynamics; the science of energetics; the elasticity of solids; the strength of iron; the stability of earth and masonry; the motion of waves; the construction of sea defences; the resistance on railways; the theory of the steam engine; &c. With Mr. J. R. Napier he has made important researches in steam navigation, especially relating to the resistance of ships.

Among his separately published works are the following:—*'Mechanical Laws, Formulæ, and Tables,'* 4to, Glasgow, 1850; *'Letters to the Provost of Glasgow, on the means of improving the water-supply of that city,'* 8vo, 1852, in which he proposed to obtain the supply from Loch Katrine, which has since been practically and successfully achieved; *'Introductory Lecture on the Harmony of Theory and Practice in Mechanics,'* 8vo, Glasgow, 1856; *'Manual of Machinery and Millwork,'* 8vo, London and Glasgow, 1859; *'Manual of Civil Engineering,'* 8vo, ibid., 1862, fifth edition, 1867; *'The Mechanical Properties of Steam,'* 8vo, Edinburgh, 1865; *'Useful Rules and Tables relating to Mensuration, Engineering, Structures, and Machinery,'* 8vo, London and Glasgow, 1866, second edition, 1867; *'Applied Mechanics,'* 4to, Edinburgh, 1866; *'Cyclopædia of Machine and Hand Tools,'* folio, London and Glasgow, 1868-69. He has also edited, and contributed portions of, *'Shipbuilding, Theoretical and Practical,'* folio, ibid., 1866. Professor Rankine, who is a fellow of the Royal Society, and received the degree of LL.D. from the University of Dublin, was awarded the Keith Medal in 1852 by the Royal Society of Edinburgh. In 1859 he raised the Glasgow University Corps of Volunteer Rifles, of which he was for some years captain and major.

RANSOME, ROBERT, member of a family connected for nearly a century with mechanical engineering at Ipswich, was born in that town on the 27th of February, 1795. His father's iron foundry was gradually enlarged by the addition of agricultural instrument making to the other operations carried on. Robert Ransome learned all the details of mechanical engineering under his father, his elder brother, and Mr. (afterwards Sir William) Cubitt, who was at that period engaged at the Ipswich works. He was admitted into partnership in 1818, and during twenty years was principally instrumental in developing a very extensive manufacture of agricultural implements. About the year 1838 Mr. Charles May joined the firm, which thereafter entered largely into railway work—especially in manufacturing Mr. James Ransome's patent railway chairs, and Mr. May's patent compressed wood fastenings. The iron-work for some large observatory telescopes, requiring great nicety of construction, was executed by the firm. Among examples of this kind were the dome for Dr. Lee's observatory at Hartwell, another for Mr. Barclay's observatory at Bury Hill, the equatorial mounting for Ross's large object-glass (exhibited in Hyde Park in 1851), and the fine transit circle and altazimuth at Greenwich, planned by the astronomer royal. Before Mr. Ransome withdrew from active participation in the business, the establishment at Ipswich had so extended as to employ more than a thousand workmen. He was struck with an apopleptic fit while on the Rhine in 1864, and died November 6th of that year.

RAPER, LIEUTENANT HENRY, R.N., the eldest son of Admiral Raper (who fought under Lord Howe in 1794), was born in 1799, and was educated at the Charterhouse. He made a cruise with his father in 1811 in the *'Mars.'* In the following year he entered as a student at the Royal Naval College, Portsmouth; where he obtained the silver medal for mathematics in 1814. He entered the Royal Navy in 1815 as a midshipman; and during the course of nine years served in succession, in various parts of the world, in the *'Nymph,'* *'Alceste,'* *'Tyne,'* *'Seringapatam,'* *'Adventurer,'* *'Euryalus,'* and *'Despatch.'* In the course of this service he was shipwrecked in the China Seas in 1817; and was entrusted by Captain (afterwards Admiral) W. H. Smyth with the management of the chronometric department, in a survey of the Mediterranean in 1822. In 1829 he was elected fellow of the Royal Astronomical Society, of which he was in later years secretary. His first publication appeared in 1831, *'Rules for finding Distances and Heights at Sea.'* In 1832 the Admiralty appointed him a member of the committee for determining a new plan for measuring the tonnage of ships. His most important work was *'The Practice of Navigation and Nautical Astronomy,'* 1840, for the Table of Maritime Positions in which work Lieutenant Raper was

awarded the gold medal of the Royal Geographical Society in 1841; the book itself was officially adopted, in 1843, for the ships in the Royal Navy and in the East India Company's Service; a tenth edition was published in 1870. In 1849 appeared *'Sailing Directions for the West Coast of Africa,'* an Italian translation of the third edition of this work, by F. Leva, was published at Trieste in 1866. In 1858 Lieutenant Raper contributed to the Royal Astronomical Society a paper on *'Lunar Distances.'* He died January 6th, 1859.

* RATTAZZI, URBANO, an Italian lawyer and statesman, was born at Alessandria on the 29th of June, 1808; and, having chosen his father's profession of law, commenced practice at the bar of Turin, from which he removed, in 1838, to the then newly constituted Court of Appeal at Casale. He was returned as deputy for Alessandria in the parliament which assembled at Turin on the 6th of May, 1848; and became a member of the eight days' ministry appointed by King Carlo Alberto after his defeat at Custoza, in July of the same year. An ardent liberal, Rattazzi went into opposition to the administration which succeeded; and when his party triumphed, a few months afterwards, he assumed the Ministry of the Interior, and subsequently that of Grace and Justice, in the cabinet formed by Gioberti on the 15th of December. Deprived of power in consequence of the abdication of Carlo Alberto in March, 1849, Rattazzi at first identified himself with the democratic opposition; but gradually assimilating his views to those of the more moderate reformers, he was appointed, in 1852, first to the vice-presidency and afterwards to the presidency of the Chamber of Deputies. In 1854 he accepted the Ministry of Justice under Count Cavour, to whom he had formerly been opposed, but of whose plans and policy he became for the future so sympathetic and cordial an exponent, that it is said that Cavour in his last moments, June 6th, 1861, spoke emphatically of Rattazzi as his only possible successor in the conduct of the administration. But this declaration was not immediately acted upon, and the premiership of Ricasoli intervened before the promotion of Rattazzi to be the head of the Government, in March, 1862. His policy may be epitomized as an attempt after the peaceful development of Italian liberty and unity; but failed to ensure the confidence of parliament, and he resigned office in December of the same year. After an interval of some years, during which several short-lived administrations had been initiated and broken up, Rattazzi again succeeded Ricasoli as premier in April, 1867, but held office only until the following October.

In a letter written by Count Cavour to one of his friends, Rattazzi is described as being the most conservative member of his cabinet, the most decided partisan of the principle of authority, and one of the most sincere and devoted adherents of the king, the monarchy, and the cause of order. His career has given rise to several works of greater or less importance, which, so far as they are biographical or political, may be represented by a Life forming the 27th number of *'I Contemporanei Italiani,'* 18mo, Turin, 1861, &c.; a sketch, by Hippolyte Castille, occupying the 30th number of the 2nd series of *'Portraits Historiques au dix-neuvième Siècle,'* 18mo, Paris, 1862; *'Vita di Urbano Rattazzi,'* 8vo, Naples, 1867, by Cesare Perocco; and Alphonse de Calonne's *'M. Rattazzi et la Crise Italienne,'* 8vo, Paris, 1862.

RAUCH, CHRISTIAN. [E. C. vol. v. col. 34.] This distinguished sculptor died at Dresden on the 3rd of December, 1857, within a month of the completion of his 80th year.

* RAUMER, FRIEDRICH LUDWIG GEORG VON, a German historian, was born at Wörlitz, in Anhalt, on the 14th of May, 1781; and, after receiving his earlier education at the Joachimsthal at Berlin, repaired successively to the Universities of Halle and Göttingen for the prosecution of his legal and financial studies. He commenced his official life in 1801, passing through various stages of promotion until, in 1810, he was appointed a counsellor in the bureau of the state-chancellor Hardenberg. The reputation acquired by the publication of several works of research and erudition procured for him, in 1811, a professorship in the University of Breslau; from which, after having gained experience in travels undertaken, partly at the expense of the government, in Germany, Switzerland, and Italy, he migrated in 1819 to the University of Berlin, on his appointment to the chair of political economy and history in that institution. For a series of years he combined various offices of a scientific, municipal, parliamentary, or diplomatic character, with his professorial duties, and with intervals of travel in England, France, and America; after which he retired from active life in 1853, with the title of professor-emeritus.

Amongst the many works of Professor von Raumer, besides those devoted to the department of philology, may be mentioned an *Autumn Journey to Venice*, 'Die Herbstreise nach Venedig,' 2 parts, 8vo, Berlin, 1816; *Lectures on Ancient History*, 'Vorlesungen über die alte Geschichte,' 2 parts, 8vo, Leipzig, 1821, third edition, 1861; *History of the House of Hohenstaufen*, &c., 'Geschichte der Hohenstaufen und ihrer Zeit,' 6 vols. 8vo, Leipzig, 1823—25, fourth edition, 1857—58; *On the Historical Development of the Ideas of Law*, &c., 'Ueber die geschichtliche Entwicklung der Begriffe von Recht, Staat und Politik,' 8vo, Leipzig, 1826, third edition, 1861; 'England im Jahre 1835,' 2 parts, 12mo, Leipzig, 1836, second edition, with a third part, or volume, 'England im Jahre 1841,' 3 parts, 12mo, Leipzig, 1842; *History of Europe*, &c., 'Geschichte Europas seit dem Ende des funfzehnten Jahrhunderts,' 6 vols, 8vo, Leipzig, 1832—38, and other editions; *Contributions towards a Knowledge of Italy*, 'Italien. Beiträge zur Kenntniss dieses Landes,' 2 parts, 12mo, Leipzig, 1840; 'Die vereinigten Staaten von Nordamerika,' 2 parts, 12mo, Leipzig, 1845, English translation, 'America and the American People,' 8vo, New York, 1846, translated by W. W. Turner; *Miscellaneous Writings*, 'Vermischte Schriften,' 8vo, Leipzig, first three volumes, 1852—54; *Politics of the Day*, 'Zur Politik des Tages,' 8vo, Leipzig, first two editions, 1859; *Letters on the Social Relations of Mankind*, 'Historisch-politische Briefe über die geselligen Verhältnisse der Menschen,' 8vo, Leipzig, 1860; *History of Literature*, 'Handbuch zur Geschichte der Litteratur,' 2 vols. 8vo, Leipzig, 1864; and a *Discourse on the Past and Present*, 'Sonst und jetzt. Vortrag,' &c., 8vo, Berlin, 1867.

RAUMER, KARL GEORG VON, geologist and geographer, younger brother of the historian, was born at Wörlitz, April 9, 1783. In 1797 he went to the Joachimsthal Gymnasium at Berlin, and from thence in succession, 1801—8, to the Universities of Göttingen, Halle, and Freiberg. At Göttingen he attended Blumenbach's lectures; but it was at Halle that his bent towards geology was first developed; while Werner's lectures at Freiberg induced him to make a special study of mineralogy. The battle of Jena, which was followed by the downfall of the Prussian monarchy, seems to have been a turning point in his life. It was to a certain extent the cause of his undertaking geological explorations in the mountainous districts on the right bank of the Rhine and in the neighbourhood of Paris; as also of the resolve which he made to benefit his country by improving the education. Having been much struck with the work written by Pestalozzi, he enlisted himself as a teacher in his establishment, but his stay was short, as he soon found that Pestalozzi's teaching had no method in it. In the leisure which followed he was induced to give an account of his explorations, which appeared under the title of 'Geognostische Fragmente,' 8vo, Nürnberg, 1811, and led to his appointment as professor of mineralogy and councillor of the mining establishment at Breslau. The object of the work was to show that Werner's succession of rocks, which was based upon their mode of occurrence in the Erzgebirge, was not of general application. This led Werner and his school to quarrel with him, but the estrangement was only temporary. In 1813 the King of Prussia appealed to his subjects to arm against France, to which Raumer willingly responded. For his services at Leipzig and other places he received the Order of the Iron Cross in 1814. He then returned to his post at Breslau, but, owing to his being suspected of liberal tendencies, he was made to resign it soon after. In 1819 he received the professorship at Halle, which he retained till 1823, when he was obliged to give it up from much the same cause as led to his leaving Breslau. He then took the management of a private school at Nürnberg, but this being broken up in 1826 he was again out of employment. In 1827 he was appointed to the chair of natural history and mineralogy at Erlangen, which he filled until his death, June 2, 1865. He wrote numerous works, some purely educational and others scientific. The most important are his 'Lehrbuch der allgemeinen Geographie,' third edition, 8vo, Leipzig, 1848, which was highly valued by Humboldt; 'Palaestina,' 8vo, 1835, third edition, 1850; 'Das Gebirge Niederschlesiens,' 8vo, Berlin, 1819, which was his principal geological work; and 'Geschichte der Paedagogik,' 4 vols. 8vo, Stuttgart, 1846—1857, the work with which his name is usually associated.

RAVENET, SIMON FRANÇOIS, a celebrated engraver, was born at Paris about 1706, according to some, but Milizia says in 1710, Zani in 1721. He studied with J. P. Le Bas; practised his art in Paris till 1750; and then came to England in order to assist Hogarth in engraving the series of plates of *Marriage-a-la*

Mode. He was afterwards much employed by Alderman Boydell, and engraved many portraits of eminent men of the day, and some plates after the great masters. Ravenet drew well, and engraved in a neat firm manner. He was elected associate-engraver of the Royal Academy in 1770, and died in London in April, 1774. His son, SIMON FRANCIS RAVENET, born in London in 1755, studied engraving under his father, and painting in Paris under T. Boucher. He then went to Parma, where he undertook to engrave Correggio's paintings in the cathedral and churches of that city. These he completed in a slight manner, about 1785, and afterwards some prints from Rubens, N. Poussin, &c. He died about 1813.

RAVENNA, MARCO DENTE DA, Italian engraver, was born at Ravenna in 1496. He was a pupil of Marcantonio Raimondi, and imitated the manner of his master, but was less refined in style. He was, however, an able engraver, spirited in execution, and painter-like in feeling, and his prints are much esteemed. The best are those after Raffaele and Giulio Romano. His Raffaele engravings include the Transfiguration, the Bible subjects, and a series of thirteen from the history of Christ. Another noted print by him is the group of the Laocoon. Marco Dente da Ravenna was killed at the sack of Rome in 1527.

* READE, CHARLES, D.C.L., a novelist and dramatic author, youngest son of the late Charles Reade, Esq., of Ipsden House, Oxfordshire, was born in the year 1814, and was educated at Magdalen Hall, Oxford, where he graduated as B.A. in 1836. In 1842 he was elected to one of the Vinerian fellowships, and on the 26th of January, 1843, was called to the bar by the Society of Lincoln's Inn. He became a frequent contributor to periodical literature; and produced various dramatic pieces, including a five-act drama in prose, entitled 'Gold,' 12mo, London, 1850, &c.; and, in association with Mr. Tom Taylor, a drama entitled 'Two Loves and a Life,' 8vo, London, 1854; 'The King's Rivals,' 8vo, London, 1854; and a comedy entitled 'Masks and Faces,' 8vo, London, 1854, which, before its literary publication, had served as the basis of a story called 'Peg Woffington,' 12mo, London, 1853, new edition, 8vo, London, 1868, American edition, 16mo, Boston, 1855, &c., by which Mr. Reade at once achieved popularity as a novelist. Works of fiction were now produced in rapid succession: 'Christie Johnstone. A Novel,' 12mo, London, 1853; 'It is Never too Late to Mend. A matter-of-fact Romance,' 3 vols. 8vo, London, 1856, which was dramatised in four acts, by C. Hazlewood, as 'Never too Late to Mend,' 12mo, London, 1860; 'White Lies. A Story,' 3 vols. 12mo, London, 1857, new edition, 'Double Marriage: or, White Lies,' 8vo, London, 1868; 'The Course of True Love Never did Run Smooth,' 8vo, London, 1857; 'Love me Little, Love me Long,' 2 vols. 8vo, London, 1859; a "tale of the Middle Ages," reprinted from 'Once a Week,' entitled 'The Cloister and the Hearth,' 4 vols. 8vo, London, a work, the chief characters of which are Gerard and Margaret, the parents of Erasmus; 'Hard Cash. A matter-of-fact Romance,' 3 vols. 8vo.; 'Griffith Gaunt: or, Jealousy,' 3 vols. 8vo, London, 1866. This work was censured for indecency and immorality in the New York 'Round Table,' from the editor of which, in an action brought by Mr. Reade, in March, 1866, the latter was successful in recovering three cents damages. 'Griffith Gaunt' was dramatised by Augustine Daly, of New York, and successfully represented in that city in November, 1866; it was also travestied in a production entitled 'Liffith Lank,' 16mo, New York, first seven editions, 1867. A "Household Edition" of Mr. Reade's novels was published in 8 vols. 16mo, Boston, U. S., 1869; and his later productions include 'Foul Play. A Novel,' 3 vols. 8vo, London, 1868, new edition, 1869, of which Mr. Dion Boucicault is joint author; 'Put Yourself in His Place,' 3 vols. 8vo, London, 1870; and 'A Terrible Temptation,' 3 vols. 8vo, London, 1871, which was reprobated by the 'Times,' of August 24th, for the prominence which it gave to the doings of a certain Rhoda Somerset, whose character and profession ought not to have been even suggested before the eyes of youthful virtue, and to which Mr. Reade replied, in a defensive letter which appeared in the 'Times' of August 31st. The greater number of Mr. Reade's novels have passed into second editions; most of them have been reprinted in America, and several have been reproduced in Germany, in the 'Tauchnitz Collection of British Authors.' A large proportion, as will have been observed, have had their first publication in the pages of magazines, and their tendency, presumably in the interests of benevolence and morality, has been to make the reader acquainted with what is abnormal, criminal, or disreputable in either sex, as shown in the discussion of strikes, rattening, theft,

prisons, lunatic asylums, and the proceedings of "Anonymas." Mr. Reade writes habitually of disease; he claims to do so with the pen of a physician.

REBOUL, JEAN, a French poet, son of a locksmith at Nîmes, the capital of the department of Gard, was born in that town on the 23rd of January, 1798; and, having received such education as the humble fortunes of his parents admitted, became at thirteen years old a copyist in a lawyer's office. The death of his father, about two years after, left the care of four children upon his mother, and, in order more effectually to assist her, he chose to follow the business of a baker. He married early, and having been twice left a widower, solaced himself by a close application to study, which in some measure atoned for the slenderness of his earlier education. In 1820 he became a member of a society, or club, at whose meetings he first developed the poetical gifts by which he acquired a reputation. After several tentatives of a gay, light, and anacreontic character, he produced a cantata on the Spanish war, at the request of his friends; and soon afterwards wrote a more solemn piece entitled 'Hymne à la Vierge.' In 1828 he contributed to 'La Quotidienne' his charming and pathetic poem entitled 'L'Ange et l'Enfant,' dedicated to a lady who had just lost her infant. This elegy achieved an immense popularity, and attracted to its author the interest and patronage of Lamartine, who addressed to him one of his 'Harmonies,' entitled 'Le Génie dans l'Obscurité.' In 1835 he received a visit from Alexandre Dumas, by whose advice and encouragement, jointly with those of Lamartine, to whom he dedicated the volume, he published his 'Poésies. Précédées d'une Préface par Alexandre Dumas, et une Lettre à l'Éditeur par Lamartine,' 8vo, Paris, 1836, of which five editions were exhausted in as many years. In April, 1839, he visited Paris for the purpose of publishing his poem entitled 'Le Dernier Jour. Poème en dix Chants,' 8vo, Paris, 1839, 18mo, 1841, 1842, &c., and was received with enthusiastic hospitality in the capital; to which he again repaired in 1848 to take his seat as representative of the department of Gard in the Constituent Assembly, where his votes were given with the legitimist minority. He contributed verses to various periodicals, and produced three tragedies, one of which, 'Le Martyre de Vivian. Mystère en trois Actes et en Vers,' 12mo, Paris, 1850, was brought out at the Odéon. He died at Nîmes, May 29, 1864.

The works of Jean Reboul, besides those already mentioned, include 'Poésies Nouvelles,' 12mo, Paris, 1846; 'Les Traditionnelles. Nouvelles Poésies,' 12mo, Paris and Nîmes, 1857; and 'Dernières Poésies. Précédées d'une Notice biographique par l'Abbé de Cabrières,' 12mo, Avignon, 1865. Several letters of Reboul are preserved in 'Souvenirs, Études, Mélanges littéraires, par le Baron Gaston de Flotte. Précédées de la Correspondance de Jean Reboul avec l'Auteur,' 8vo, Paris and Nîmes, 1865; and M. R. Valladier has produced a small work in illustration of his career, entitled 'Jean Reboul. Étude biographique et littéraire,' 8vo, Toulouse, 1864.

REDSCHID PASHA [E. C. vol. v. col. 43] lived but a few months after the publication of the above memoir; he died at Constantinople on the 6th of January, 1858.

REED, ANDREW, D.D., was born in London, November 27th, 1787. He studied for the ministry in the Independent connection at Hackney College, and was ordained in 1811. In 1812 he was chosen minister of the New Road Chapel, St. George's-in-the-East. His career as a pastor was marked by few changes. He visited America in 1833-4, with Dr. Mather, as a deputation from the Congregational Union of England and Wales, and published an account of his mission after his return. He refused all invitations to part from his original charge, but removed with his congregation to a new and much larger building, Wycliffe Chapel, Stepney; and it was only when he had completed a jubilee period of fifty years, and felt the infirmities of extreme age, that he, in 1862, resigned his pastorate.

Dr. Reed published many sermons, charges, memorial notices, devotional tracts, and religious manuals, but acquired no celebrity as a theologian, and wrote nothing that is likely to be of permanent value or interest. His worth was that of a devoted pastor; but beyond that he has claims to general remembrance as an earnest, persevering, and successful philanthropist. In 1813 he first conceived the idea of a home for orphans, and succeeded in establishing the East London Orphan Asylum and Working School, which began with two orphan girls at a house near the Cannon-street Road. In 1816 he changed the name to the London Orphan Asylum, obtained subscriptions by indefatigable application, and bought a piece of ground at Clapton. On this site, as funds accrued, a spacious building was constructed, and was

opened by the Duke of Cambridge in 1825. Meanwhile his thoughts had been directed to the need for a separate home for infant orphans; he kept the idea to himself for a time, lest he should exhaust the flow of benevolence by too frequent appeals; but in 1827 he made his scheme public. One of his first subscribers was the Duchess of Kent, who stated that the asylum should have her aid, "and that of her fatherless daughter Victoria" (the present Queen). He began in 1828, with a small establishment at Hackney; but, having obtained land near Wanstead, he gradually collected funds for a large and handsome structure, the Infant Orphan Asylum, of which the first stone was laid in 1841, by the Prince Consort. Dr. Reed's next charitable scheme was for a Home for Fatherless Children, he having become dissatisfied with the working of the Wanstead Asylum. He began in a small house at Richmond, then removed to another at Hackney; and at length, in 1856, obtained funds sufficient to buy an estate at Coulsdon, three miles from Croydon. Here he erected a spacious building, which the trustees afterwards called Reedham, in compliment to him. The idea of a fourth good work of the kind, for the succour of poor idiots, had occupied his mind occasionally since 1837; he visited, as time and opportunity offered, asylums for idiots in various parts of Europe, and gradually framed a plan. In 1848 he took an old mansion on Highgate Hill; then another at Colchester, in 1850; and, in 1852, bought the estate of Earlswood, near Redhill, Surrey. Here an extensive asylum for idiots was built, and opened by the Prince Consort in 1855. It has increased in magnitude and usefulness ever since, and is now, probably, the most important and best managed institution of the kind extant. A fifth asylum was the Hospital for Incurables, which he commenced in a small way in 1845, and removed to a new building in 1854. In 1859 he succeeded in establishing another asylum in Essex—the Eastern Counties Asylum for Idiots. In earlier years he had been instrumental in founding the Hackney Proprietary Grammar School. Although in good circumstances, Dr. Reed never possessed a fortune; his untiring exertions, and the respect in which he was universally held, were the means which enabled him to achieve such great results. He died February 25th, 1862. (*Memoirs of the Life and Philanthropic Labours of Andrew Reed, D.D., with Selections from his Journal.* Edited by his sons, Andrew Reed, B.A., and Charles Reed, F.S.A., 8vo, London, 1863.)

* REED, EDWARD JAMES, naval architect, was born at Sheerness, in September, 1830. After serving an apprenticeship of four years in Sheerness Dockyard, he was selected by Canon Moseley, Government examiner, for special training in the School of Mathematics and Naval Construction at Portsmouth. Here, under the tuition of Dr. Woolley, he made great progress, and was recommended to the attention of the Admiralty in 1852. After serving for about a year as draughtsman at Sheerness Dockyard, he became one of the editors of the 'Mechanics' Magazine.' The articles on ship-construction which he contributed to this work attracted attention, and were quoted in Parliament as being authoritative; and a paper read by him before the Society of Arts, 'On the Modifications which the Ships of the Royal Navy have undergone during the present century, in respect to dimensions, forms, means of propulsion, and power of attack and defence,' elicited notice in high quarters. In 1856 the Admiralty placed in Mr. Reed's hands some official papers relating to the French navy, in order that he might institute a searching comparison between the strength of the navies of England and France. About the same time he became secretary to the newly formed Institution of Naval Architects. In 1857 he submitted to the Admiralty plans for reducing the size and cost of ships of war, and expediting the processes of building. These plans were so well received by the Duke of Somerset as First Lord of the Admiralty, and Sir Spencer Robinson as Controller of the Navy, that the Admiralty entrusted him with the conversion of the 'Enterprise,' 'Research,' and 'Favourite' into ironclads. He next designed the new ironclads 'Bellerophon,' 'Lord Warden,' 'Lord Clyde,' and 'Pallas,' and his success led to his appointment as Chief Constructor of the Navy. His leading idea was to combine thick armour with high speed; and he introduced many new features in carrying his plans into effect. The 'Hercules,' a broadside ironclad with very thick armour; the 'Monarch,' a turret-ship with the largest guns (25-ton) till that time used in any navy; the 'Inconstant,' the swiftest war-ship afloat; and the 'Volage,' were among the vessels planned and constructed by him. In 1868 he published 'Ship-building in Iron and Steel; a Practical Treatise giving full details of construction,' &c.: this work has become a textbook in naval schools. In the following year appeared 'Our

Iron-clad Ships; their qualities, performances, and cost; with chapters on Turret Ships, Ironclad Rams, &c.' In 1868, Mr. Reed proposed to resign, in order that he might have a chance of election to Parliament, where he much wished to meet in debate naval critics who had found fault with his plans; but the Admiralty dissuaded him from this course. A dispute between him and the First Lord, led, in 1870, to the resignation of Mr. Reed, who has since become connected as managing director with a large iron ship-building company. Nevertheless he keeps his name constantly before the public, as an unsparing critic on matters affecting ship-construction and stability and Admiralty management—such as the loss of the war-steamer, 'Captain,' in 1870, the plan and construction of which had always been opposed by him, and that of the 'Mégara,' in 1871.

REGNAULT, HENRI VICTOR, a distinguished chemist, was born at Aix la Chapelle, July 21st, 1810. After studying at the École Polytechnique in 1830–32, he entered the Government department of Mines. He became professor of chemistry at the École Polytechnique in 1840; professor of physics at the College of France in 1841; engineer in chief of mines in 1847; and director of the Imperial Manufactory of Porcelain at Sèvres in 1854. His first important memoir, 'Sur l'Action du Chlore sur l'Éther chlorhydrique,' appeared in vol. 71 of the 'Annales de Physique et de Chimie.' He confirmed an opinion held by Laurent, that chlorine may be substituted for hydrogen, atom for atom, in organic compounds; and examined with great care the chloride compounds obtainable from hydrochloric or muriatic ether. Mariotte and Charles, early in the century, had endeavoured to determine the relations which exist between the volumes of gases and vapours under varying degrees of pressure and temperature; Dulong, Pétit, Arago, and Gay-Lussac, by better experiments, arrived at more accurate results; while Despretz showed that the law of compressibility is not the same for all gases. Regnault made a searching examination into the whole matter; defined the various circumstances which disturb the law; and ascertained the numerical constants which must enter into any calculations of the effects of heat and pressure. He wrote numerous articles on the dilatation of elastic fluids; the density of gases; the measure of temperature; the density and absolute dilatation of mercury; the compressibility of elastic fluids and liquids; the elastic force of steam at different temperatures; the latent heat of saturated steam under different pressures; the specific heat of water under different pressures; the respiration of animals; hygrometry; and various other physico-chemical subjects. The chief of them were, in 1847, collected to form vol. 21 of the 'Mémoires de l'Académie des Sciences,' comprising 748 4to pp., under the title 'Relation des Expériences entreprises par ordre de M. le Ministre des Travaux Publics, and sur la proposition de la Commission Centrale des Machines à Vapeur.' Abstracts of most of these papers were given in the 'Comptes Rendus,' and he subsequently published others on allied subjects. Among his separate works are 'Cours Élémentaire de Chimie,' Paris, 4 vols. 12mo, 2nd edition 1849–50, German translation by Strecker, with alterations and additions, Brunswick, 1857; 'Premières Notions de Chimie,' 12mo, 1850, an abridgment of the preceding; an American translation, Philadelphia, 1852. Regnault succeeded Robiquet as a member of the Académie des Sciences in 1840; he was elected foreign member of the Royal Society in 1852; corresponding member of the Academies of Berlin, St. Petersburg, &c.; and was made commander of the Legion of Honour in 1863.

REGNAULT, BARON JEAN BAPTISTE, an eminent French painter, was born at Paris, October 19th, 1754. His father, whose name was Renaud, sent him to sea when ten years old, and he served on shipboard for five years, when on the death of his father he returned to Paris. By the kindness of a friend he was enabled to enter the atelier of Bardin, whom he accompanied to Rome. In 1775 he won the second, and in 1776 the first prize of the Academy. This entitled him to study at Rome. His pictures soon secured him fame and position. He was elected a member of the Academy in 1783 and the picture he presented on his reception, 'The Education of Achilles,' well known by Bervie's fine engraving, is now in the Louvre, where are also his 'Pygmalion imploring Venus to animate his Statue,' 'The Origin of Painting,' and a 'Descent from the Cross.' These may be taken as fair examples of his manner and range of subjects. He painted ecclesiastical and mythological pictures with equal facility, and both in what was then regarded as the purest classical style. M. Regnault was looked on as the great rival of David, in competition with whom he opened an atelier from which several good artists proceeded. He was appointed professor

at the École des Beaux-Arts in 1795, and at the École Polytechnique in 1816. He was a chevalier of the Legion of Honour, and of the order of St. Michel, and was created a baron in 1819. He died at Paris on the 12th of November, 1829.

RÉGNIER, MATHURIN, a French poet, chiefly known as a satirist, was born at Chartres on the 21st of December, 1573; and, being destined by his parents for the church, in order that he might succeed to the preferments of a well-beneficed uncle, received his first tonsure at eleven years of age, when he had already exhibited a tendency to satire. The gaiety and wildness of his youth gave rise to scandal, and he found it expedient to leave France in attendance on the Cardinal de Joyeuse, whom he accompanied, in 1593, to Rome. Here he stayed eight years, and finding on his return to France that the patronage of the Cardinal did not conduce to preferment, returned to Rome in 1601, as a retainer of the Duc de Béthune, who proceeded to that city as the ambassador of Henry IV. At the death of his uncle, Desportes, in 1608, Régnier received, out of all the benefices of that ecclesiastic, only a pension of 2000 livres, which was charged upon the Abbey des Vaux-de-Cernai; and on the 30th of July, 1609, was appointed to a canonry in the cathedral church of Chartres, the entire benefit of which, as not being in full orders, he was not in a position to enjoy. His income was, however, sufficient to enable him to devote himself to poetry and pleasure; and he varied his residence at his will, sometimes living at Paris, but oftener at Chartres or Royaumont. He died whilst on a visit to Rouen, at the hotel called 'l'Escu d'Orléans,' on the 22nd of October, 1613.

The works of Régnier, which comprise satires, epistles, elegies, epigrams, sonnets, and poems of miscellaneous form, display a wonderful amount of vigour, nerve, and naturalness, as well as a consummate knowledge of human character and manners. They have gone through a vast number of editions, and have been reproduced in France, Holland, and England. The principal editions are 'Œuvres de Régnier,' &c., 12mo, Paris, 1608, &c., 8vo, Rouen, 1613, 1614, &c., 12mo, Leyden, 1652, 12mo, Amsterdam, 1712; a series published with the Commentary of Brossette, 12mo, Amsterdam, 1729, 4to, London, 1730, and 2 vols. 12mo, London, 1730, stereotyped, 18mo, Paris, 1808, &c. Still more modern and critical editions are 'Œuvres Complètes. Avec les Commentaires revus, corrigés, et augmentés: précédées de l'Histoire de la Satire en France, pour servir de Discours préliminaire. Par M. Viollet le Duc,' 8vo, Paris, 1823, and, as part of the 'Bibliothèque Elzévirienne,' 16mo, Paris, 1853; 'Œuvres Complètes de Régnier. Nouvelle édition. Avec le Commentaire de Brossette, publié en 1729, des Notes littéraires, un Index des Mots vieilliss ou hors d'usage, et une Étude biographique et littéraire par M. Prosper Poitevin,' 12mo, Paris, 1860, and, as part of the 'Bibliothèque Gauloise,' 16mo, Paris, 1860, "augmentées de trente-deux Pièces inédites, avec des Notes et une Introduction par M. Edouard de Barthélemy," 12mo, Paris, 1862; and 'Œuvres Complètes de Régnier. Revues sur les Éditions originales, avec Préfaces, Notes, et Glossaire par M. Jannet,' 8vo, Paris, 1867. Amongst the critical and other notices conversant about the works of Régnier, may be mentioned the Baron James de Rothschild's 'Essai sur les Satires de Mathurin Régnier (1573–1613),' 8vo, Paris, 1863.

* REICHENBACH, BARON KARL VON, was born at Stuttgart, February 12th, 1788. He studied at the Stuttgart Gymnasium, and then at Tübingen University. In 1807 he began to devote his attention to technology, or the application of science to the industrial arts; visited various mining and smelting works in Germany and France; and gradually formed works of his own at Villingen and Hausach. A partnership with Count Hugues de Salm in 1821 led to the establishment of other works, including a beet-sugar factory at Blankenau in Moravia. Reichenbach realised a large fortune; and the King of Wurtemberg raised him to the rank of baron. During a course of chemical experiments, he discovered paraffin in 1831, creosote in 1833, and afterwards eupion and capnomor. In 1834 he published a memoir on the geology of Moravia, 'Geologische Mittheilungen aus Mähren.' Reichenbach is chiefly known, however, by his publications relating to nerve-power, or psychical biology. He claims to have discovered a new agent, called the Od force, as universally diffused as electricity or magnetism; he explains by it the mutual preferences and antipathies of mankind; and asserts that sensitive persons have the power of rendering the Od force faintly luminous and visible. These views have been developed in numerous publications, of which the following are the chief:—'Physikalisch-physiologische Untersuchungen über die Dynamide des Magnetismus,' 3 vols. 8vo,

Brunswick, 1845, 2nd edition, 1849, abridged English translations by J. Ashburner and W. Gregory; 'Odisch-Magnetische Briefe,' Stuttgart, 1852, French translation, 1854; 'Der sensitive Mensch und sein Verhalten zum Ode,' 2 vols. 8vo, 1854; 'Wer ist Sensitiv, wer nicht? oder kurze Anleitung sensitiv: Menschen mit Leichtigkeit zu finden,' 8vo, Vienna, 1856; 'Odische Erwiederungen an die Herren Professoren Fortlage, Schleiden, Fechner, und Hofrath Carus,' 8vo, 1856; 'Die Pflanzenwelt, in ihren Beziehungen zur Sensitivität und zum Ode,' 8vo, 1858; 'Aphorismen über Sensitivität und Od,' 8vo, 1866; 'Die odische Lohe und einige Bewegungserscheinungen,' 8vo, 1867.

REID, MAJOR-GENERAL SIR WILLIAM, K.C.B., F.R.S. [E. C. vol. v. col. 49]. General Reid retained the governorship of Malta till 1858. He died shortly after his return to England, in October, 1858, aged 67.

REINDEL, ALBERT CHRISTOPH, German engraver, was born at Nürnberg in 1784. In 1798 he became a pupil of H. Guttenberg, and in 1803 went to Paris in order to study anatomy and design. Whilst there he engraved several plates for Visconti's 'Iconographie,' the 'Musée Français,' &c. Returning to Nürnberg, he was appointed professor of the Malerakademie, and afterwards director of the Kunstschule, an office he retained till his death, February 23rd, 1853. Reinidel was one of the ablest of recent German engravers. Besides the prints already named, he engraved Poussin's 'Arcadian Shepherds,' A. Carracci's 'Silence,' the sculpture by Peter Vischer on St. Sebald's shrine, Nürnberg; Rauch's statue of Albert Dürer, &c. He translated, for the use of his pupils, Thibaut's 'Perspective linéaire,' 4to, Nürnberg, 1834. A catalogue of his engravings was published by Andersen, Leipzig, 1867.

* RÉMUSAT, CHARLES FRANÇOIS MARIE, COMTE DE, a French philosopher and politician, was born at Paris on the 14th of March, 1797; and received under the roof of his father, Comte de Rémusat, chamberlain of the Emperor Napoleon I., and under the care of his mother, a lady of extensive cultivation, and a friend of the Empress Josephine, a more profound training than ordinarily fell to his youthful contemporaries. After the completion of his classical and professional studies, he was called to the bar, and devoted himself to the prosecution of politics and legislation, varying these pursuits with philosophy and poetry, in the latter of which he had from an early age produced several pieces of happy augury. The Restoration of 1814 is said to have precipitated his liberalism; and, formed by the teaching and influence of M. Guizot, he produced several brochures on political, constitutional, and juridical subjects, contributing also to various journals and other periodicals during the decade 1820—1830. To this epoch belongs the production of a treatise, 'De la Procédure par Juges en Matière criminelle,' 8vo, Paris, 1820, Spanish translation, 'Del Modo,' &c., 2 vols., 18mo, Paris, 1827; and of a translation, with a preface, of Cicero's 'De Legibus.' In 1824, M. de Rémusat became connected with the 'Globe,' in which he wrote the remarkable protest against the press ordinances, July 25th, 1830, which resulted in the downfall of the Government of Charles X. In October following he entered the Chamber of Deputies as the representative of Toulouse. He took office in September, 1836, as under-secretary of state to the Ministry of the Interior, but resigned this post on the modification of the Cabinet, in April, 1837; and on the 1st March, 1840, received the portfolio of the Interior in the Thiers cabinet, which was succeeded, in the following October, by the Guizot administration. M. de Rémusat, who on the 27th of April, 1840, had been made a knight of the Legion of Honour, took advantage of his vacation from office to bring out his 'Essais de Philosophie,' 2 vols., 8vo, Paris, 1842, the critical power of which procured for him the membership of the Académie des Sciences, in succession to M. Théodore Jouffroy; 'Abélard,' 2 vols., 8vo, Paris, 1845, a work which comprises at once a valuable life of that philosopher and a lucid exposition of his doctrines; 'De la Philosophie allemande. Rapport à l'Académie des Sciences morales et politiques, précédé d'une Introduction sur les Doctrines de Kant, de Fichte, de Schelling, et de Hegel,' 8vo, Paris, 1845; and 'Passé et Présent. Mélanges,' 2 vols., 12mo, Paris, 1847, second (enlarged) edition, with the modified title of 'Critiques et Études littéraires: ou, Passé et Présent,' 2 vols., 12mo, Paris, 1857. M. de Rémusat was elected a member of the Académie Française in 1846, in succession to M. Royer-Collard; and in his *discours de réception*, which was delivered on the 7th of January, 1847, insisted finally upon the necessity of the alliance between politics and philosophy. He was one of the ministry selected by Louis Philippe on the night 23-24th of February, 1848, about an hour

before the abdication of the king, in the futile hope that certain concessions in the direction of liberalism might prolong the monarchy; and after the accomplishment of the Revolution, he was returned by the Haute-Garonne as a member of the Assemblée Constituante, and was appointed a member of the Committee on the Constitution, and vice-president of the War Committee. In 1849 he became a member of the Legislative Assembly; where he upheld the moderate party as opposed at once to socialism and absolutism. After the coup d'état, he suffered a temporary exile; but was soon recalled to France, where he led a quiet life, devoting himself to study and literary production. Since the election of M. Thiers as president of the Republic, he has given a cordial support to that statesman, in whose cabinet he is minister for foreign affairs.

The works of M. de Rémusat, besides those which have been already mentioned, include, 'Du Paupérisme et de la Charité légale,' 18mo, Paris, 1840; 'Saint Anselme de Cantorbéry. Tableau de la Vie monastique et de la Lutte du Pouvoir spirituel au XI^e Siècle,' 8vo and 12mo, Paris, 1853, Italian translation, 8vo, Milan, 1853; 'L'Angleterre au XVIII^e Siècle. Études et Portraits pour servir à l'Histoire du Gouvernement anglais depuis la Fin du Règne de Guillaume III.,' 2 vols. 8vo, Paris, 1856, second edition, 2 vols., 12mo, Paris, 1856, a collection of articles which were originally contributed to the 'Revue des Deux Mondes'; 'Bacon. Sa Vie, son Temps, sa Philosophie et son Influence jusqu'à nos Jours,' 8vo, Paris, 1857, second edition, 12mo, Paris, 1858; 'Preface' to 'Channing. Sa Vie et ses Œuvres,' 8vo, Paris, 1857, &c.; 'Politique libérale: ou, Fragments pour servir à la Défense de la Révolution française,' 8vo, Paris, 1860; and 'Philosophie religieuse. De la Théologie naturelle en France et en Angleterre,' 12mo, Paris, 1864. M. de Rémusat, amongst numerous contributions to periodical literature, and especially to the 'Revue des Deux Mondes,' brought out in various numbers of that review an interesting series of articles, which recorded his memories of a tour in Italy in 1857.

* RENAN, JOSEPH ERNEST, a French philologist and biblical critic, was born on the 27th of February, 1823, at Tréguir, Côtes-du-Nord, where he received his earlier education. Being destined for the priesthood, he studied successively at one of the primary theological schools of Paris, at the Seminary of Issy, where he devoted himself to science and metaphysics, and finally at the Seminary of Saint-Sulpice, where he developed that singular aptitude for Oriental learning for which he afterwards became distinguished. The independence of his judgment, and his tendency to original critical investigation, led him into a condition of much mental perplexity, which resulted in his abandonment of an ecclesiastical career. Accordingly, he left Saint-Sulpice, and, through the influence of M. Dupanloup, Bishop of Orleans, at that time president of the Seminary, who sympathised with his difficulties, obtained an appointment as tutor in the Collège Stanislas. He vacated this post soon afterwards, and divided his time between private teaching and the studies necessary to qualify him for admission as a university professor of philosophy. In 1847 he received from M. de Tocqueville, as representing the Académie des Inscriptions et Belles Lettres, the *pria Volney*, for a memoir which was afterwards expanded and published as 'Histoire générale et Système comparé des Langues sémitiques,' 8vo, Paris, 1855, &c., fourth edition, 1863, &c. In 1849, having in the previous year published an essay, which was subsequently elaborated into a considerable volume, 'De l'Origine du Langage,' 8vo, Paris, fourth edition, 1863, he was sent on a literary mission to Italy, during which he prepared the materials of his historical essay on Averroes the philosopher; which, having been issued in a more fugitive form, was afterwards published, at the request of M. Victor Cousin, as 'Averroès et Averroïsme. Essai historique,' 8vo, Paris, 1852, second edition, 1860. In April, 1851, M. Renan was appointed librarian in charge of the Oriental MSS. in the Bibliothèque Nationale, and signalled the independence of circumstances which he thus enjoyed by a yet more ardent prosecution of his various studies. In 1852 he took his doctor's degree, with a thesis entitled 'De Philosophia peripatetica apud Syros. Commentatio historica,' 8vo, Paris, 1852; in 1856 was admitted to the Académie, in succession to M. Augustin Thierry; and in December, 1860, was made a member of the Legion of Honour, and commissioned by the Emperor to proceed to Syria for the purpose of exploring the reputed sites of the Phœnician cities. His sister, who accompanied him on this expedition, died suddenly at Byblos, on the 24th of September, 1861; and it is to her spirit—"à l'Âme pure de ma sœur Henriette"—which in this life had been so perfectly sympathetic with his

own, that he afterwards dedicated the "livre premier" of his great work, which owes to the author's Eastern experience so much of its vividness of colour and precision of detail. The more direct literary result of the journey, however, was a volume entitled 'Mission de Phénicie dirigée par M. E. Renan,' 4to, with 'Planches,' fol., Paris, 1864. The death of his sister had the effect of curtailing his stay in the East; and on his return to France, he was appointed by the Emperor to the professorship of the Hebrew, Chaldee, and Syriac languages and literature in the Collège de France, for which he had been proposed in his absence, and which had remained vacant since the death, September 18th, 1857, of the distinguished orientalist, M. E. M. Quatremère. The inaugural address of M. Renan, which was delivered in February, 1862, and published with the title 'De la Part des Peuples Sémitiques dans l'Histoire de la Civilisation,' &c., 8vo, Paris, first four editions, 1862, and others, was so offensive to the clerical party, whom it was the policy of the Emperor to conciliate, that the lectures were indefinitely suspended by a decree in the 'Moniteur' of the following day; and M. Renan, having protested energetically against an appointment to the Bibliothèque Impériale, under which M. Duruy, the Minister of Public Instruction, sought to veil the real nature of the professor's suspension, was driven to depend on the press for the promulgation of his opinions.

The work by which M. Renan is most widely known, and one which has caused an immense commotion throughout Christendom, is his 'Vie de Jésus,' 8vo, Paris, 1863, thirteenth edition, 1867, of which, it is said, 40,000 copies were sold in six weeks, and which has been translated into Italian, German, Dutch, English, Spanish, Russian, Polish, and other languages, in nearly all of which it has been discussed, attacked, confuted, answered, and defended. The exegetical opinions of M. Renan, as stated in the 'Vie de Jésus,' are to the effect that we have neither of the original Gospels which bear the names of Matthew and Mark, whilst the books at present ascribed to them are only subsequent arrangements which were completed one by the other. A judicious criticism may succeed in restoring what belonged to each originally, with sufficient certainty to fix the exact historical worth of these compositions. Thus Matthew is to be trusted, in preference, for the discourses, whilst Mark is to be prized for his superior freedom from credulity, and his greater precision. The Gospel of Luke, again, is entirely derived from that of Matthew and of Mark; and that of St. John, in spite of the fierce contentions to which it has given rise in modern rationalistic criticism, is the Gospel selected by M. Renan as the general basis of his narrative, as being worthy of the first place of all, regard being had to its assertions in biography and history. M. Renan meets the assertion of the miraculous or supernatural with a general denial; and the position he had long before laid down, in 1849, in a periodical entitled 'La Liberté de Penser,' demanded that marvellous recitals were not to be accepted literally, whatever might be their origin or antiquity, inasmuch as the essence of criticism is the negation of supernatural agencies. The 'Vie de Jésus' is, however, something more than a biography of Christ; it is also the "livre premier"—where "livre" is coincident with "volume"—of a larger work entitled 'Histoire des Origines du Christianisme,' of which the "livre deuxième," or second volume, was published with the title of 'Les Apôtres,' 8vo, Paris, 1866, English translation, 8vo, London and Bungay, 1869, and the "livre troisième," entitled 'Saint Paul,' 8vo, Paris, 1869. Two other "livres," or volumes, are announced as necessary to complete the work, the titles of which will be respectively 'L'Antéchrist' and 'Les Derniers Hommes apostoliques.'

Amongst the other works of M. Renan, hitherto unmentioned, may be named 'Études d'Histoire religieuse,' 8vo, Paris, 1857, seventh edition, 1864, of which an American edition, incorporating the famous inaugural lecture at the Collège de France, and an article from the 'Revue des Deux Mondes,' for October 15th, 1860, was published by "O. B. Frothingham, pastor of the third Unitarian Church in New York," with the title of 'Studies of Religious History and Criticism. With a biographical Introduction,' 8vo, New York, 1864; 'Essais de Morale et de Critique,' 8vo, Paris, 1859, second edition, 1860, consisting chiefly of articles reprinted from the 'Revue des Deux Mondes' and the 'Journal des Débats'; 'Le Livre de Job, traduit d'Hébreu. Étude sur l'Âge et le Caractère du Poème,' 8vo, Paris, 1858, third edition, 1865; 'Nouvelles Considérations sur le Caractère général des Peuples sémitiques, et en particulier sur leur Tendance au Monothéisme,' 8vo, Paris, 1859; 'Le Cantique des Cantiques, traduit de l'Hébreu, avec une Étude

sur le Plan, l'Âge, et le Caractère du Poème,' 8vo, Paris, 1860, &c.; 'Questions contemporaines,' 8vo, Paris, 1868; 'La Part de la Famille et de l'État dans l'Éducation,' 12mo, Paris, 1869; and 'La Monarchie constitutionnelle en France,' 12mo, Paris, 1870.

RENDEL, JAMES MEADOWS [E. C. vol. vi. col. 1016].

RENNIE, GEORGE, F.R.S. [E. C. vol. v. col. 60], died: on the 30th of March, 1866, at his house, 39, Wilton-crescent, London, aged 75.

RESTOUT, JEAN, French painter, was born at Rouen, March 26th, 1692. His father, Jean Restout, and his mother were both artists; and he was nephew of the celebrated Jean Jouvenet, whose pupil he became, and whose manner he imitated. Restout designed well, and painted with facility on a large scale; but he was wanting in style, and was a poor colourist. Among his principal works were 'Ananias laying hands on St. Paul,' painted for the church of St. Martin des Champs, and 'Christ curing the Paralytic,' for Saint-Germain-des-Prés, which are now in the Louvre; the ceiling of the library of Ste. Gèneviève; and the 'Presentation of the Virgin,' painted for the city of Rouen. Restout was in 1730 a member, in 1733 professor, in 1752 rector, in 1760 director, and in 1762 chancellor of the Academy. He died at his apartments in the Louvre, January 1st, 1768.

RETHEL, ALFRED, an eminent German painter, was born at Aix-la-Chapelle, on the 15th of May, 1816, and studied under W. Schadow at the Düsseldorf Academy with brilliant success. His early works excited much admiration, but Schadow and the heads of the Düsseldorf school censured him for showing a tendency to abandon the abstract conventionalisms of the school for a more naturalistic manner, and Rethel left Düsseldorf in 1836 for Frankfurt, where he connected himself with Ph. Veit. Here he produced the works which made his name famous in Germany; notably the cartoons for the series of frescoes illustrative of the Life of Charlemagne in the grand salle of the Town Hall; his great picture of the 'Reconciliation of the Emperor Otho I. with his brother Henry,' and a series of portraits of the German emperors. He also prepared a large number of designs which were widely diffused by engravings. Among the most popular were his 'Dance of Death,' in six plates; and his two plates of 'Death as a Friend and an Enemy'—works of great ability. Other well-known series of designs are his 'Rheinischen Sagenkries,' twenty-one plates, folio, 1835; illustrations to Rotteck's History, and the 'Lebensbilder für deutsche Volk,' six plates, fol., Frankfurt, 1850. Failing health led him to make a second visit to Italy, where, during a prolonged stay, he drew several large cartoons of the Passage of the Alps, as a part of a series commemorative of the Life of Hannibal. Returning to Germany, he lingered on in feeble health till released by death at Düsseldorf, December 18th, 1859. Rethel was among the best recent German designers. All that he did was marked by loftiness and purity of purpose, a strong imagination, good drawing, and skilful composition, learning, and intelligence. As a painter he was less successful, being deficient in vigour and facility of handling, and truth and brilliancy of colour.

RETZSCH, MORITZ [E. C. vol. v. col. 63]. This excellent artist died at Dresden, June 11, 1857, in his 78th year.

RETZIUS, ANDERS OLOF, anatomist, was born at Lund, October 3, 1796. After conducting a veterinary school for some time, he, in 1823, commenced teaching anatomy at the Caroline Institute in Stockholm, and continued the occupation till his death, April 18, 1860. He has written numerous papers on biological subjects in the scientific periodicals of Sweden and in Müller's 'Archiv'; but he is chiefly known on account of his classification of skulls according to their relative breadths, which has been very largely employed. Hence he has been regarded by some as one of the founders of human cranio-logy. His knowledge of human skulls was very extensive, and the collection which he formed at Stockholm is exceedingly rich, especially in the crania of the races of Northern Europe.

* REUTER, PAUL JULIUS, founder of the press telegram system, was born at Cassel, July 21st, 1821. While engaged at a banking-house, he gave some attention to science, especially electro-magnetism. In 1847 he removed to Berlin, and engaged in the book trade. The political events of 1848 suggested to him the idea of improving the transmission of intelligence to the newspapers; and when the electric telegraph from Berlin to Aix-le-Chapelle was made available for commercial purposes by the Prussian Government in 1849, he

organised a new system of press telegraphing, employing carrier-pigeons to fill up the gap between Aix-la-Chapelle and Brussels, and supplied newspapers and bankers with news several hours in advance of the regular post. In 1850 he in a like degree organised and accelerated the telegraphic communication from Berlin to Paris. In 1851 Mr. Reuter removed to London, where he established a central office. He contracted with merchants and bankers to supply them with news from almost every capital in Europe; and in order to accomplish this, he spared no expense in laying down short lines of wire and chartering steamers where gaps in the line of communication occurred. For some years the newspaper proprietors were unwilling to avail themselves of his aid; nevertheless he frequently sent them telegrams of foreign news to show what celerity and accuracy he had attained. At length one striking achievement gave a new turn to the whole enterprise. On the 9th of February, 1859, the Emperor of the French made a speech which denoted approaching war between France, Italy, and Austria; the words were spoken about 1 P.M.; within two hours a third edition of the 'Times,' containing the news, was in circulation in the city. From this period the principal journals, one by one, availed themselves of Mr. Reuter's brief telegrams from foreign parts. During the Austro-Italian war, and again during the American civil war, numerous minor arrangements were made by him to supplement the telegraphy of wires in various countries and cables in various seas; and in Lombardy, in 1860, he had three special correspondents at three distinct camps to transmit telegrams direct to his central office in London, whence they were forwarded to several of the newspapers. Mr. Reuter, who obtained a concession for a submarine cable from Hanover to England, and joined Baron Erlangen in starting the French Atlantic Cable, has extended his operations by means of a joint-stock company, which entered into arrangements with the English Government in 1869, in connection with the new system of postal telegraphy. Mr. Reuter has become a naturalised British subject, and resides in London.

REVETT, NICHOLAS. [STUART JAMES, E. C. vol. v. col. 795.]

REYNOLDS, SAMUEL WILLIAM, an eminent engraver in mezzotint, was born in 1774, and was a pupil of Hodges. His plates are exceedingly numerous, and necessarily of unequal merit, many having been produced hastily to meet the requirements of the publishers. He is best known by his engravings of the 'Works of Sir Joshua Reynolds,' a series of over 300 plates issued in three folio volumes; 'The Lion and Snake,' and 'The Falconer,' after Northcote; 'The Fisherman's Dog,' after Morland; Owen's portraits of Bishop Heber, and Rubens's 'Chapeau de Paille,' now in the National Gallery. In 1826 he went to Paris, and whilst there executed mezzotints of 'Napoleon crossing the Alps,' after H. Vernet; and Géricault's 'Wreck of the Medusa,' which had an immense popularity. He died in 1835. Samuel Cousin, R.A., was his pupil, and one of his assistants.

RIBADENEIRA, PEDRO DE, a Spanish Jesuit and hagiographer, was born at Toledo, on the 1st of November, 1527; and, having been sent to Rome at an early age for the purposes of education, was received, in 1540, as one of the earliest disciples of Ignatius Loyola, at a period when his society had not yet attained the confirmation of the Holy See. In 1542 he repaired to Paris for the study of philosophy and theology; and migrated to Padua in 1545, for the completion of his education. In 1549 he was appointed to teach rhetoric at Palermo; and was called upon to pronounce a formal eulogium of his order before the magnates of the city. In 1555 he commenced his travels into various countries of Europe as a Jesuit apologist and propagandist; and in 1558 accompanied the Duke of Feria to England, and devoted much attention to the ecclesiastical affairs of this country, upon which he afterwards produced a work entitled, 'Historia ecclesiastica del Scisma del Reyno de Inglaterra, en la qual se tratan las Cosas mas notables q han sucedido en aquel Reyno, tocantes a nuestra Santa Religion, desde que comengo hasta la Muerte de la Reyna de Escocia,' 8vo, Madrid, 1588, of which a second part was published as 'Segunda Parte de la Historia,' &c., 16mo, Lisbon, 1594, new edition, 2 parts, quarto, Madrid, 1781. He obtained permission, in 1574, to establish himself at Madrid, where, after zealously devoting his pen to the defence of the Romish faith, and to the glorification of the Society of Jesus, and especially of its founder and his immediately succeeding generals, he died on the 1st of October, 1611.

The principal works of Ribadeneira are his 'Vida de San Ignacio de Loyola,' 8vo, Madrid, 1570, new edition, 8vo, Barcelona, 1863, Latin versions, by the author, 8vo, Naples, 1572, 8vo,

Antwerp, 1588, French translation, by Mlle. Evelina de Tressan, "précédée d'une Introduction par M. de B***," 12mo, Toulouse, 1844, a work which has gone through numerous editions, with one of which, folio, Madrid, 1598, was incorporated 'Vidas de Diego Lainez, Alfonso Salmeron, y Francisco de Borja,' 8vo, Madrid, 1592, Latin version, by André Schott, 8vo, Antwerp, 1598, 16mo, Cologne, 1604, &c., and translated in whole or in part into French and Italian; 'Vida de Christo y de su Madre Santissima,' folio, Madrid, 1604, and other editions both before and after, Italian translation, with additions, 4to, Venice, 1682, English (partial) translation, 'The Life and Death of the Virgin Mary,' 12mo, Limerick, 1814—19, French translation, with additions, 'Vie de N. S. Jésus-Christ, de la très-sainte Vierge, de Saint Joseph, et des Fêtes de l'Eglise,' &c., 8vo, Tournay, 1862; 'De la Tribulacion particular y publica,' 8vo, Barcelona, 1691, &c., from a Latin version of which a French translation was made by M. l'Abbé B***, entitled, 'Manuel des Ames affligées: ou, Traité des Tribulations,' &c., 8vo, Nancy, 1855; a work on Government, in opposition to the 'Prince' of Machiavelli, 'Tratado de la Religion y Virtudes que deve tener el Principe Christiano, para gobernar y conservar sus Estados,' &c., 4to, Madrid, 1595, &c., Latin version, 8vo, 1603, &c., and translations into French, English, and Italian; 'Tratado en el qual se da Razon del Instituto de la Religion de la Compañia de Jesus,' &c., 4to, Madrid, 1605; and 'Illustrium Scriptorum Religionis Societatis Jesu Catalogus,' 8vo, Antwerp, 1608, &c., afterwards much enlarged, especially as 'Bibliotheca Scriptorum Societatis Jesu. Opus inchoatum a R. P. Petro Ribadeneira ejusdem Societatis Theologo, anno Salutis 1602: continuatum a R. P. Philippo Alegambe ex eadem Societate, usque ad Annum 1642 recognitum, et productum ad Annum Jubilæi MDCLXXV. a Nathanaele Sotvello ejusdem Societatis Presbytero,' &c., folio, Rome, 1676. But the chief work of Ribadeneira, and which incorporates some of the biographical material already mentioned, is his 'Flos Sanctorum: o, Libro de las Vidas de los Santos,' 2 vols. folio, Madrid, 1590—1610, which, growing in bulk under the hands of successive editors, who were at once critics and biographers, has gone through a great number of editions, amongst which may be mentioned one in 6 parts, 8vo, Madrid, 1716—18, and another, more recent, and still incomplete, entitled 'Flos Sanctorum. Nuevo Año Cristiano. Vidas de los Santos,' &c., 8vo, Cadiz, 1863, &c., Latin versions, 'Vitæ Sanctorum ex orthodoxis Patribus,' &c. Studio et Labore C. Gradii, &c., 4 vols. 8vo, Cologne, 1616, and 'Flos Sanctorum: seu, Vitæ et Res gestæ Sanctorum ex probatis Scriptoribus selectæ,' &c. Additis Annotationibus et Sanctorum Vitis recentioribus a J. Canisio, 2 vols. folio, Cologne, 1700, another edition, 3 vols. folio, Cologne, 1741, often translated into French, 'Les Vies des Saints,' &c., folio, Paris, 1719, 8vo, Bar-le-Duc, 1858—60, and more elaborately as 'Les Vies des Saints et Fêtes de toute l'Année. Traduction française, revue et augmentée des Fêtes nouvelles, des vies des Saints et bienheureux nouveaux, par M. l'Abbé E. Daras,' &c., fourth edition, 13 vols. 8vo, Paris, 1864, the first of which appeared in 1855—58. An eighth edition of an Italian translation of the 'Vidas,' appeared in 2 parts, 4to, Venice, 1680; and amongst the English translations, or partial translations, may be mentioned Mrs. Hope's 'Acts of the Early Martyrs,' 12mo, Dublin, 1855, 8vo, New York, 1857, and an antecedent one, "translated into English by W. P., Esq.," and entitled 'The Lives of the Saints: with other Fastes of the Year according to the Roman Calendar,' second edition, 2 parts, folio, London, 1730.

* RICASOLI, BARON BETTINO, an Italian statesman and scientific agriculturist, the representative of an old baronial family of Lombardy, was born at Florence, on the 9th of March, 1809, and was educated in his native city and at Pisa. Early in life he adopted the principles of liberalism, which, in accordance with his bias towards aristocracy, he believed must be initiated from above, and not by the people. His first prominent political act was the presentation of a memorial to the Grand Duke, in 1847, in which he pointed out the grievances and the critical position of the country, the ignorance, laxity, and inefficiency of the clergy, and the necessity of administrative and municipal reforms. He held aloof from the Republican government of 1848, and, trusting to the promises of the Grand Duke, he interested himself for the return of that prince to Tuscany, in April, 1849, under such conditions as were calculated to ensure the preservation of constitutional privileges. But the expectations thus formed were short and illusory; and when Ricasoli saw that the Grand Duke was upheld by an Austrian garrison, he withdrew from political life, and for ten years devoted himself to his intermitted agricultural pursuits. He enlarged the sphere of his

operations by the reclamation of waste lands, and especially by the draining—under his personal supervision, and with machinery imported from England and elsewhere—of a portion of the Tuscan Maremma, or marshes, which had been long given up to malaria and pestilence. After the expulsion of the Grand Duke in April, 1859, Baron Ricasoli emerged from his retirement to undertake, May 8th, the Ministry of the Interior, in an administration ostensibly formed in the interests of peninsular unity, as represented by the sovereignty of Victor Emmanuel over an Italian kingdom. Subsequently to the realisation of this project, and the merging of Tuscany in the new kingdom of Italy, which was proclaimed on the 14th of March, 1861, Ricasoli was returned by three electoral colleges to the Parliament at Turin, in which he took his seat as representative of Florence, and became Minister of the Interior in the administration of Count Cavour, after whose death on the 6th of June, 1861, he succeeded to the post of President of the Council. During his tenure of office, which continued until the 2nd of March, 1862, he endeavoured to carry out and consolidate the policy of his predecessor; but, although his loyalty and patriotism were undoubted, he did not succeed in attracting the affection of the people or the implicit confidence of parliament. His manners lacked pliancy, and his powers of administration were superior to his gifts of diplomacy—a fact of which he showed his own consciousness when he declined the offered presidency of the Chamber, on the ground of his want of the requisite suppleness and adaptability. He was again appointed to the Ministry of the Interior in 1866; and, on the 20th of June, once more became prime minister, in succession to General Alphonso de la Marmora, whom it became necessary to set free for the military operations of the war against Austria, the declaration of which was announced to the Italian parliament, coincidentally with the announcement of the constitution of the Ricasoli cabinet. On the 11th of February, 1867, Baron Ricasoli, whose policy with regard to the property of the church did not command the confidence of parliament, tendered his resignation to the king, who pressed him to continue in office. The Chamber was dissolved, and the ministry somewhat modified; but, although the government gained by the elections, the increase of strength was not sufficient to encourage Ricasoli to persevere in the conduct of the administration. Accordingly he definitively resigned on the 5th of April, 1867, and was succeeded by Rattazzi.

The political career and character of Baron Ricasoli have given rise to abundant discussion; and among the works which he has either produced himself, or of which he has caused the production by others, may be mentioned, 'Discorso pronunziato da S. E. il Barone Bettino Ricasoli, Presidente del Consiglio e Ministro degli Affari esteri, per l'Inaugurazione del Monumento a S. M. il Re Carlo Alberto il Magnanimo, 21 Luglio, 1861,' 4to, Turin, 1861; 'Le Baron Ricasoli et la Question Romaine,' 8vo, Paris, 1861; 'Speeches delivered in the Italian Chamber of Deputies, on the 18th, 19th, and 20th of April, 1861, on Baron Ricasoli's Interpellation upon the Subject of the Southern Army, lately under the command of General Garibaldi,' 8vo, London, 1861; 'Il Ministerio Ricasoli e le Relazioni della Chiesa collo Stato. Discussione alla Camera dei Deputati sull' Interpellanza Ferrari intorno la Missione Tonello a Roma, con Documenti e Note 9—15 Luglio, 1867,' 8vo, Florence, 1867. A biography of Baron Ricasoli, by F. dall' Ongaro, formed No. V. of 'I Contemporanei Italiani,' 16mo, Turin, 1861, &c., of which an English translation appeared as 'Baron Ricasoli, Prime Minister of Italy,' &c., 8vo, London, 1861.

RICCI, MATTEO, a Jesuit missionary and Chinese scholar, was born on the 6th of October, 1552, at Macerata, in the March of Ancona, where he received his earlier education. He studied law at Rome, and acquired considerable skill in mathematics under the celebrated Christopher Clavius. He was admitted a member of the Society of Jesus on the 15th of August, 1571; and in 1578, having devoted himself to the Eastern mission, proceeded to Goa, where he completed his course of theology, and taught rhetoric, and applied himself assiduously to the language of China, to which country he was destined, in order to open it up as a field of Christian propaganda. After a series of difficulties and failures, he was permitted, in 1583, to establish himself, with two other Italian fathers, Roger and Pasio, at Tchao-King-fou, in the province of Canton; and won the admiration of the Chinese by his mathematical learning, and the art with which he adapted a map of the world to Chinese prejudices. In a similar spirit of compliance he drew up a Chinese catechism, which, keeping in the background the dogmatic features of Christianity, gave

especial prominence to the precepts of morality and natural religion. In 1589 he was left in sole charge of the mission at Tchao-King; and, after undergoing various difficulties and dangers, more or less formidable, in the course of which he had to leave his establishment at Tchao-King, succeeded, in 1600, in procuring access to the Emperor at Pekin, in the hope of obtaining the influence of the court in favour of his operations. He presented himself in the double character of a scholar and an ambassador commissioned by the Portuguese with the presentation of scientific and other novelties to the Emperor. He was well received by the latter, and was allowed to settle in the capital, where his learning and talents rendered him acceptable to the court and to the men of letters. The cares of the mission, and the anxieties of the multiform duties, religious and secular, which devolved upon him, added to the hardships of the earlier stages of his career in China, accelerated his death, which took place at Pekin on the 11th of May, 1610. He was buried with much distinction, and with the open observance of Catholic ceremonial.

Father Ricci produced fifteen works in the Chinese language, for the information of that people upon philosophical, moral, religious, mathematical, astronomical, and geographical subjects. His *Memoirs or Commentaries on China* formed the basis of Father Trigault's work entitled 'De Christiana Expeditione apud Sinas suscepta ab Societate Jesu, ex Matthæi Ricci Commentariis, Libri quinque,' 4to, Leyden, 1616, 8vo, Cologne, 1617, French translation, by T. C. D. A., 'Histoire de l'Expédition Chrestienne en la Chine,' &c., 8vo, Paris, 1618; and his 'Chinese Letters' form part of a volume entitled 'Litteræ Japonicæ Anni MDCVI. Chineses Anni MDCVI. et MDCVII. Illæ à R. P. Joanne Rodriguez: hæ à R. P. Matthæo Ricci, Societatis Jesu Sacerdotibus,' &c., 12mo, Antwerp, 1611.

RICHARD OF ARMAGH, *Latine* RICHARDUS ARMACHANUS, whose real name was Fitz-Ralph or Fitz-Raufe, Archbishop of Armagh in the 14th century, is variously stated to have been born in Devonshire, and at Dundalk, in the county of Louth, in Ireland. He was educated at Oxford, successively at University College and Balliol College; and took the degrees in arts and divinity. In 1333 he was commissary-general of the university; on the 10th of July in the following year was collated to the chancellorship of the cathedral church of Lincoln; became Archdeacon of Chester in 1336; on the 20th of April, 1337, was installed in person as Dean of Lichfield; and in 1347 was promoted to the archbishopric of Armagh. Whilst at Oxford he distinguished himself by his opposition to the Mendicant friars, whose affectation of poverty and other superstitions and irregularities he exposed in his lectures, his object being their reform, rather than their abolition. He also preached against them in London; and the incensed friars procured him to be cited, in consequence, before Pope Innocent VI., at Avignon, where he exhibited much firmness in the defence of his opinions, and where he died in 1360, not without suspicion of poison. The discourse which he made before the pope and cardinals at Avignon, and which was a defence of the parish priests against the Mendicants, was published with the title of 'Defensorium Curatorum contra eos qui Privilegiatos se dicunt,' 4to, about 1475, another edition, 4to, about 1480, folio, Lyons, 1490, 8vo, Paris, 1625. He also produced, amongst other polemical works, a treatise entitled 'De Audientia Confessionum,' and 'Sermones quatuor, ad Crucem Londinensem.' Fox, the martyrologist, asserts that Archbishop Fitz-Ralph translated the whole of the Bible into Irish, and that it was preserved in the 16th century; and Archbishop Usher says that in his time several fragments of this translation were extant in Ireland.

RICHARDSON, DR. CHARLES [E. C. vol. v. col. 92]. This distinguished philologist died October 6, 1865, at the ripe age of 90.

RICHARDSON, SIR JOHN, M.D. [E. C. vol. v. col. 92]. The situation of Director-General of the Medical Department of the Navy having become vacant by the retirement of Sir William Burnett, 1855, Sir John Richardson applied for it in the usual terms to the First Lord of the Admiralty, but was informed that his age was considered to disqualify him for promotion. He thereupon resigned his post as chief medical officer at Haslar Hospital, and was placed on the retired list of medical inspectors, having spent forty-eight years in the public service. From this time he resided at Lancrigg, a pleasant villa near Ambleside, Westmoreland, but continued to attend the annual gatherings of the British Association, and occasionally to make distant journeys. In December, 1856, he received one of the royal medals of the Royal Society, for his Arctic researches and general scientific

labours. Nor did he allow his pen to remain idle. He wrote, 1857, for the 'Encyclopædia Britannica,' a short memoir of Sir John Franklin, and the articles 'Polar Regions' and 'Ichthyology.' He also edited, 1859—62, a new edition of Yarrell's 'British Fishes,' and contributed many papers to the 'Museum of Natural History,' and, up to within an hour or two of his death, he was occupied in reading and noting Wycliffe's Bible for the Dictionary of the Philological Society. He died very suddenly on the 5th of June, 1865, and was buried in Grasmere churchyard, near the grave of Wordsworth. (Rev. John Mellraith, *Life of Sir John Richardson*, C.B., 12mo, London, 1868.)

RICHARDSON, THOMAS, chemical technologist, was born at Newcastle-upon-Tyne, in 1817. He studied chemistry at Glasgow University, in the laboratory of Dr. Thomas Thomson; then under Liebig, at Giessen; and afterwards under Pérouze, at Paris. On returning to Newcastle, he became connected with chemical manufactories; introduced new processes and apparatus in some of the lead works in the neighbourhood, and established the manufacture of new artificial manures. He was appointed professor of chemistry in the Medical College at Newcastle, and in 1859 reader in chemistry at Durham University. On the invitation of the North-Country Steam Coal Association, he undertook, in conjunction with Sir W. E. Armstrong and Mr. Langridge, an elaborate investigation into the economic combustion of coal under steam boilers, and the relative merits of North-Country coal and Welsh coal. In 1866, in conjunction with Mr. Fletcher, he made a similar examination of Lancashire and Cheshire coal. Dr. Richardson and Dr. Edmund Ronalds edited an English translation of Knapp's 'Chemical Technology,' 2 vols. 8vo, 1848; but this has since been almost wholly re-written, and greatly extended, by Dr. Richardson and Mr. Henry Watts; five volumes of the new edition had appeared by 1871, and others were in progress. Dr. Richardson held the degrees and honours of Ph.D., A.M., F.R.S., and M.R.I.A. He died July 10th, 1867.

* RICHMOND, GEORGE, R.A., was born March 28, 1809; became a student of the Royal Academy in 1824; and early commenced practice in painting portraits in water-colours. By these and his chalk drawings he acquired celebrity, but eventually devoted himself to painting in oil. Mr. Richmond has probably painted the portraits of a larger number of distinguished persons than any of his contemporaries, his sitters including such men as Macaulay, Ruskin, E. M. Ward, R.A., and the like; the Prince of Wales, the Earl of Shaftesbury, and a large proportion of the higher nobility; the Archbishop of Canterbury, Bishop Wilberforce, John Keble, and a considerable portion of the episcopal bench, and other dignitaries and leading members of the clerical profession; Lord Cranworth, Stephen Lushington, and other eminent lawyers, and a vast number of ladies of high position, as well as many presentation and memorial portraits of municipal and other official personages. As may be supposed from the amount and character of the patronage he has enjoyed, Mr. Richmond possesses great facility in catching a favourable likeness. He seldom fails, indeed, to smooth away some of the ruggedness of his male sitters, while his female portraits are always graceful and usually elegant, and both classes are marked by clear and careful execution. Besides his portraits, Mr. Richmond has painted several scriptural subjects, such as 'The Agony in the Garden,' 1858; poetical pieces, as 'Comus,' 1864; and one or two landscapes, as a 'Sunset seen from Hyde Park,' 1861. Mr. Richmond was elected A.R.A. in 1859, and R.A. in June, 1866.

RIEMANN, GEORG FRIEDRICH BERNHARD, was born 17th September, 1826, at the village of Breselenz, near Dannenberg, in Hanover, of which his father was pastor. While yet a child, he exhibited great powers of arithmetical calculation, and it is said that an able tutor had to make unusual exertions in order to follow the short and original solutions of the problems submitted to his pupil. In 1840 he entered the Lyceum in Hanover, and after two years the Gymnasium of Lüneburg, under Director Schmalfuss, who soon discovered Riemann's mathematical talent, and lent him works on the higher mathematical subjects. In 1846 he entered the University of Göttingen as a student of theology, but the lectures of Gauss made him so fond of exact science, that he obtained his father's permission to devote himself to science. He studied two years under Jacobi at Berlin, and returned to Göttingen, where he graduated. In 1854 he qualified for the post of teacher, and in 1857 became professor extraordinarius. He published several mathematical and physico-mathematical papers in Poggendorff's 'Annalen,' Crell's 'Journal,' and the 'Abhandlungen' of the Academy of Sciences of Göttingen, of which he became a member in 1860. He married

in 1862, and in July of the same year was attacked with pleurisy. Through the good offices of some of the professors of Göttingen, he was enabled to travel in Italy for the benefit of his health. After some months' residence his health was partly restored, but he suffered a relapse in crossing the Splügen, so that he had to return to Italy, and he passed two winters in Pisa. In the autumn of 1865 he returned to Göttingen, and commenced a paper on the mechanism of the ear, which was published after his death. A paper on the surface of least area having a given boundary, is printed in vol. xiii. of the 'Abhandlungen.' He again visited Italy, with the intention of completing his unfinished works, but he died on the 16th June, 1866, at Selasca, near Intra, on the Lago Maggiore. His memoirs on the propagation of plane waves of finite amplitude in air, and on the motion of a fluid homogeneous ellipsoid, are in the 8th and 9th vols. of the 'Abhandlungen.'

RIENZO, or RIENZI, COLA DI, and, more precisely, NICCOLO GABRINO DI RIENZO, distinguished in one of the most popular of modern romances as the 'Last of the Tribunes,' was born at Rome about the year 1310. Although he claimed through his father an illegitimate descent from the Emperor Henry VII., his parents were of mean condition; but, triumphing over all obstacles in the way of education, he became an accomplished scholar, well versed in the literary, artistic, and monumental antiquities, as well as in the history of the past political glories of his country, from the ancient magnificence of which he drew the augury of future liberty and splendour. He was a notary by profession, and an orator of rare and persuasive eloquence. His life and career form an episode of that seventy years' period during which the Papal court was held at Avignon, where it was first established in 1306, by Clement V., who was a Frenchman. The absence of the popes left Rome and its dependencies a prey to the unchecked fury and factions of disorderly nobles, whose houses were fortified castles, and whose ceaseless turbulence and tyranny robbed, oppressed, and demoralised the people. Such excesses revolted the mind of Rienzo, whose brother had been slain without retribution made for his death, and who, after long pondering on the anarchy of the State, strove to awaken in the citizens the resolve of freedom. When, in 1341, Petrarch was crowned at the capitol, it seemed to Rienzo a revival of Rome's ancient glories, and he contracted a friendship with the poet, which continued, with slight interruption, to the last, and which was strengthened and consolidated in 1342, at Avignon, whither Rienzo had been commissioned as one of the members of a deputation to supplicate Clement VI. to remove the Holy See from Avignon to Rome. The pope was charmed with the extraordinary eloquence of Rienzo, to whom he listened with pleasure and frequency, and whom, although he did not accede to his prayer, he sent back to Rome invested with the dignity of high and responsible office. He fulfilled the duties of vicar-apostolical with zeal, justice, and integrity; and when on the 20th of May, 1347, in response to his passionate and patriotic eloquence, he was elected by popular acclamation to the Government of Rome, with the title of Tribune, the dignity was recognised by the Bishop of Orvieto, the pope's legate and Rienzo's colleague, and confirmed by the Pontiff himself. He sought to restore the Roman Republic to its ancient form, and acquired, according to the testimony of Machiavelli, "so great a reputation for justice and virtue, that not only the places adjacent, but the whole of Italy, sent ambassadors to him. The ancient provinces, seeing Rome arise to new life, again raised their heads, and some induced by hope, others by fear, honoured him as their sovereign." Several kings appealed to his tribunal, as had been customary in the times of the ancient republic; and Louis of Hungary, especially, referred to his decision the quarrel between himself and Queen Joanna of Naples, whom he accused of having murdered her husband, his brother. Trade, commerce, justice, and security were fostered and ensured. Constitutionally inclined to mysticism and enthusiasm, Rienzo thought to fortify his rule by much symbolism and pageantry—a practice which naturally led him into the commission of many acts which, if only because they were generally unintelligible, were judged to be wanton, fanatical, or arrogant. A confederacy, headed by the great families whose authority and immunities he had abridged, was formed against him in December, 1347, and he retired, after various wanderings in Italy, to seek refuge from Charles, King of Bohemia, who, by the influence of the pope, and in contempt of Ludwig of Bavaria, had been elected Emperor, and who, it is said, in order to ingratiate himself with the Pontiff, sent Rienzo as a prisoner to Avignon, where he remained for some years the occupant of a

dungeon. At length, in 1353, Innocent VI., who had succeeded Clement in the Papacy, having at heart the amelioration of the state of misrule and anarchy to which Rome had again fallen a victim, released Rienzo, and sent him to Rome as the colleague of his legate, Cardinal Gil Albornoz, who, a warrior as well as a prince of the church, defeated on his way various enemies of the Papal power, and restored various revolted states to their allegiance to the Holy See. The Romans received Rienzo with enthusiasm; but when they found him hampered with restrictions and with the necessity of raising supplies, which he endeavoured to accomplish by means of a tax on wine and salt, their loyalty and affection turned to hatred and contempt. On the 8th of October, 1354, only seven weeks after his arrival in Rome, a furious insurrection took place; and Rienzo, having hastily adopted a mean disguise, sought to escape from his residence, the capitol, which had already been fired by the people. Having been detected, however, and having in vain endeavoured by his eloquence to change the purpose of his enemies, he was stabbed to death, after which his body was subjected to the vilest indignities.

RIEPENHAUSEN, FRANZ, German painter and engraver, was born at Göttingen in 1786, and was the eldest son of Ernst Ludwig Riepenhausen (born 1763, died 1840), an engraver of some note in that city. Franz learned engraving of his father, then became a pupil of Wilhelm Tischbein; in 1804 passed into the Cassel art-academy, and thence, 1805, into that of Dresden. He had attracted notice by some illustrations of Tieck's 'Genoviva,' 1806, and other etchings, when in 1807 he and his brother Johannes were enabled by the liberality of the Westphalian government to continue their studies at Rome, whither they went in company with Tieck. Here the brothers devoted themselves to the study of the works of Raffaele and his predecessors; and produced numerous designs in chalk illustrative of the poems of Goethe, Schiller, &c., and some scriptural subjects. They also painted, alone or in conjunction, several altar-pieces and other pictures in oil, including some for the Hall of the Guelphic Order at Hanover. They likewise published, 1820—24, three parts of a 'History of Painting in Italy,' with outline engravings from the works of the chief painters prior to Perugino; also 'The Paintings of Polygnotus in the Lesche at Delphi, designed and engraved from the Descriptions of Pausanias,' 16 plates, Rome, 1826—29. Franz Riepenhausen died at Rome, January 3rd, 1831.

RIEPENHAUSEN, JOHANNES, younger brother of the preceding, was born at Göttingen in 1788. The brothers, as indicated above, studied together, went together to Rome, and worked in common till the death of Franz in 1831. Johannes then set about completing the engravings, and arranging the materials of the life of Raffaele already commenced, in continuation of the History of Painting in Italy. The Italian edition, 'Vita di Raffaello,' appeared at Rome in 1834, the German at Göttingen in 1835. He subsequently painted the 'Death of Raffaele,' 1836; 'The Emperor Maximilian and the Duke of Brunswick;' 'The Cenci,' and other large oil pictures. He died at Rome in September, 1860.

RIETSCHEL, ERNST FRIEDRICH AUGUST, an eminent German sculptor, was born at Pulsnitz, in Saxony, December 15th, 1804. He studied in the Dresden art-academy, and afterwards at Berlin under Rauch. In 1827 he went to Rome as academy student, and remained there about a year. On his return he was commissioned to execute a colossal statue of Friedrich Augustus of Saxony. Henceforward his position was assured. He was nominated member, and in 1832 professor, in the Dresden Academy; was elected member of several foreign academies, including that of France; decorated with numerous orders, and actively employed by his own and other German governments. His works consist of classical, poetical, and religious groups, statues, and reliefs, and portrait busts and statues. Among the chief may be named a 'Pieta,' life size, executed for the King of Prussia, which takes high rank among modern works of that class for beauty of design and religious sentiment; 'The Christ-Angel,' a work of wide popularity; a series of reliefs representing Morning, Noon, Twilight, Night; colossal statues of Goethe and Schiller for Weimar; Lessing for the city of Brunswick; Weber for Dresden, and several more; besides busts of Rauch, Luther, &c., for the Walhalla; and a large number of other public and private commissions. He had also completed the design for the Worms memorial statue of Luther, but its execution was left for another hand. Rietschel died at Dresden, February 21st, 1861. (Appermann's *Ernst Rietschel*, Leipzig, 1863.)

RIGAUD, STEPHEN JORDAN, Bishop of Antigua [E. C. vol. vi. col. 1019], died on the 23rd of June, 1859.

***RIGAUD, STEPHEN PETER, M.A., F.R.S.**, Savilian professor of astronomy at Oxford [E. C. vol. vi. col. 1018].

RITCHIE, LEITCH [E. C. vol. v. col. 104], died on the 16th of January, 1865.

* **RITTER, AUGUST HEINRICH**, but generally known as Heinrich, a German philosopher, was born at Zerbst, in the year 1791, and received his earlier education under the roof of his father, who was an eminent legist, and at the Gymnasium of his native town. In 1811 he commenced at the University of Halle the study of theology, which he afterwards prosecuted successively at the Universities of Göttingen and Berlin. His studies, which had from an early period determined towards philosophy, were interrupted by a campaign as a volunteer in the German army against France; but in 1815, at the suggestion of his father, by whose advice he had been directed and encouraged in all his studies, he became a successful competitor for the prize offered by the Berlin Academy of Sciences on the subject of the Influence of the Cartesian Philosophy on that of Spinoza, &c. This essay was published together with a treatise, embodying a doctrine upon which Ritter afterwards proceeded in his teaching, on the Formation of the Philosopher by the History of Philosophy, 'Ueber die Bildung des Philosophen durch die Geschichte der Philosophie,' 8vo, Leipzig, 1817, in which he showed that, as the present state of the science is the result of all previous states, an intimate acquaintance with its history is indispensable to its further advancement. The successful essayist now devoted himself entirely to philosophy, in which he took his doctor's degree; and, having become a tutor in that faculty at Berlin in 1817, was appointed extraordinary professor in the same university in 1824. In 1832 he was elected a member of the Royal Academy of Sciences; but, having been disappointed in the hopes he had reasonably entertained of succeeding to the chair left vacant by the death of Hegel, on the 14th of November, 1831, he accepted, in 1833, a chair in the University of Kiel, from which he migrated in the early part of 1838, to undertake the professorship of philosophy at Göttingen.

Ritter occupies an independent position in the field of speculative philosophy; and, without attaching himself to any school, favours the principles of eclecticism. Several of his works, which, especially his minor treatises, are very numerous, have been translated into French, English, and other languages of Europe. They include an Examination of the Philosophical Doctrine of Empedocles, 'Ueber die philosophische Lehre des Empedokles,' contributed to Wolf's 'Literarischen Analekten,' 1820; History of the Ionian Philosophy, 'Geschichte der Ionischen Philosophie,' 8vo, Berlin, 1821; Introduction to Logic, 'Vorlesungen zur Einleitung in die Logik,' 8vo, Berlin, 1823; Epitome of Logic, 'Abriss der philosophischen Logik,' 8vo, Berlin, 1824, second edition, 1829; History of the Pythagorean Philosophy, 'Geschichte der Pythagorischen Philosophie,' 8vo, Hamburg, 1826; The Semi-Kantians and Pantheism, 'Die Halb-Kantianer und der Pantheismus,' &c., 8vo, Berlin, 1827; History of Philosophy, 'Geschichte der Philosophie,' 12 vols. 8vo, Hamburg, 1829—53, second edition, 8vo, 1836, &c., which devotes four volumes to the History of Ancient Philosophy, 'Geschichte der Philosophie alter Zeit,' 1829—34, second edition, 1836—38, French translation, by Dr. Tissot, 4 vols. 8vo, Paris, 1836—37, English translation, by Alexander J. W. Morrison, B.A., 4 vols. 8vo, Oxford, 1838—1846, four other volumes to the History of Christian Philosophy, 'Geschichte der Christlichen Philosophie,' 1841—45, French (partial) translation, by M. Trullard, 2 vols. 8vo, Paris, 1843—1844, and the remaining four volumes to the History of Modern Philosophy, 'Geschichte der neuern Philosophie,' 1850—53, French translation, "précédée d'une Introduction par M. Challemeil-Lacour," 3 vols. 8vo, Paris, 1861; On the Recognition of God in the World, 'Ueber die Erkenntniss Gottes in der Welt,' 8vo, Hamburg, 1836; Philosophical Miscellanies, 'Kleine philosophische Schriften,' 3 vols. 8vo, Kiel, 1830—40; 'Historia Philosophiæ Græco-Romanæ ex Fontium Locis contexta,' &c., 8vo, Hamburg, 1838, second edition, with slightly modified title, 8vo, Göttingen, 1857, third edition, 1864, a work produced in association with L. Preller; a paper read before the Göttingen Royal Scientific Society, on Our Knowledge of Arabic Philosophy, &c., 4to, Göttingen, 1844; Essay on the post-Kantian Philosophy of Germany, 8vo, Brunswick, 1853, reprinted from the 'Allgemeine Monatsschrift für Wissenschaft und Literatur'; System of Logic and Metaphysics, 'System der Logik und der Metaphysik,' 2 vols. 8vo, Göttingen, 1856; On the Development

of Christian Philosophy, 'Die Christliche Philosophie nach ihrem Begriff, ihren äussern Verhältnissen, und in ihrer Geschichte bis auf die neuesten Zeiten,' 2 vols. 8vo, Göttingen, 1858-59; 'Encyclopädie der philosophischen Wissenschaften,' vols. 1 and 2, 8vo, Göttingen, 1862-63.

RITTER, KARL [E. C. vol. v. col. 106]. Being endowed with unusual health and strength, Ritter carried on his great scheme of a universal geography as far as his professional duties would allow. In addition to the volumes of his 'Erdkunde,' already mentioned, he wrote a second on Arabia, forming the 13th of the whole work; the next four were devoted to the peninsula of Sinai; and the last published contains the first part of Asia Minor. After Asia was finished he contemplated treating Europe in the same manner, for which object he had collected a large quantity of material; but his life, although it spanned upwards of eighty years, was too short for the task. He died September 28, 1859.

ROBBIA, LUCA DELLA, Italian sculptor and inventor of the potter's ware which bears his name, was born at Florence, about 1400, and learned to design and model in wax of a celebrated goldsmith, Leonardo di San Giovanni. His spare time, however, was given to sculpture; and while still a youth he was employed by Sigismond di Malatesti, lord of Rimini, to carve the marble ornaments in a monumental chapel he was building. Recalled to Florence, Luca was commissioned by the wardens of Santa Maria del Fiore to execute some bassi-relievi for the campanile of Giotto, which excited great admiration; and afterwards to carve the marble ornaments on the organ screen, in which were some admirable figures of singing boys, designed in rivalry with the screen of Donatello on the opposite side of the cathedral: both are now in the Florence Gallery. So well satisfied were the wardens with this work, that they gave Luca the commission for the great bronze door of the sacristy. On this door, which he divided into ten compartments filled with reliefs, he was employed several years. It was greatly admired; but, according to Vasari, he found that from the time expended on them these works produced so little profit that he, about 1438, determined to abandon bronze and marble, and work in terra-cotta. Succeeding in this, he became anxious to discover a means of securing it from the effects of the atmosphere, and eventually invented an opaque glaze, or enamel, which perfectly answered the purpose, and produced a novel and pleasing effect. The first important work of this kind was, according to Vasari, a bas-relief placed over the door of the sacristy of S. Maria del Fiore. The early specimens were white, but he now determined if possible to add colour to them, and after many failures succeeded. The ware became exceedingly popular, and Robbia received numerous commissions. Cosmo de' Medici employed him to decorate the ceiling and pavement of a study with this coloured ware, and afterwards the central chapel and that of S. Jacopo, in the church of St. Miniato-al-Monte. The fame of these and other works in the same material soon brought Luca commissions, not only for other churches and palaces in Florence, but from Fiesole, Naples, and even from Spain. Indeed, says Vasari, so widely was their celebrity spread through Europe, that the Florentine merchants began to find them a profitable article of commerce, and kept Luca so fully employed at this kind of work, to his great profit, that he was fain to call in his relatives, Andrea, Ottaviano, and Agostino, to assist him. He continued his labours till about 1471. He died at Florence in 1481.

Luca made over the works to his nephew ANDREA DELLA ROBBIA (born 1437, died 1528), to whom he confided his secret, and who continued the manufacture with scarcely inferior ability. Andrea bequeathed the manufactory to his sons, in whose hands the ware began to deteriorate. It afterwards passed by marriage to the Buglioni, and, still declining, was finally abandoned in the latter part of the 16th century. In our own day, Della Robbia ware has again come into fashion. Original examples command very high prices, and it has been successfully imitated on the Continent, and by Minton in this country. Many of the enamelled terra-cottas of Luca remain in perfect preservation in their original positions; others have been removed uninjured to museums. The Louvre possesses a fine 'Madonna adoring the Infant Jesus,' by him. In the South Kensington Museum are more than fifty good specimens of this work, including several fine medallions by Luca, and an altar-piece, 'The Adoration of the Magi,' and others by Andrea della Robbia. The most remarkable example is a massive medallion eleven feet in diameter, one of the largest works of its kind ever made. It was taken from the exterior of

BIOG. DIV.—SUP.

the Villa Pontificia-Ximenes, near Florence; and though exposed there for nearly 400 years, is still almost uninjured.

(Barbet de Jouy, *Les Della Robbia*; *Étude suivie du Catalogue de leurs Œuvres*; Vasari, Baldinucci, Cicognari, &c.).

* ROBERT-FLEURY, JOSEPH NICOLAS, a celebrated French painter, was born August 8th, 1797, at Cologne, then in the department of the Roër. He studied in Paris, and obtained a medal of the second class in 1824. Robert-Fleury early distinguished himself as a partisan of what is known in France as the neo-romantic school. His subjects are mostly incidents from the bye-paths of history, or the biography of eminent men, but he is classed by his countrymen among the painters of genre. Among his most characteristic pictures are—'Le Colonne de Poissy,' now in the Luxembourg; 'Une Scène d'Inquisition,' 'Benvenuto Cellini,' 'Charles-quin au Monastère de Saint Just,' and 'Louis XIV.' the last two of which were in the International Exhibition of 1862. M. Robert-Fleury's works are characterised by sobriety of style, careful drawing and execution, a warm tone of colour, and refinement of expression. In 1836 M. Robert-Fleury was created a knight, and in 1849 officer of the Legion of Honour. In 1850 he was elected member of the Institute, and professor in the École des Beaux-Arts, of which he was appointed director on its reorganisation in 1863.

ROBERTS, DAVID, R.A. [E. C. vol. v. col. 114]. This celebrated artist and kind-hearted man died on the 27th of November, 1864. In 1866 appeared the 'Life of David Roberts, R.A., compiled from his Journals and other sources, by James Ballantine. With Etchings and Fac-similes of Pen-and-Ink Sketches by the Artist.'

ROBERTSON, REV. FREDERICK WILLIAM, eldest of the four sons and seven children of Captain Robertson, R.A., was born in London, at the house of his grandfather, Colonel Robertson, on the 3rd of February, 1816. The first five years of his life were spent at Leith Fort, at that period the station of his father, who, with the view of educating his children more efficiently, retired from the service and settled at Beverley, where he previously instructed his son for four years, and then sent him to the grammar-school of that town. In 1820 the family removed to Tours; but returned to England in consequence of the Revolution of July, 1830. Young Robertson now became a pupil of the Edinburgh Academy; and afterwards conjoined the private tuition of Mr., afterwards Bishop, Terrot, with attendance upon various classes in the University. In 1833 he was articled to a solicitor at Bury St. Edmunds, and passed a year in his office; although at this time, as indeed throughout his life, his heart was with the army, to which his earliest associations attracted him, and in which two of his brothers became officers, while the third held a commission in a regiment of militia. He himself received the promise of a commission; but, in disappointment at its late arrival, and acting upon the wish of his father, and the advice of Dr. Daly, Bishop of Cashel, he decided to enter the Church, and with this view matriculated on the 4th of May, 1837, at Brasenose College, Oxford, where he went into residence in the following October. Four days after his matriculation, the coveted commission was granted; but as Captain Robertson recognised the hand of Providence in the fact of the matriculation having been then completed, the career thus begun was not interrupted, and the commission was reluctantly declined. He took his B.A. degree in due course, and proceeded M.A. in 1844. On the 12th of July, 1840, he was ordained by Dr. Sumner, Bishop of Winchester, and entered upon a curacy in that city on the 19th of the same month, which he occupied for a year; and then, after having passed his examination for priests' orders, sought to recover his health, which had considerably suffered, by a tour on the continent, in the course of which he stayed for some time at Geneva, where he married a daughter of Sir George William Denys, then equerry to the Duke of Sussex. Returning to England, he became curate to Dr. Boyd, Dean of Exeter, at that time incumbent of Christ Church, Cheltenham; and, entering upon his duties in the summer of 1842, remained there for above four years, during which his views underwent considerable change and enlargement. On leaving Cheltenham, he again repaired to the continent; and in the course of his travels, which extended to the Tyrol, spent some weeks at Heidelberg, where he devoted himself to the examination of German theology and metaphysics. He received from Bishop Wilberforce the charge of the parish of St. Ebbe's, Oxford; and shortly afterwards left it in order to enter upon the incumbency of Trinity Chapel, Brighton, in which he preached his first sermon on the 15th of August, 1847. The

3 X

fearless liberality of his opinions presently alienated many members of the old congregation; but their places were more than supplied by the crowds who flocked to listen to the singular, yet restrained, fervour of his eloquence. The young, the eager, and the thoughtful regarded him with reverence and affection; and he brought Christianity as a power to bear upon the daily life and the social state of all classes. His sympathy with the poor was so ardent, and his activity in their behalf was so constant and multiform, that he became obnoxious to the charge of being a democrat and revolutionist. He assisted in establishing a Working Man's Institute; and in an Address which he delivered on the 23rd of October, 1848, convinced the working classes that "at last a clergyman had entered into their aspirations and their wrongs." This 'Address,' which was afterwards published, 8vo, Brighton, 1849, "attracted," Mr. Robertson wrote in a letter to a friend, "more notice than it deserved, and than I expected, vituperative and laudatory. It has been read by her Majesty; distributed by nobles and Quakers; sneered at by Conservatives; praised by Tories; slanged by Radicals; and swallowed, with wry faces, by Chartists." It was followed up by lectures, speeches, and addresses, having for their object the intellectual, moral, and spiritual elevation of the working men; in whose behalf, especially in a sermon preached at St. John's Church, in Charlotte Street, Fitzroy Square, London, in June, 1851, he incurred from the 'Record' the charge of preaching democracy and socialism, notwithstanding that the latter was distinctly opposed in his discourse. The only sermon published in the life-time of Mr. Robertson was one which he delivered on the day of the public mourning for the late Queen Dowager, and which bore the title of 'The Israelite's Grave in a Foreign Land.' Two sermons which, according to his custom of discussing the subjects of the day, he preached upon the Gorham controversy, gave displeasure to both parties; but it is claimed for them that "they reconciled to the Church many who had despaired of ever accepting the teaching of her baptismal services." Within six months, it was said, Mr. Robertson had put himself into opposition with the whole accredited theological world of Brighton on the questions of the Sabbath, the Atonement, Inspiration, and Baptism. "His words were garbled; passages from his sermons, divorced from their context, were quoted against him; persons who could not understand him came to hear him and look at him as a strange phenomenon; he became the common talk of all the theological tea-tables of the town. People were solemnly warned against him; those who knew little of his doctrines, and less of himself, attacked him openly, with an apparently motiveless bitterness. He had dared to be different from the rest of the world, and that in itself was revolutionary. He was called neologian, socialist, sceptic; all the cruel armoury of fanaticism, and especially the weapon of blind terror, was used against him." The manifold antagonism which Mr. Robertson had to encounter acted disastrously upon a constitution which had always been delicate; and his death, accelerated by the almost reckless abandonment to the fervid and continuing energy of his devotion to the duties—especially to preaching, which he "hated"—of a profession which he did not choose, took place on the 15th of August, 1853. He was interred in the New Cemetery, Brighton; and the procession upon the occasion partook of the dimensions of a public rather than a private funeral. More than two thousand persons assisted at the ceremony, and comprised the members of various incorporated societies; whilst a number of the clergy of Brighton met the hearse upon its arrival at the cemetery.

Mr. Robertson's continual effort was to bring into clear light the living spirit of dogmas, forms, and even of errors; which of itself marks the positive character of his teaching. He insisted imperatively on the historical reality of the life of Christ, holding that Christianity itself would be lost with the loss of the facts of the incarnation, the childhood, the temptation, the daily life, the miracles, the death, and the resurrection of Jesus. He rested on a life, rather than on a system. He did not deny the necessity of a system of theology; but what he did deny was the necessary permanence of any system. Christianity was founded on a life, the spirit of which was infinite and capable of infinite expansion. It would, therefore, be necessarily born again and again under new forms, conditioned by the character and thought of the several countries and ages in which it existed.

Mr. Robertson's works include 'Two Lectures on the Influence of Poetry on the Working Classes,' 12mo, Brighton, 1852, second edition, 8vo, 1853; 'Lectures and Addresses on Literary and Social Topics,' 8vo, London, 1858; 'Analysis of

Mr. Tennyson's "In Memoriam," 16mo, London, 1862; 'Sermons preached at Trinity Chapel, Brighton,' 8vo, London and Edinburgh, 1855, eleventh edition, 1863, American edition 12mo, Boston, 1857, new edition, 1866; 'Sermons,' &c., second series, 8vo, London, 1855, tenth edition, 1864, and others, American edition, 12mo, Boston, 1858, new edition, 1866; 'Sermons,' &c., third series, 8vo, London, 1857, tenth edition, 1864, new edition, 1868, American edition, 12mo, Boston, 1858, new edition, 1866; 'Sermons,' &c., fourth series, 8vo, London, 1863, new edition, 1868, American edition, published as "fifth series," 12mo, Boston, 1864, new edition, 1866; 'Sermons,' &c., "new popular edition, with memoir and portrait," 2 vols. 12mo, Boston, U. S., 1870; and 'Expository Lectures on St. Paul's Epistles to the Corinthians: delivered at Trinity Chapel, Brighton,' 8vo, London, 1859, new edition, 1868, American edition, in which it is reckoned as the "fourth series" of the 'Sermons,' &c., 12mo, Boston, 1860, new edition, 1866. Robertson's 'Life and Letters,' 2 vols. 8vo, London, 1865, new (fifth) edition, one volume, 8vo, London, 1868, has attained a large amount of favour and circulation. It was published under the care of the Rev. Stopford A. Brooke, who combined the duties of author and editor.

* ROBIN, CHARLES PHILIPPE, French physician and histologist, was born at Jasseron, Ain department, June 4, 1821. He passed through the regular course of medical study and in 1844 he received a prize from the 'École pratique de Médecine.' In 1845 Orfila the eminent toxicologist sent Robin and Lebert to Normandy and Jersey to collect specimens of marine life, for the purpose of making additions to the museum which he had founded in connection with the school of practical medicine, of which he was one of the professors. In 1846, Robin received his degree of doctor of medicine, and in 1847, that of doctor of science, as also a professorship in the Parisian medical faculty. In 1862 a chair of histology was formed in the same faculty, and he was the first to fill it. He is a member of the Academy of Sciences of France, as also of many other societies in France and other European countries. He has written much on anatomy and more especially on those branches in which the microscope is requisite as an instrument of investigation. His special study, one in which he is the principal pioneer, has been the determining the normal and abnormal conditions, development, and structure of animal tissues and humours, more especially as revealed by the application of chemical re-agents. As a teacher he has had signal success. His researches on the vegetable parasites of animals are published in his 'Histoire naturelle des végétaux parasites qui croissent sur l'homme et les animaux vivants,' 8vo, Paris, 1853; and a general outline of them is given under ENTOPHYTA, E. C. NAT. HIST. Div. vol. ii. col. 564. Of his other works, the more noteworthy are his thesis on fermentation; 'Traité de chimie anatomique et physiologique, normale ou pathologique, ou des principes immédiats normaux ou morbides qui constituent le corps de l'homme et des mammifères,' 3 vols. 4to, 1852, in which Verdel was his coadjutor; 'Leçons sur les substances amorphes et les blastèmes,' 18mo, 1866; 'Leçons sur les substances organisées et leurs altérations,' 18mo, 1866; 'Leçons sur les humeurs normales et morbides du corps de l'homme,' 8vo, 1867; 'Leçons sur les vaisseaux capillaires et l'inflammation,' 18mo, 1867; 'Anatomie microscopique,' 8vo, 1868; and 'Programme du Cours d'Histologie professé à la Faculté de Médecine de Paris,' second edition, 1870. He has also edited, in conjunction with M. Littré, the later editions of Nysten's 'Dictionnaire de Médecine.'

ROBINSON, JOHN HENRY, R.A. [E. C. vol. v. col. 123]. Under the altered constitution of the Royal Academy, this eminent line engraver was elected an academician in 1867. But before this he had ceased to employ his burin, he having, in 1862, published his latest plate of importance, a fine rendering of Vandyck's famous portrait of the 'Countess of Bedford.' Mr. Robinson's last years were spent at Petworth in Sussex, where he died on the 21st of October, 1871, at the age of seventy-five.

* ROCHEFORT, VICTOR HENRI, generally known as HENRI, MARQUIS DE ROCHEFORT-LUCAY, a French journalist, vaudevilliste, and politician, son of the lately deceased Marquis Claude Louis Marie de Rochefort-Lucay, also known as a dramatic author, was born at Paris, on the 30th of January, 1830, and was educated at the Collège Saint-Louis, where he was early distinguished for his gifts in poetical composition, and especially for a hymn which he wrote in honour of the Virgin. On the 1st of January, 1851, he became a clerk (expéditionnaire) in the bureaux of the Hôtel de Ville; and having gained considerable reputation by the literary results of his leisure, and parti-

cularly by his contributions to the 'Charivari,' received the appointment of sub-inspector to the fine arts for the city of Paris, which he resigned in 1861. Devoting himself entirely to literature, he became connected, more or less closely, with different journals, and became at length the editor of the daily 'Figaro,' the character of which changed in his hands from non-political satire to the bitterest irony against the Imperial régime. His contributions to 'Figaro,' the audacity of which made the severance of his connection with that journal necessary, were collectively published as 'Les Français de la Décadence,' in three series, 18mo, Paris, 1866-68, the second and third series of which bore respectively the titles of 'La Grande Bohème' and 'Les Signes du Temps,' and the earlier series of which had in 1868 reached a fifth edition. Separated from the 'Figaro,' M. Rochefort at once founded a weekly journal called 'La Lanterne,' the first number of which, June 1st, 1868, attained on the day of its issue a circulation of eighty thousand copies, a figure which was maintained by its successors, besides a continual demand for back numbers. The articles of 'La Lanterne,' the wonderful success of which called forth a crowd of journals with analogous titles, were written exclusively, or all but exclusively, by Rochefort himself, and were conceived in a spirit of extreme and bitter hostility to the Imperial government. The eleventh number was seized, and its author summoned before the tribunals, and sentenced, August 13, 1868, to a twelvemonth's imprisonment, to a fine of 10,000 francs, and to the deprivation of all civil and political rights; and the like penalties were decreed to follow any subsequent issue. For an assault on a printer who had published an alleged libel against him, M. Rochefort was about the same time sentenced to four months' imprisonment; and in order to evade the effects of these two convictions, an account of which was published with the title of 'Rochefort devant les Tribunaux,' &c., 8vo, Paris, 1868, he escaped to Brussels, where he continued the publication of 'La Lanterne,' which obtained a surreptitious circulation in France, and was scattered nearly all over Europe, both in the original French, and in English, German, Spanish, and Italian translations. Rochefort dropped the publication of 'La Lanterne' after he had produced about fifty numbers; and, presuming on the amnesty granted to political offenders in honour of the centenary of the birth of the Emperor Napoleon I., August 15, 1869, returned in November to France, where he had been named as a candidate in two of the electoral circumscriptions of the capital, for one of which he was returned. On his way to Paris, however, he was arrested and detained for a short time at the frontier, but was allowed to proceed under a safe-conduct granted by the Emperor. Professing himself the delegate and mouth-piece of his constituents, he took their votes for the selection of a manager and staff of a journal which he established with the title of 'La Marseillaise,' of which he became chief editor, counting among his collaborateurs MM. Flourens and Victor Noir. The death of the latter at the hands of Prince Pierre Bonaparte on the 10th of January, 1870, at Autenil, caused an extreme agitation, in which M. Rochefort was a prominent figure; and on Wednesday, January 12, the day of Noir's funeral, when about a hundred thousand persons marched to Neuilly to swell the procession to the grave, and when M. Flourens wished to have the hearse driven, at all hazards of murder and insurrection, into Paris, Rochefort—whose courage had been proved by the four duels in which the amenities of journalism had involved him—lacking the will or the nerve to take advantage of a promising opportunity of revolution, recommended to the excited multitudes the preservation of peace and order. Yet for an incendiary article which appeared in 'La Marseillaise' of the same day, he became obnoxious to a government prosecution authorised by the Chamber of which he was a member; and, having been cited before the Correctional Tribunal on the 22nd of January, was condemned by default to pay a fine of 3000 francs, and to undergo a term of imprisonment. He was arrested on the evening of the 7th of February, when on his way to preside over one of the popular meetings which he had organised, and was committed to Ste. Pélagie; from which, on the 4th of September following, the day of the overthrow of the Empire, he was "carried by the crowd" to the Hôtel de Ville, to become a member of the Government of Defence, of which General Trochu assumed the presidency. According to the testimony of the latter, Rochefort was for eight weeks "very actively engaged in the defence, without any apparent personal ambition, more moderate than his notoriety had given cause to expect, and a supporter of several measures of a conservative character" initiated by the General. Rochefort resigned office

on the 1st of November, stating that, in consequence of the events that had occurred, he could not follow the Government in the course upon which it had entered; that course being, according to General Trochu, "a struggle with the democracy the arrest of whose leaders had been determined upon." The chief circumstances in the later career of M. Rochefort may be most conveniently examined in the light of the proceedings of the third Conseil de Guerre, commissioned at Versailles for the trial of the Communist prisoners; and which on the evening of the 21st of September, 1871, after two days' trial, sentenced him to *déportation dans une enceinte fortifiée*, being the maximum of punishment demanded by the prosecution. The main charges against him were for incitement, not for participation; and his pen, as wielded in the 'Mot d'Ordre,' was held more or less responsible for nearly all the misdeeds of the Commune, from the destruction of M. Thiers' house to the assassination of the hostages. His defence consisted chiefly in pleading good character and past services. In order to prevent agitation or discord calculated to weaken the defence of Paris, he claimed to have voluntarily suppressed, just before the siege, 'La Marseillaise,' in which, without his knowledge, an attack had appeared on General Trochu, although that journal was bringing him in from 18,000 to 20,000 francs a month, and he had no other private means of support. He had given many other proofs of patriotic disinterestedness; in spite of which, on account of a single article—too strongly worded, perhaps, but substantially harmless—the Government suppressed his paper, the 'Mot d'Ordre,' which had succeeded 'La Marseillaise,' and thus deprived him of his livelihood. A few days after came the March insurrection, for which, as for nearly all the other misfortunes of France, the prosecution held him responsible, although when it occurred he was lying dangerously ill; and when, on his recovery, he came to Paris, he found a Government *de facto* existing there, with the creation of which he had had nothing to do, and which he merely recognised as a journalist—a public writer, professionally criticising and often blaming its acts. He was simply, he pleaded, a journalist under the Commune, not a politician or man of action in the Commune. So far was he, even as a journalist, from being its uncompromising supporter, that its avowed organs fiercely denounced him as "reactionary," and in the end he was obliged to save himself from prosecution at the hands of the Commune by flight. But various passages taken almost at random from numbers of the 'Mot d'Ordre,' the responsibility of which he could not evade, were fatal to his defence; and after a deliberation of between two and three hours, the Court, whilst acquitting him of inciting to the destruction of the Colonne Vendôme, and to the pillage of the Church Notre Dame des Victoires, found him guilty of inciting to civil war; of inciting to the destruction of M. Thiers' house; of inciting to the damage of the Chapelle Expiatoire; of publishing a journal suppressed by the Government; of publishing false news with deliberate intent to disturb the public peace; and of offences against the Chief of the Government and against the National Assembly. The sentence pronounced upon M. Rochefort has been already mentioned; it remains to be seen to what extent, if any, it may be modified, in answer to applications already (December, 1871) made, or to be made, for that purpose. He is said to have made some progress, since his incarceration, in a work on the life and career of the Emperor Napoleon III.

ROCHETTE, DESIRÉ RAOUL, called RAOUL-ROCHETTE, French archæologist, was born March the 9th, 1790, at Saint Amand in the department of Cher. He received his education at Bourges; in 1811 went to Paris and was appointed professor of history at the Lycée Impérial; in 1813 received the prize of the Académie des Inscriptions for a 'Histoire critique des Colonies grecques,' and in 1815 became suppléant to M. Guizot in the chair of modern history in the Faculté des Lettres. On the restoration M. Rochette was named by royal ordonnance member of the Académie des Inscriptions, and his polished and courtier-like manners, strong royalist opinions, reputation for learning, and pleasing elocution smoothed the way to great social success despite the hard criticisms of several of the leading scholars of France and Germany. He was appointed in 1816 editor of the 'Journal des Savants,' in 1818 keeper of medals and of the antiquities at the Bibliothèque; in 1820 censeur royal, an office he retained till the abolition of the censorship in 1824; in 1826 suppléant and in 1828 titular professor of archæology, when he delivered several courses of lectures which drew crowds of fashionable auditors; the 'Lectures on Ancient Art,' published at Paris in 1828, &c., were translated into English by Mr. H. M. Westrop, 8vo, 1854. In 1826-27 he was sent

on a mission to Italy and Sicily; and he published the results of his archaeological investigations, in 'Monuments inédits d'Antiquité figurée, grecque, étrusque et romaine, recueillis pendant un voyage en Italie et en Sicile, dans les années 1826 et 1827,' large folio, Paris, 1833, &c.; 'Choix de Peintures de Pompéi, la plupart de sujets historiques, publiées avec l'explication et une introduction sur l'histoire de la peinture chez les Grecs et les Romains,' large folio, Paris, 1838—44; and 'Peintures antiques inédites, précédées de recherches sur l'emploi de la peinture dans la décoration des édifices sacrés et publics chez les Grecs et chez les Romains,' 4to, Paris, 1836, which was commented on by M. Letronne in 'Lettres d'un Antiquaire à un Artiste sur l'emploi de la peinture historique murale dans la décoration des temples et des autres édifices publics ou particuliers chez les Grecs et chez les Romains. Ouvrage pouvant servir de suite et de supplément à tous ceux qui traitent de l'histoire de l'art dans l'antiquité,' 8vo, Paris, 1836; 'Appendice,' 1837. In 1836, M. Raoul-Rochette was elected perpetual secretary of the Académie des Beaux-Arts. Honours continued to shower on him. He was elected a member of almost every academy in Europe, and received numerous orders—indeed, so loaded was his button hole with decorations that his colleagues at the Institute named him Raoul-Brochette, and even the provisional government of 1848 did not go further than to take away one of his offices, that of keeper of the medals. He died at Paris, July 3rd, 1854. Besides the works named above he published many other books, of which the most important are 'Tableau des Catacombes de Rome,' 12mo, Paris, 1837; 'Sur les Antiquités chrétiennes des Catacombes,' 4to, Paris, 1839; 'Lettres archéologiques sur la Peinture des Grecs,' 8vo, Paris, 1840; 'Mémoires de Numismatique et d'Antiquité,' 4to, Paris, 1840; 'Mémoires d'Archéologie comparée, asiatique, grecque et étrusque,' part i., 1848. He also contributed numerous papers to the Academy and other learned bodies; and it was his intention to remodel much of what he had written and embody therewith the results of his various studies and travels in Greece and Italy into an exhaustive 'History of Ancient Art,' but his purpose was never accomplished. M. Rochette's erudition was wide but superficial, but his works contain much valuable matter, and are written in a clear and readable style.

ROCK, DANIEL, D.D., a Roman Catholic divine and archaeologist, was born at Liverpool in the year 1798, and was educated successively at Old Hall, Hertfordshire, and at the English College at Rome. After serving the mission in London for two years, he was appointed domestic chaplain to the Earl of Shrewsbury in 1827, and in 1840 assumed the charge of the Roman Catholic congregation at Buckland, near Faringdon, Berkshire, which he resigned in 1854, in order the more effectively to fulfil the duties of a canon of Southwark, to which office he was preferred after the re-establishment of the Romish hierarchy in England, in 1852.

Dr. Rock's reputation rests mainly upon his 'Hierurgia,' &c., 2 vols. 8vo, London, 1833, the more extended title of the second edition of which, 8vo, London, 1851, will sufficiently explain its scope and purpose:—'Hierurgia: or, Transubstantiation, Invocation of Saints, Relics, and Purgatory, besides those other Articles of Doctrine set forth in the Holy Sacrifice of the Mass, expounded; and the Use of Holy Water, Incense, and Images, the Ceremonies, Vestments, and Ritual employed in its Celebration among the Latins, Greeks, and Orientals. Illustrated from Paintings, Sculptures, and Inscriptions found in the Roman Catacombs, or belonging to the earliest Ages of the Faith.' He has also written a polemical brochure entitled 'Did the early Church in Ireland acknowledge the Pope's Supremacy? Answered in a Letter to Lord John Manners,' 8vo, London, 1844, which gave rise to a slight controversy and one or two Protestant disclaimers; 'The Church of our Fathers, as seen in St. Osmund's Rite for the Cathedral of Salisbury: with Dissertations on the Belief and Ritual in England before and after the Coming of the Normans,' 3 vols. 8vo, London, 1849—53; a poetical production, entitled 'The Mystic Crown of Mary, the Holy Maiden Mother of God, born free from the Stain of Original Sin,' 8vo, London, 1857; 'The Action of the Church upon Art and Civilisation, shown in the high Altar in the Church of St. Ambrose at Milan,' &c., an article contributed to the volume produced by various writers, and edited by Dr. Manning, with the title of 'Essays on Religion and Literature,' 8vo, London, 1865; and 'Textile Fabrics: a descriptive Catalogue of the Collection of Church Vestments, Dresses, Silk Stuffs, Needlework, and Tapestries, forming that Section of the [South Kensington] Museum,' 8vo, London, 1870, a production which followed as a

natural sequence to the functions performed by Dr. Rock, in 1862, as a member of the Committee appointed to carry out the objects of the South Kensington "Special Exhibition of Works of Art on Loan, chiefly of the Mediæval Period." He died at his residence, Kensington, on the 28th of November, 1871, aged 73.

RODE, CHRISTIAN BERNARD, German painter, was born July 18th, 1725, at Berlin, and studied there under A. Pesne, and at Paris under C. Vanloo and J. Restout. After visiting Italy, he returned to Berlin, and became the favourite painter of Frederick the Great, who employed him to paint the palaces of Sans Souci and Potsdam, and various altar pieces for churches. Rode was in his day extremely popular as a painter of historical and religious subjects, but his manner was slight and superficial, and out of Berlin he is now held in little estimation. He executed about one hundred and fifty etchings. Nagler gives a list of his pictures and prints. He was director of the Berlin Academy and died in that city, June 24th, 1797.

ROGERS, HENRY DARWIN, geologist, and one of four brothers, all of whom acquired more or less distinction in science. He was born at Philadelphia in 1809, but belonged to a family of Scotch origin. When only twenty-one he was professor of chemistry and natural philosophy in Dickinson College, Pennsylvania, and continued to be so for some years. After a visit to Europe he returned to the United States as State geologist for Pennsylvania and New Jersey. From 1836 to 1841 he, in a series of annual reports, gave an outline of the progress of the survey, but in 1858 appeared his final report, which was the great work of his life, and to which he had devoted twenty-two years. This final report occupies three thick quarto volumes profusely illustrated. It deals with a very large area of country, and explains the peculiar features of the great Appalachian chain of mountains. The minute details and many of the broader views enunciated in this work are exceedingly valuable, but unfortunately its usefulness has been sensibly impaired by a fanciful stratigraphical nomenclature which has not passed into the ordinary currency of geological literature. In 1857 he accepted the professorship of natural history and geology at Glasgow, and he still held the post when he died, May 29, 1866. Professor Rogers was an enthusiastic scientific enquirer, and a very eloquent speaker. He wrote a large number of papers, chiefly geological, in the scientific periodicals of England and America.

ROGERS, JOHN, an English divine, and the first Marian martyr, son of John Rogers, of Deritend, Birmingham, was born at that place about the year 1509; and was educated at Pembroke Hall, Cambridge, where he took his B.A. degree in 1526. Having been admitted to holy orders, he was appointed chaplain to the Company of English Merchant Adventurers at Antwerp; where, as the result of an intimacy which he contracted with Tyndal and Coverdale, he embraced their Protestant opinions. Under the assumed name of Thomas Matthew, he published, in July, 1537, an English translation of 'The Byble, which is all the Holy Scripture: in which are contained the Olde and Newe Testament truly and purely translated into English by Tho. Matthew,' folio, 1537, the place of the issue of which has not been ascertained. Rogers was the superintendent and corrector of the press; and for the most part adopted Tyndal's translation of the Old Testament as far as the end of the Second of Chronicles, and the whole of the New Testament, with an occasional variation only in the orthography. With regard to the rest of the Old Testament, it seems to have been founded upon a critical reading and examination of Coverdale's version, whilst the translation of the Apocrypha, in whole or in part, was the work of Rogers himself. In the same year, 1537, Rogers married, and soon afterwards left Antwerp for Wittenberg, where he became pastor of a church or congregation. Here he continued until the accession of Edward VI., after which he returned to England, where he acquired the reputation of great ability and eloquence as a preacher, and was appointed to the Rectory of St. Margaret Moyses, in London, and to the vicarage of St. Sepulchre's in the same city on the 10th of May, 1550. He resigned the former of these preferments about the time when he was collated, August 24, 1551, to the prebend of St. Pancras in St. Paul's Cathedral, in which church he was appointed by the dean and chapter to be a reader in divinity. He had to defend himself before the Privy Council for his denunciation of the sacrilegious designs and proceedings of some of the young king's courtiers in a sermon which he preached at St. Paul's Cross; at which place he had the hardihood to deliver a discourse on Sunday, August 6, 1553, three days after the triumphal entry of Queen Mary into London, in which he exhorted the people to abide by the doctrine taught

in the time of King Edward, and to beware of popery in all its forms and superstitions. For this offence he was immediately summoned before the Privy Council, in which were many of the restored Romish bishops; but he defended himself with such wit and wisdom that he was for that time dismissed unhurt. His security, however, was of short duration; for on the 16th of the same month, two days before the issue of the Queen's proclamation against preaching the Reformed doctrines, he was again cited before the Privy Council, who ordered him to confine himself as a prisoner in his own house at St. Paul's, without communication with any one but the members of his household. He was committed to Newgate on the 27th of January, 1554; and having been detained there until January, 1555, was called upon to undergo three examinations before Gardiner, Bishop of Winchester, of which Fox the martyrologist has furnished an interesting account. The trial resulted in the conviction of the accused for the crimes of heretical pravity and execrable doctrine; for his persistence in which he was degraded from his ministerial orders by the hands of Bishop Bonner, in Newgate, and was afterwards delivered over to the secular power. On the 4th of February, 1555, he suffered death at the stake, in Smithfield, whither he proceeded, chanting the fifty-first psalm, through an immense and sympathising crowd, amongst whom he had the agony of seeing his wife and his eleven children, one of whom was an infant at the breast, and whose visits had been forbidden to him whilst he was in prison. But nothing sufficed to shake the constancy and determination of his soul, and he refused at the last moment to purchase his life by recantation; thus worthily sustaining the honour of being the proto-martyr of the Marian persecution, from whom several families in England and America are proud to claim descent, and to celebrate the day of his passion in devout commemoration. 'The Story, Life, Admonition, and Martyrdom of John Rogers, Prebendary of St. Paul's, and the first Martyr in the Reign of Queen Mary, A.D. 1555,' forms part of a volume entitled 'Writings of Rogers, Saunders, Taylor, and Careless, Confessors and Martyrs, A.D. 1555—1556,' 8vo, London, forming one of a series published by the Religious Tract Society.

Besides the translation of the Bible already mentioned, several works have been referred to Mr. Rogers as their author. These include 'Historia a condito Mundo,' 'Indices Bibliorum,' 'Conciones per Annum,' 'In Evangelium Johannis,' 'Lectiones in Paulum. Libri IV.,' 'Letters,' 'Examinations before Stephen Gardiner,' and English translations of Melancthon's 'Homilies,' 'Common Places,' and 'Commentary on the Book of Daniel,' as well as of the same author's 'Waying and Considering of the *Interim*,' 8vo, London, 1548.

ROGET, PETER MARK, M.D. [E. C. vol. v. col. 133]. In his later years Dr. Roget gave considerable attention to a classified arrangement of words and phrases in the English language, with a view to facilitate composition. The idea was first conceived somewhere about the beginning of the present century, and was carried out, partially, from time to time, but it was not until 1852 that the work appeared as a 'Thesaurus of English Words and Phrases,' since which it has passed through numerous editions. He died September 12, 1869.

* ROGIER, CHARLES, a Belgian statesman of French origin, was born at Saint-Quentin, on the 12th of August, 1800, and was educated at Liège; where, after the prosecution of the requisite study of law, he took a doctorate in that faculty. He became editor and co-proprietor of the 'Politique,' a journal to which he contributed a remarkable and popular series of letters entitled 'Lettres d'un Bourgeois de Saint-Martin.' Always a warm advocate of Belgian independence as opposed to the domination of Holland, he took a prominent part, at once enterprising and moderate, in the Revolution of 1830, which ended in October of that year in the proclamation of the independence of the Belgian provinces by the provisional government of which he was a member. In June, 1831, he was appointed Governor of Antwerp, and held this position till July, 1832, in which year he became Minister of the Interior, and signalled his term of office, which continued until 1835, by the activity with which he endeavoured to develop and extend the commerce and industry of the country. In 1835 he entered upon a five years' incumbency of the governorship of the province of Antwerp, in which office he continued his efforts for the advancement of commerce and agriculture; and in 1840, after the dissolution of the retrograde Theux cabinet, took office in the Liberal administration of his friend M. Lebeau, as Minister of Public Works. He resigned in 1841, and for a period of six years acted as one of the leaders of the opposition against the successive administrations of M.

Nothomb, 1841—1846, and M. Theux, 1846—1847, whose policy it was to encourage the supremacy of the clerical party. M. Rogier was again summoned to office in August, 1847, and, after having successfully administered the departments of the Interior and of War through all the difficulties and dangers of the revolutionary year 1848, resigned office on the 31st of October, 1852; and, after a vacation of eight years, assumed in 1861 the Presidency of the Council and the Ministry of Foreign Affairs, from which he retired in 1868.

M. Rogier has distinguished at once his liberalism and his literary culture by the production of '*Mémoires de Don Juan van Halen, écrits sous les Yeux de l'Auteur*,' 2 vols. 8vo, Brussels, 1827.

* ROHLFS, GERHARD, traveller in Africa, was born at Vegesack near Bremen, April 14, 1834. In 1848 he was compelled to enter the army, and he served in the Schleswig-Holstein campaign with so much distinction that he was made an officer. In 1849 he commenced his collegiate studies, which were pursued at Heidelberg, Würzburg, and Göttingen; afterwards travelled in various parts of Europe; and then entered into the French army in Algiers. His residence here enabled him to acquire the Arabic language and to adapt himself to Arabian customs. In 1861 he disguised himself as a Mussulman, and commenced his travels in North Africa. He crossed the Atlas Mountains, worked his way through Morocco, and penetrated into the desert of Sahara as far as Toccat and Tidikelt. His return was effected by way of Ghadamis and Tripoli. This journey carried him through a wide tract of country not previously visited by Europeans; and it was effected at considerable risk, since no Christian would have been knowingly allowed to pass, while he was not only alone amongst the natives, but his means were so slender as to compel him to use the utmost economy. During eighteen months he kept his travelling expenses down to 80*l*. He published an account of this journey under the title of '*Reise durch Marokko . . . und . . . durch die grosse Wüste über Rhadames nach Tripoli*,' 8vo, Bremen, 1868. In 1865 he again essayed to penetrate into Central Africa, with the object of visiting the kingdom of Wadai for the purpose of recovering the lost papers of Vogel. On this occasion a considerable sum was subscribed for him, both in England and Germany. He reached Murzuk in November, 1865. In 1866 he was detained at Schimmedru, and occupied his forced leisure in mapping from native information the mountainous country about Tibesti, of which scarcely anything was known. In August he reached Kuka, on the shores of Lake Tchad. From here he vainly attempted to get access into Wadai, so was obliged to make his way south-westward to Lagos in the Bight of Benin. This journey, though more extensive than the previous one did not add so much to geographical science, as it was mostly along caravan routes which had been followed by Denham, Clapperton and several other Europeans. The scientific results of his journeys have been published in Petermann's '*Mittheilungen*.' In 1868 the patron's medal of the Royal Geographical Society was awarded him. He has also written '*Neueste Nachrichten aus den Inneren Afrikas*,' 4to, Gotha, 1867; '*Im Auftrage Sr. Majestät des Königs von Preussen mit dem Englischen Expeditionscorps in Abessinien*,' 8vo, Bremen, 1869; '*Land und Volk in Afrika*,' 8vo, Bremen, 1870.

* ROLLESTON, GEORGE, biologist, was educated at Pembroke College, Oxford, where he graduated first-class in Literis Humanioribus in 1850, and subsequently took the degree of M.D. He was elected Fellow of Pembroke in 1850, and in 1860 became the Linacre professor of anatomy and physiology in the University, a post which he still holds. He is an excellent teacher and he has obtained the reputation of being one of the foremost of the anatomists of this country, a reputation based upon an unusually wide range of knowledge of biological literature, high classical attainments, remarkable terseness of language, and an independence of character which urges him to oppose all dogmas supported by mere authority or popular ignorance. Although very few individuals surpass him in personal knowledge of anatomical and physiological structure, he has written few works of importance. His contributions to literature have consisted almost entirely of isolated papers, many of which are valuable. Some of these have an antiquarian character, such as those on the animals domesticated by the ancients, and called cats, which in several instances belonged to other species than *Felis domestica*; on ancient modes of burial, and other subjects. His principal separate work is entitled '*Forms of Life*,' 8vo, Oxford, 1870. It is essentially a book for students at Oxford. It consists of an introduction forming nearly half the volume,

which is noticeable mainly on account of the summaries given of the principal characteristics of each class of animals. The summaries are confined to the class groups and only incidentally relate to the larger sub-divisions into which each class may be separated. The body of the book is for the most part a descriptive catalogue of the anatomical specimens in the Oxford Museum, the species selected being those which are most readily obtainable. Each class is illustrated by one or two species only. The book is full of matter, although its plan is very condensed. It is possibly the forerunner of works of a wider scope, which will afford a better opportunity of exhibiting the real depth and extent of Professor Rolleston's knowledge. He was the president of the biological section of the British Association at its meeting in Edinburgh in 1871. He is a fellow of the Royal Society, and a member of many other societies.

ROMANI, GIROLAMO, called **IL ROMANINO**, was born at Brescia, about 1480. He was a pupil of Stefano Rizzi; but moulded his style on that of Giorgione and Titian, and became known as the rival of Moretto, to whom he was preferred by many, though Moretto was undoubtedly the better portrait painter. Romanino's pictures exhibit a lively imagination, deep feeling, and much technical skill. One of his finest extant works is a 'Dead Christ with Mourning Disciples,' in the Manfrini Palace, Venice. The National Gallery contains a large and excellent example (No. 297), 'The Nativity,' painted in 1525 for the high altar of the church of Sant' Alessandro at Brescia. Romanino's earliest known picture was painted in 1502, the latest in 1541. He died about 1560.

RONDELET, JEAN, French architect, was born at Lyons, June 4th, 1734. After completing his general education in the college of the Jesuits, he became the scholar and afterwards assistant to the court architect Soufflot. He was superintending the erection of the Church of St. Gèneviève, named afterwards the Pantheon, for Soufflot, at the death of the latter in 1781, and he was entrusted with its completion. The dome is attributed entirely to Rondelet, who published a memoir on its construction; but its weight caused a sinking in the building, and Rondelet had to alter materially the internal arrangements of the church. In 1783, during a suspension of the works, Rondelet visited Italy under the auspices of his government. He stayed there two years, and digested his studies and investigations into a 'Traité Théorique et Pratique de l'Art de Bâtir,' 5 vols. 4to, Paris, 1802—17—a work which was speedily accepted as an authority, and of which a seventh edition was called for in 1834. In 1794 Rondelet was appointed superintendent of the royal buildings, and in that capacity directed most of the public works executed during the next two years. He was engaged in the formation of the Ecole Polytechnique, and organised the arrangements for the study of civil engineering and the schools of applied sciences. Rondelet was one of the members of the Ecole des Beaux-Arts, nominated at the remodelling of the Institute in 1816. He became quite blind some years before his death, which occurred on the 25th of September, 1829. Besides the works above mentioned, Rondelet contributed many articles on architecture to the 'Encyclopédie Méthodique,' and wrote a 'Mémoire sur la reconstruction de la Halle au Blé de Paris,' 4to, 1803; and other professional memoirs.

* **ROON, ALBRECHT THEODOR EMIL, GRAF VON**, a Prussian soldier and military administrator, was born in Pomerania, on the 30th of April, 1803; and, after having passed five years as a cadet, received his first commission in the army in January, 1821. He devoted himself from 1824 to 1827 to the study of the higher branches of his profession; and in 1828 was appointed governor of the cadet-institution at Berlin, where he also gave instruction in military science. His tutorial avocations did not prevent him from taking his share in the more active duties of his profession. He served in the field during the Belgian campaign of observation in 1832, and on the occasion of the siege of Antwerp was a member of the topographic service; and, having received a staff appointment, became captain in 1836, and major in 1842. In 1844 he was entrusted with the scientific and military education of Prince Frederick Charles, whom he attended at the University of Bonn, and afterwards accompanied in his travels in Switzerland, Italy, France, and Belgium. After filling various intermediate grades, he was promoted to be lieutenant-general in May, 1859; and it fell to him to undertake the mobilisation of the Prussian army, when that step became necessary on account of the war of Italian independence which was abruptly concluded by the peace of Villafranca. On the 16th of April, 1861, General von Roon was appointed to the Ministry of Marine, to which office was added,

on the 5th of December following, that of Minister of War. In spite of the budget contest into which King William I. had entered with the Chambers in 1862, and the necessity of dissolving the latter on account of their refusal to sanction the extraordinary amount asked for the re-organisation of the army, General von Roon, with the king's sanction, determined that the army should be put into a state of efficiency, at whatever cost. This resolution he carried out so thoroughly that when, in 1866, his preparations were seconded by the admirable strategical arrangements of Von Moltke, and the political foresight and promptness of Von Bismarck, the war against Austria was limited to a short campaign, which commenced in June and virtually terminated on the 3rd of July, with the splendid victory of Sadowa. Von Roon had remained in the capital until the 30th of June, when he left for the seat of war, in the suite of the king, with whom, and with the generals who had directed the campaign, he made a triumphant entry into Berlin, on the 20th of September, and was entertained at a grand dinner given jointly in his honour and in honour of Bismarck and Moltke. The same unity of purpose and the same unanimity of sentiment led to a still more splendid, if less rapid, result in the war which broke out between France and Germany in July, 1870. Setting out with the king for the seat of war on the 31st of the last-named month, General von Roon shared the dangers and the successes of various battle-fields; and finally, on the 17th of June, 1871, on which day his services were rewarded with promotion to the rank of Graf, or count, once more rode in triumph through the streets of Berlin, with his colleagues and comrades, and with his sovereign, who in the previous January had added to his dignities the style and title of Emperor of Germany.

ROSA DA TIVOLI. [ROOS, PHILIP PETER, E. C. vol. v. col. 155.]

ROSCOE, THOMAS [E. C. vol. v. col. 158], died at his house, St. John's-wood, London, September 24, 1871, aged 81.

ROSE, HEINRICH [E. C. vol. v. col. 159]. The sixth edition of Rose's 'Handbuch' was published in French at Paris in 1861, and may be regarded as a new work, so thoroughly was it revised, re-written, and enlarged. An enormous amount of labour was expended in the preparation of this volume. He also prepared an 'Elementary Treatise on Analytical Chemistry,' about thirty sheets of which were printed during his lifetime, and which entailed a large amount of laboratory work. His activity and industry increased with advancing age, and for some years his only recreation was a long walk taken late in the evening in all weathers. He was the first in Germany to establish a class of working pupils. He continued to lecture to within eight days of his death, and he was confined to his bed only a week. On the 27th January, 1864, he asked for writing materials to correct some proof sheets, but he died on the afternoon of that day of inflammation of the lungs.

* **ROSECRANS, WILLIAM STARKE**, an American general, was born at Kingston, in the State of Ohio, September 6th, 1819. He entered West Point Military Academy in 1838, graduated in 1842, and in the same year received a commission as brevet second lieutenant of engineers. In the academy he afterwards occupied the posts of assistant professor of engineering and professor of natural philosophy. Resigning his commission in 1854, he established himself at Cincinnati as an architect and civil engineer, and also engaged in the manufacture of kerosene oil. When the civil war broke out in 1861 he entered the Federal army as aide-de-camp and chief engineer to General McClellan, and was soon afterwards placed in command of a force in Western Virginia, with the title of brigadier-general. In 1862 he was promoted to the rank of major-general, and succeeded General Pope in the command of one wing of General Grant's army, occupying the border regions of Alabama and Mississippi. He defeated the Confederates under General Price at Juka, in September, and in the following month fought the severe battle of Corinth, in which the Confederates lost 9000 men in killed, wounded, and prisoners. In 1863 Rosecrans commanded an army in Tennessee. The Confederates in that State were believed to have been weakened by dividing their forces, and the Government at Washington urged him to take advantage of the opportunity to drive General Bragg out of Tennessee. This was effected in July sufficiently to recover a portion of the State and to protect Kentucky; but in September and October, Bragg, with augmented forces, gained advantages at Chattanooga and Chickamauga, which led to the temporary supersession of the Federal commander. In 1864 General Rosecrans commanded an army in Missouri, but was not again concerned in the more active operations of the war.

In 1868—9 he filled the post of United States Minister at Mexico.

* ROSNY, LÉON DE, a distinguished French orientalist, son of the archaeologist, M. Lucien de Rosny, was born at Loos (Nord) on the 5th of August, 1837; and, having early begun to manifest a determination to the study of Eastern literature, became, in 1852, a pupil at the *École des Langues orientales*. He was subsequently appointed professor of Japanese at the *Bibliothèque Impériale*; and in May, 1863, was commissioned by the Minister of Foreign Affairs to officiate as interpreter to the Japanese ambassadors then on a visit to Paris, and whom he accompanied to Holland, England, and Russia. He served as a member of the scientific commission of the *Exposition Universelle* in 1867, and in 1868 was appointed to fill the newly-instituted chair of Japanese literature in the *École spéciale des Langues orientales*. M. de Rosny is a member of various learned societies, to the *Transactions* of which several of his smaller works have been in the first instance contributed; and he is especially to be mentioned as the founder and perpetual secretary of the *Société d'Ethnographie*. The principal of the serials to which his articles have been supplied are—'*Actes de la Société d'Ethnographie*,' '*Revue orientale et américaine*,' '*Journal asiatique*,' '*Bulletin du Grand-Orient de France*,' '*Annales de Philosophie chrétienne*,' '*Revue de l'Orient*,' '*Bulletin de l'Académie impériale des Sciences de Saint-Petersbourg*,' &c. The most important of M. Rosny's works, which have been either re-issued or originally published in a substantive form, comprise an '*Introduction à l'Étude de la Langue japonaise*,' 4to, Paris, 1857; '*Dictionnaire de la Langue japonaise (japonais-français-anglais), précédé d'une Introduction à la Langue japonaise*,' 4to, Paris, first *livraison*, 1857, of which no other instalment has yet been issued; '*Aperçu général des Langues sémitiques et de leur Histoire*,' 8vo, Paris, 1858; '*Mémoire sur la Chronologie japonaise, précédé d'un Aperçu des Temps antéhistoriques*,' 8vo, Paris, 1858; '*Les Écritures figuratives et hiéroglyphiques des différents Peuples anciens et modernes*,' 4to, Paris, 1860; '*Notice ethnographique de l'Encyclopédie japonaise Wa-kan-san-sai-dzou-yé*,' 8vo, Paris, 1861; '*Aperçu de la Langue coréenne*,' 8vo, Paris, 1864; '*Dictionnaire des Signes idéographiques de la Chine, avec leur Prononciation usitée en Chine et au Japon, et leur Explication en français, accompagné d'un Vocabulaire des Caractères difficiles à trouver, rangés d'après le Nombre de Traits*,' &c., 3 parts, 8vo, Paris, 1864; and '*Grammaire japonaise, accompagnée d'une Notice sur les différentes Écritures japonaises, d'Exercices de Lecture, et d'un Aperçu du Style sinico-japonais*,' 4to, Paris, second edition, 1865.

ROSS, SIR JAMES CLARK [E. C. vol. v. col. 165], the eminent navigator, and the discoverer of one of the north magnetic poles, died at Aston Abbots House, near Aylesbury, April 3rd, 1862.

ROSS, SIR WILLIAM CHARLES, R.A. [E. C. vol. v. col. 165]. This celebrated miniature painter, after about three years' suffering from paralysis, died on the 20th of January, 1860, in the 66th year of his age.

ROSSE, WILLIAM PARSONS, THIRD EARL OF [E. C. vol. v. col. 166]. During the later years of his life Lord Rosse was prevented by a lingering and painful malady from paying much attention to astronomy. His great telescope continues to be the largest in existence, but adapted only for observations of a special character, for which the humid climate of Ireland is scarcely suited. From 1861 till his death he was chancellor of Trinity College, Dublin. He died at Birr Castle, October 31st, 1867, and was buried in the Church of St. Brandon, Parsonstown.

ROSSELLINO, ANTONIO (but whose family name was GAMBARELLI), an eminent Italian sculptor, was born at Florence about 1427. He was possessed of great ability, was of a devotional turn of mind, and of rare mental and moral qualities. His chisel was in constant employment, especially for monumental sculpture. Among the more celebrated of his works are the monuments to Francesco Nori, in the chapel of Santa Croce; the Cardinal of Portugal, in the monastery of San Miniato—a work which excited great admiration when erected, and which was praised by Michelangelo; several statues of the Madonna; a '*Nativity*,' in the church of Sta. Maria di Monte, Naples; rilievi, fountains, portrait-busts, &c. He died, according to the Florentine editors of Vasari, in 1490.

ROSSELLINO, BERNARDO, elder brother of Antonio, born about 1409, practised architecture with eminent success. He was especially patronised by Pope Nicolas V., who employed him on

many important works. Among other things, he built several costly buildings at Civita Vecchia and Civita Castellana; the fortresses of Orvieto and Narni; rebuilt or restored the Piazza, church, &c., in Fabriano; San Benedetto, in Gualdo; the baths of Viterbo; and built and restored several churches within and outside the walls of Rome. The pontiff designed to carry out far more important and extensive works in connection with the Vatican: the reconstruction of the papal palace on a scale of unequalled magnificence; some new churches within the city; and to rebuild the forty churches of the stations of Pope Gregory I.; and for all these the genius of Bernardo was to be called into requisition. But Nicolas died before his great projects could be even begun, and they were neglected by his successor. Bernardo is, however, said to have been employed by Pius II., for whom he executed various works at Pienza. He also executed several monuments, among others that of Leonardo Bruni, in the church of Santa Croce.

ROSSETTI, DANTE GABRIEL, an English painter, was born in London about 1828. His father was the late G. Rossetti, LL.D., professor of Italian in King's College, London, and known as a commentator on Dante; and under his care young Rossetti received an excellent literary education. His leaning being towards art, he was in due time entered as a student at the Royal Academy, and whilst there originated, in conjunction with his fellow-students, Hunt and Millais, that effort to revive what they considered to be the purer, more earnest, and more devotional practice of art of the early Italian painters, which became so well known as pre-Raphaelism. [HUNT, WILLIAM HOLMAN, and MILLAIS, JOHN EVERET, E. C.] Mr. Rossetti was the leader in this movement, and supported it with his pen in the '*Germ*,' as well as with his pencil; but, from not sending his pictures to the exhibitions, he remained comparatively unknown to the public, though highly esteemed by a circle of warm admirers. On the whole, he appears to have remained most faithful to the original creed. He delights in the symbolical treatment of religious subjects, and retains the dry, quaint forms, intense expression, strong positive colours, and minute finish which characterised his first works. His earliest picture in this manner was '*The Girlhood of the Virgin*,' 1849. He has since painted other subjects from the life of the Madonna, from Scripture, and from the legends of the Saints; a series in water-colours from Dante, others from Spenser, Shakspeare, and Tennyson; in all of which a vein of poetry and refined feeling pervades and underlies the quaint, hard envelope. His more important works include a triptych, painted as a reredos for the high altar of Llandaff cathedral; and the series of Arthurian legends at the Union, Oxford. Mr. Rossetti has also made a few drawings on wood for an illustrated edition of Tennyson's poems, for a volume of verse written by his sister, &c. He has also appeared with distinguished success as an author:—'*The Early Italian Poets*, from Ciuillo d'Alcamo to Dante Alighieri (1100—1200—1300) in the original metres, together with Dante's *Vita Nuova*,' 8vo, 1862, is a work of learning, research, and poetic feeling; and shows a remarkable command of forms of metre unfamiliar to the English language; while '*Poems*,' 8vo, 1870, consists of short original pieces and sonnets, full of striking imagery, fervid, passionate, sensuous, and pictorial; sometimes wilful in structure, and strange in rhythm and rhyme, but often very beautiful.

* ROSSI, GIOVANNI BATTISTA DE, an Italian archaeologist, was born at Rome about the year 1822, and early distinguished himself by his determination to the study of antiquity, which he has in the course of his life pursued with much zeal, intelligence, and success. He is known as a prominent member of the *Commissione Pontificale per la Pubblicazione dei Monumenti Cristiani*, and as an important contributor to the archaeological serials of Rome and Naples. The discoveries of the *Cavaliere de Rossi* have been instrumental in the solution of many difficulties in the earlier ages of Christian Rome, upon the chronology and archives of which they have thrown considerable light; and it is through them that a more orderly and lucid understanding of the catacombs has become attainable. The results of his labours underground, the most remarkable of which has been the discovery of the famous cemetery of St. Callistus, with the tombs of the Bishops of Rome from the time of Alexander Severus to that of Constantine, have been set forth in various works of his production. These include '*Inscriptiones Christianæ Urbis Romæ septimo Sæculo antiquiores*,' folio, Rome, 1867, &c.; '*Buletino di Archeologia Cristiana del Cavaliere Giovanni Battista de Rossi*,' 4to, Rome, 1863, &c.; '*La Roma Sotterranea Cristiana descritta ed illus-*

trata,' 8vo, Rome, 1864, &c., with 'Tavale,' 4to, Rome, 1864, &c., English version, 'Roma Sotterranea: or, Some Account of the Roman Catacombs, especially of the Cemetery of San Callisto. Compiled from the Works of Commendatore de Rossi, by J. S. Northcote and W. R. Brownlow,' &c., 8vo, London and Edinburgh, 1869.

ROSSINI, GIOACCHINO ANTONIO [E. C. vol. v. col. 167]. This famous composer adhered pretty closely to a resolution, made in the prime of life, to publish little more music. He is understood to have assigned, as the reasons for this determination, that he had made a sufficient fortune by his compositions (40 operas between his 20th and 38th years); that he was not likely to rise higher than he had done in 'Il Barbiere' and 'Guillaume Tell'; that it would be unwise to run the risk of failure; and that he thought himself now entitled to pursue music as a source of pleasure rather than of profit and fame. In 1832 appeared his 'Stabat Mater,' in recent years performed more frequently throughout Europe than any other 'Stabat.' 'La Carità,' and a few other sacred trios and choruses, were published some years afterwards. In 1864 he finished a 'Messe Solennelle,' which was heard in London for the first time in 1869. Rossini lived at Bologna from 1836 to 1847, occupying himself chiefly in agriculture and painting; then at Florence till 1855. The remaining thirteen years of his life were spent in Paris, where his music, cheerfulness, and kindness of disposition rendered him a general favourite in social and artistic circles. He died at Paris on the 13th of November, 1868. The funeral at the Cemetery of Père la Chaise, and the preceding service at the Church of the Trinity, were attended by the most distinguished persons in Paris in music, the drama, art, and literature. He left by will an endowment of 3000 francs a year, to be administered by the Institute of France, one-half as an annual prize for the best libretto for an opera, and one-half for the best score of a new opera—melody (in which Rossini himself had always excelled) to be regarded as a *sine quâ non*. Shortly after his death a claim was put forth by the small town of Luge, near Ravenna, as having been his birthplace, instead of Pesaro. Memoirs of Rossini have been published by Edwards, Montazio, Mirecourt, Roqueplan, Rovani, and other writers.

* **ROTHSCHILD, BARON LIONEL NATHAN DE**, M.P. [E. C. vol. v. col. 172], was enabled to take his seat and vote in the House of Commons, July, 1858, by the passing of the Act for Removing the Disabilities of the Jews. He retained his seat as member for the City of London till the general election of December, 1868, when he was not returned; but on the death of one of the members, Mr. Charles Bell, he was re-elected, February, 1869. Baron Lionel Nathan de Rothschild was born November 22nd, 1808. His eldest son, **NATHANIEL MAYER DE ROTHSCHILD**, born in 1840, was elected M.P. for Aylesbury in July, 1865, and has since continued to represent that borough.

ROTTMANN, KARL, a distinguished German landscape painter, was born at Handschuchsheim, near Heidelberg, in 1798. He began with water-colour painting, and copying the Dutch masters. But in 1822 he removed to Munich, and, under the influence of the eminent masters there, turned his attention to a more elevated style, and to the study of the grander features of nature; spending his summers among the Bavarian mountains, and working in his painting-room in the winter. In 1826 he went to Italy and Sicily, painted a large view of Palermo for king Ludwig of Bavaria, and made a great number of careful drawings. On his return to Munich in 1829 he was commissioned by king Ludwig to paint in fresco a portion of the arcades of the Hofgarten, with views of famous scenes in Italy and Sicily. For each of these landscapes, twenty-eight in number, the king wrote an inscription in verse. On the completion of this commission (1835), Ludwig sent Rottmann to Greece, to make a corresponding series of representations of the famous historical scenes of that country. Several of these were in due course painted in the northern arcades of the Hofgarten, but as the Italian frescoes had become greatly injured, these were painted in encaustic. He also painted the ceiling of the upper storey of the royal palace at Munich, and prepared several Grecian landscapes for the new Pinacothek, besides many private commissions. Rottmann, who was a great favourite with the king, was appointed court-painter in 1841, and created knight of the order of St. Michel in 1843. He died at Munich, July 7th, 1850.

* **ROUHER, EUGÈNE**, a French lawyer and politician, was born at Riom, in the department of Puy-de-Dôme, on the 30th of November, 1814, and was educated successively at the Collèges of Riom and Clermont, with a short interval in 1838, when

he was a pupil of the naval school of Angoulême. He studied law at Paris, and commenced his career as an advocate before the Cour Royale at Riom, and in a few years became one of the leading members of the bar of his native place, for the representation of which he was an unsuccessful candidate in 1846. After the Revolution of February, 1848, he was returned on republican principles for the department of Puy-de-Dôme; and in the Constituent and Legislative Assemblies, to the latter of which he was deputed by the same electoral body in May, 1849, identified himself with the Right or Moderate party. On the 31st of October following he was appointed to the Ministry of Justice in the cabinet selected by the President of the Republic. M. Rouher retained office, with two or three short intermissions consequent upon as many reconstructions of the cabinet, until the 26th of October, 1851, and resumed the Ministry of Justice on the morning of the 2nd of December, the day of the *coup d'état*, being at the same time appointed a member of a new Consultative Commission, composed of "men deservedly enjoying the confidence and esteem of the country," who should act as assessors or advisers of the President until the re-organisation of the Legislative Body and a permanent Council of State. In common with the other ministers who refused to concur in the decree by which the Prince President confiscated the property of the Orleans family, M. Rouher tendered his resignation on the 22nd of January, 1852; and three or four days afterwards was appointed a member of the Council of State, which replaced the temporary Consultative Commission, and in which he assumed the presidency of the department of legislation, justice, and foreign affairs. On the 3rd of February, 1855, he received the appointment of minister of agriculture, commerce, and public works, his administration of which was signalised by the successful holding of the Universal Cattle Show and Agricultural Exhibition at the Palais de l'Industrie, in June, 1856, and other exhibitions in which he took a lively and enlightened interest. He fostered in divers ways the development of scientific agriculture, and both in the capital and in the departments initiated various works for the material benefit of the country; but performed the most important service of all by negotiating with Mr. Cobden the commercial treaty of January, 1860, in the preparation of which they had laboured in concert for the preceding twelve months, and in acknowledgment of which M. Rouher was promoted to the grand cross of the Legion of Honour. He was also chosen in January, 1861, to act as plenipotentiary in negotiating a commercial treaty between France and Belgium; and this treaty, which was concluded on the 1st of May following, was accompanied by a maritime, as well as by a literary, convention between the two countries. M. Rouher, who had been raised to the rank of senator on the 18th of June, 1856, acted, in the place of the Prince Napoleon, as president of the French commission for the London Exhibition of 1862; and on the 16th of July of that year was entertained at a banquet given in Willis's Rooms, under the chairmanship of Mr. Milner Gibson, President of the Board of Trade. M. Rouher negotiated a treaty of commerce between France and Italy, which was signed in January, 1863, and for his services in this business received from Victor Emmanuel the grand cordon of the order of SS. Maurizio e Lazzaro. Quitting the portfolio of agriculture on the 23rd of June, 1863, he was again appointed to the Ministry, and became on the same day President of the Council of State; and, after a temporary occupation of the Ministry of the Interior, succeeded M. Billault as Minister of State on the 18th of October, in which capacity it fell to him to defend and explain the political measures of the Government as they were placed before the Senate and the Legislative Assembly. His powers in this direction were fully taxed in the hopeless endeavour to conciliate the confidence and goodwill of a small, but keen-eyed, eloquent, and influential minority. During the debate upon the affairs of Italy in the Legislative Assembly on the 5th of December, 1867, M. Rouher said, "We declare that Italy shall never seize upon Rome," a declaration which was affirmed by a majority of 238 votes against 17, but the emphatic and reiterated "jamais" of which was reduced to an absurdity by the entry of the soldiers of Victor Emmanuel into the Eternal City on the 20th of September, 1870. On the 20th of July, 1869, M. Rouher was appointed to the presidency of the Senate; and one of his last public acts, at the commencement of the war, which in its very early stages swept away the whole Imperial system, was as spokesman of the members of the Senate whom the Emperor received at St. Cloud on the 16th of July, 1870. "Your Majesty draws the sword," he said, addressing the Emperor, "and the country is with you, trembling with indignation at the

excesses that an ambition over-excited by one day's good fortune was sure, sooner or later, to produce. Your Majesty was able to wait, but has occupied the last four years in perfecting the armament and the organisation of the army."

ROUSSEAU, THÉODORE, a distinguished French landscape painter, was born at Paris in 1812. Having passed through the usual training in the schools of Paris, he devoted himself to landscape painting, and formed his style in a wide course of travel and sketching from nature. He made a successful début at the Salon of 1834, and in a short time came to be the recognised head of the "realistic school" of French landscape, the outgrowth of the reaction from the classic and conventional styles which had long prevailed. Year-by-year M. Rousseau increased in facility of handling and mastery over his materials; he was an able and learned designer, and a pleasing and skilful colourist, and his works achieved considerable popularity in this country as well as in France. But, however realistic, he was still eminently Parisian in his way of looking at nature; his composition and colour, though amazingly clever and fascinating, are decidedly conventional, and his works have often the appearance of sketches rather than finished pictures. His subjects are such as the 'Marais des Landes,' 'Sunset in Fontainebleau,' 'Avenue de l'Île Adam,' 'Borders of the Loire in Spring,' 'Stormy Morning,' 'Forest Scene,' 'A Village,' &c. M. Rousseau received first-class medals in 1849 and 1855, and the decoration of the Legion of Honour in 1852. He died in December, 1867.

ROWLANDSON, THOMAS, a celebrated caricaturist, was born in Old Jewry, London, in July, 1756; entered the École des Beaux-Arts, Paris, in 1772, and in 1774 became a student in the Royal Academy, where he distinguished himself by his talent and versatility. He began his artistic career by making designs for the booksellers, but having received a bequest of 7000*l.* from an aunt, he gave way to dissipation. His means being exhausted, he took to making satirical drawings and etchings, which being coarse, virulent, and unrestrained, but full of life, vigour, and dash, became exceedingly popular, and found purchasers as fast as he could produce them. His first political caricature, 'The Champion of the People,' appeared in 1784, and was followed by a long succession of effective prints, chiefly in the interest of the Opposition. But he executed a still larger number of social burlesques, both as tinted drawings outlined with the reed pen, and etchings, which were even freer and coarser, verging often on obscenity, than his political caricatures. Several series of etchings, and especially the 'Dance of Death,' the 'Dance of Life,' and 'The Travels of Dr. Syntax in Search of the Picturesque,' as elucidated by the pen of the equally unscrupulous Dr. Combe, met with an almost unparalleled success. Of his various designs Rowlandson produced, it is said, some thousands, so that, however dissipated, he could not have led an idle life; but the signs of haste and mannerism became more and more marked as he advanced in life. He died on the 22nd of April, 1827.

ROYER-COLLARD, PIERRE PAUL, a French philosopher and statesman, was born on the 21st of June, 1763, at Sompuis, near Vitry-le-François, in the department of Marne, where his childhood was passed under the careful superintendence of his mother, a lady of strong Jansenist principles. He was afterwards educated successively at the College of Chaumont and the College of Saint Omer, the latter of which was under the direction of one of his uncles, the Abbé Collard. Devoting himself to a legal career, he had already formed the basis of a practice as an *avocat au parlement*, when, on the breaking out of the Revolution, he was elected one of the representatives of the Commune of Paris, by the quarter of the Île Saint Louis. Assuming the duties of assistant-registrar of the municipality in 1790, he continued to discharge these until the 10th of August, 1792, the day of the King's committal as a prisoner to the Temple, when he retired before the excesses which were obnoxious to his moderation, and during the Reign of Terror led a life of studious and philosophical seclusion at Sompuis. In 1797 he was elected representative of the department of Marne, in the Council of Five Hundred, in the labours of which assembly he took an active part in the interests of constitutional monarchy. In 1811, on the organisation of the Université de France, he accepted with some reluctance the chair of philosophy in that institution, becoming also dean of the faculty of letters; and, during an incumbency of two years, increased his already extended reputation by his exposition of the philosophy of Reid, and his successful opposition of the sensual system, which, up to the time when he began his lectures in 1811, was the ruling philosophy. The task he undertook required eminent personal qualities,

which were happily combined in him. His mind was singularly vigorous, profound, and clear; his language was easy, forcible, and precise; and he was rich in the gifts of imagination and eloquence. He exerted a prodigious influence on the philosophy of France. It was in accordance with his principles that the minds of Cousin, Guizot, and Jouffroy were formed and developed; and the fragments of his lectures—his only philosophical remains—were published by the last, with explanations, in connection with his translation of the 'Works of Reid,' 6 vols., Paris, 1836. The powerful influence exerted by Royer-Collard as a teacher of philosophy is chiefly to be recognised in his disciples and successors. He founded a school of ardent and elevated young minds, to whom he imparted his zeal, his spirit, his method, and his principles, and in whose labours the activity and mind of their master, even under all modifications and extensions, are to be readily traced. In 1814, almost coincidently with the restoration of the Bourbons, he returned to political life, and in August, 1815, took office as President of the Council of Public Instruction, the duties of which post he fulfilled until July, 1820, when he resigned, still preserving as an honorary rank the title of Councillor of State. In 1815 he had been sent by the electors of Marne to represent them in the famous Chamber called *introuvable*, in which he played a prominent part at once loyal and constitutional; and maintained the same course in the succeeding and more liberal Chamber, of which he was also a member. As a member of the Opposition he contributed in no small degree to the securing of the Constitutional Régime and to the propagation of sound liberal doctrines; and at length came to be the head of the political party known as Doctrinaires, who opposed the movements both of the ultra-liberal and the royalist parties. It was thus he gained great hold on the opinion and esteem of his country, and attained such popularity that, in 1827, he was returned as a representative by no fewer than seven electoral colleges. To this honour succeeded, a few weeks after, his election as a member of the Académie Française; and in 1828, he became, as a natural sequence, President of the Chamber of Deputies, in which capacity it fell to him, March, 1830, to present to Charles X. the famous address of the 221 deputies, which met with so little regard from the King that he prorogued the Chamber on the following day. The Revolution of July brought about the downfall of Charles; after which M. Royer-Collard continued to sit as a Deputy, and took a conscientious oath to the new dynasty and to the revolution of which the address of the 221 had formed the standard. The advance of age, with its attendant infirmities, for some years before his death, seldom allowed of his appearance in the tribune; and he retired altogether from political activity in 1842, after which he lived in the most complete privacy and seclusion. He died on the 4th of September, 1845, at his residence of Châteauneuf, near Saint Aignan (Loir-et-Cher); and ten years after, the town of Vitry-le-François raised a statue in his honour. Of the biographies which have been produced in illustration of his life and career, the most remarkable are M. de Barante's 'Vie Politique de M. Royer-Collard, ses Discours et ses Ecrits,' 2 vols. 8vo, Paris, 1861; and M. de Lacombe's 'Vie de Royer-Collard,' 8vo, Paris, 1862.

ROYLE, JOHN FORBES, M.D. [E. C. vol. v. col. 183], died at Acton, near London, January 2, 1858, in the 59th year of his age.

RÜCKERT, FRIEDRICH, a distinguished German poet and Orientalist, was born at Schweinfurt, Bavaria, May 16th, 1788. He received his education in the gymnasium of his native town, and at the University of Jena, in which he became lecturer in 1811. In 1815 he left Jena to become one of the editors of the Stuttgart 'Morgenblatt,' and remained thus employed for two years. After a year's residence at Rome, during which he studied the national songs of Italy, he returned to Germany, settled at Coburg, married, and wrote and published largely. He studied Arabic, Persian, Sanscrit, and other oriental languages, of which he acquired so extensive a knowledge, that, in 1826, he was appointed professor of oriental literature at the University of Erlangen. In 1841 he was invited by the King of Prussia to Berlin, where he filled various university offices. In 1849 he retired into private life, settled at Neuses, near Coburg, and resided there till his death, which took place January 31st, 1866.

Rückert was one of the most voluminous and ablest German poets of his time. His temperament and sympathies were such as to throw a poetical halo around everything he wrote; he had studied all the best marked styles of the ancient Greek and early German poets; while his knowledge of the eastern

languages enabled him to produce almost unrivalled translations of oriental poetry. Indeed his own poems partook much of the oriental style, the rich imagery of which was congenial to his taste and feeling. His published writings—epics, lyrics, dramas, didactic pieces, and metrical translations—are very numerous. His early poems were collected in 1814, with the title 'Deutschen Gedichten,' which he published at Heidelberg, under the assumed name of Freimund Raimar. A Call to Arms, the 'Geharnischten Sonette,' aroused attention by the fierce hostility it breathed against Napoleon. 'Napoleon, eine polit. Komödie,' Stuttgart, 1816. This was followed by 'Kranz der Zeit,' celebrating the downfall of Napoleon, Stuttgart, 1817; 'Oestliche Rosen,' Leipsic, 1822, imitated from the Persian; 'Amarylis, ein ländliches Gedicht,' 1825; 'Die Makamen des Hariri,' an oriental translation, Stutt., 1826—forming part of a collection, in 2 vols., entitled 'Die Verwandlungen des Abu-Seid,' 'Nal und Demajanti, ein indisches Gedicht,' Frankfurt, 1828; 'Schi-King, chinesisches Liederbuch,' 1833. All his poems down to this date were collected in 'Gesammelte Gedichte,' 6 vols., Erlangen, 1834—38; 'Erbauliches und Beschauliches, aus dem Morgenland,' 2 vols., Berlin, 1836—8; 'Sieben Bücher Morgenländische Sagen und Geschichten,' 2 vols., Stutt., 1837; 'Die Weisheit des Brahmanen, ein Lehrgedicht in Bruchstücken,' 6 vols., 1836—9; 'Rostem und Suhrab, eine Heldengeschichte,' Erl., 1838; 'Brahmanische Erzählungen,' Leip., 1839; 'Amralkais der Dichter und König,' a translation, 1843; 'Saul und David, ein Drama der heiligen Geschichte,' Erl., 1843; 'Herodes der Grosse,' 2 vols., Stutt., 1844; 'Kaiser Heinrich IV.,' 2 vols. Frank., 1845; 'Christoforo Colombo, Geschichtes-Drama,' Frank., 1845; 'Hammāsa, oder die ältesten Arabischen Volkslieder übersetzt und erläutert,' 2 vols., Stutt., 1846; 'Ein Dutzend Kampflieder für Schleswig-Holstein.' The latest poem published in his lifetime was 'Sawitri,' 1866. There appeared posthumously, 'Lieder und Sprüche,' edited by F. Rückert, 1866. In 1867 was commenced a collected edition of his whole works, 15 vols., Frankfurt. Notices of the life and writings of Rückert, by Stein, Kinkel, Beyer, and Fortlage, have been published.

RUDOLPHI, KARL ASMUND, Swedish naturalist and entozoologist, was born at Stockholm, July 14, 1771. His academical education was begun and ended at Greifswald, but the intermediate portion was received at several of the German universities. The thesis which he sustained on acquiring his degree of doctor of medicine was 'Sur les vers intestinaux,' a subject which he studied with remarkable success. For a few years he was engaged in teaching medical science and veterinary surgery at Greifswald, but in 1810 he acquired the professorship of anatomy and physiology at Berlin, and there taught till his death, November 29, 1832. His principal writings are 'Observationes circa vermes intestinales,' 4to, Greifswald, 1793—1795; 'Entozoorum historia naturalis,' 2 vols., 8vo, Amsterdam, 1808—1810; 'Entozoorum Synopsis,' 8vo, Berlin, 1819; 'Bemerkungen aus dem Gebiet der Naturgeschichte, Medicin und Thier-arzeneykunde, auf seiner Reise durch einen Theil von Deutschland, Holland und Frankreich gesammelt, von K. A. R.,' 8vo, Berlin, 1804-5; and 'Grundriss der Physiologie,' 3 vols., 8vo, 1821—1828. Rudolphi was the first to group together all the anneloid parasites into one class, which he named *Entozoa*, from which the class *Scolecida*, as now adopted, only differs by including, in addition, certain forms which live free in water. He divided the group into five orders, all of which have long been adopted, but latterly one has been suppressed. Rudolphi may be regarded as the first systematist of these animals. He was a pupil of Linnæus, a teacher of Johannes Müller, and has been styled the "princeps helminthologorum."

RÜMCKER, CARL LUDWIG CHRISTIAN, German astronomer, was born at Neubrandenburg, Mecklenburg-Strelitz, May 28th, 1788. After receiving his education at the Graue Kloster and the Engineering Academy at Berlin, he passed an examination in 1807 as engineer and architect. The French occupation of North Germany greatly interfered with peaceful employment about that time; and Rümker came to England in 1808 to seek an opening for his abilities. He served for a time as a midshipman in the East India Company's navy; then in a merchant-ship belonging to a private firm. In 1811 he entered the Royal Navy, and served in the 'Benbow,' and afterwards in the 'Montague,' as naval instructor. In the 'Albion' he made a voyage to the Mediterranean, met Baron Zach at Genoa, and contributed some astronomical papers to Zach's 'Correspondenz.' In 1817 he quitted the English navy, removed to Hamburg, became principal of the School of

Navigation, and extended his knowledge of astronomy under Schumacher at Altona Observatory. In 1821 he returned to England, and accompanied Sir Thomas Brisbane to New South Wales, where he took charge of the newly-founded observatory at Paramatta. In 1822 he anticipated the astronomers of Europe by obtaining the first view of the return of Encke's comet. His observations on comets, solstitial latitudes, the pendulum, the dip and declination of the needle, and other subjects, were so numerous and important as to fill a volume of the 'Philosophical Transactions;' a collection especially notable for his 'Catalogue of Stars in the Southern Hemisphere.' In 1829 [he changed his abode again to Hamburg, where he obtained the appointment of principal of the School of Navigation and director of the Observatory. He became renowned throughout Germany as the leading teacher in the sciences bearing upon navigation. His 'Handbook of Navigation,' 1843, became a standard work, and has gone through many editions. His 'Catalogue of the places of 12,000 Fixed Stars visible at Hamburg,' 4to, 1843, gained for him the Royal Society's medal. In 1861 he presented to the Royal Astronomical Society the MSS. of his Observations of Southern Stars, made at Paramatta in 1826—7. Rümker, who was a fellow or member of most of the great scientific societies in Europe, went to Lisbon with the hope of recruiting his declining health, and died there on the 21st of December, 1862.

RUNGE, OTTO PHILIPP, a celebrated German painter, was born at Wolgast in 1776. He studied at Hamburg, whence he proceeded in 1798 to Copenhagen, where he particularly distinguished himself. In 1801 he went to Dresden, where he executed numerous designs—among others several from the poems of Goethe, which were greatly admired by Tieck and by the poet himself. One of his best oil paintings, 'The Triumph of Love,' was painted at the suggestion of Tieck. Runge returned to Hamburg in 1804, and there, among other things, produced designs illustrative of the Bible; of Ossian; and a series of the Seasons, which attracted considerable attention, and, on account of their obscurity, called forth some witticisms—amongst others from Goethe. He died December 2nd, 1810. He wrote a treatise on the relations of colours, 'Farbenkugel,' &c., Hamburg, 1810. His 'Writings and Letters' were published at Hamburg in 2 vols. 8vo, 1841.

* RÜPPELL, WILHELM PETER EDUARD SIMON, traveller and zoologist, was born at Frankfurt-am-Main, November 20, 1794. The son of a wealthy merchant, he early indulged his taste for travelling by visiting Italy and Egypt. After spending three years in making the preliminary preparations, he in 1822 commenced the exploration of Africa, and, from that year till 1827, his time was spent in Nubia, Sennaar, Kordofan, and Arabia. From 1830 to February, 1833, he devoted to an investigation of Abyssinia. During these journeys he made extensive collections of animals, plants, antiquities, and Abyssinian manuscripts, the large proportion of which he presented to the museum and library at Frankfurt. His works abound in information of a varied and trustworthy kind respecting the countries visited by him. They include 'Reisen in Nubien, Kordofan und dem Petrischen Arabien, vorzüglich in Geographischen-Statistischen-Hinsicht,' 8vo, Frankfurt, 1829; 'Reise in Abyssinien,' 2 vols., 8vo., 1838—1840; 'Neue Wirbelthiere zur Fauna Abyssinien,' 8vo, 1835—1840; 'Systematische Uebersicht der Vögel Nord-ost Afrikas,' 8vo, 1845; and numerous papers. In 1838 he received the patron's medal of the Royal Geographical Society of London. He is a member of numerous societies.

* RUSKIN, JOHN [E. C. vol. v. col. 204.] Mr. Ruskin was born on the 8th of February, 1819. He completed his great work 'Modern Painters,' by the publication of the fifth volume in 1860. He has since published many volumes, but mostly small in size and occasional in character. Several of them have been more or less directly concerned with social and political economy, in which his views diverge widely from those of the leading authorities on the subject. He had touched on political questions in some of his larger works, but he treated it more specifically in 'The Political Economy of Art: being the substance, with additions, of two Lectures,' 16mo, 1857; "'Unto this Last,'" four Essays on the First Principles of Political Economy, 8vo, 1862, a work which called forth much adverse criticism, and 'The Crown of Wild Olive. Three Lectures on Work, Traffic, &c.,' 8vo, 1866. He further developed his views in letters which appeared in the newspapers, and in 'Time and Tide, by Wear and Tyne. Twenty-five Letters to a Working Man of Sunderland, on the Laws of Work,' and he is at present engaged in writing a series of letters to working men, in one of

which he stated his intention, if he found it practicable, to establish on a suitable estate a colony of working men, in which it should be a fundamental law that no steam-engine or railway should be admitted. In his more generally recognised position as a teacher of art, he published in 1858 'An Inaugural Address, delivered at the Cambridge School of Art, October 20th, 1858,' and 'The Two Paths : being Lectures on Art and its application to Decoration and Manufacture,' 8vo, 1859. In 1861 a 'Selection from the Writings of J. Ruskin' appeared in one volume 8vo. In 1862 he issued a new edition of his 'Pre-Raphaelitism.' Of a different class, but equally characteristic, were his 'Ethics of the Dust : ten Lectures to little Housewives on the Elements of Crystallization,' 8vo, 1866 ; and 'The Queen of the Air : being a study of the Greek Myths of Cloud and Storm,' 8vo, 1869. In 1867, Mr. Ruskin was appointed Sir Robert Rede's Lecturer in the University of Oxford ; and on the foundation of the Slade Professorship of Fine Art at the University, Mr. Ruskin was elected the first professor. On the duties of this office he entered with characteristic zeal ; his lectures were largely attended, and he supplemented them by personal instruction ; he set about forming a collection of drawings and engravings chiefly from his own sources for the use of the students ; he drew up and published a 'Catalogue of Examples arranged for elementary study in the University Galleries,' 8vo, Oxford, 1870, and passed through the press his early lectures, 'Lectures on Art delivered before the University of Oxford in Hilary Term, 1870,' Oxford, 8vo, 1870 ; and he made what the University authorities justly term "a munificent offer" of 5000*l.* for the endowment of a Master of Drawing, which was accepted by a Convocation, November 22nd, 1871. On the 23rd November, Mr. Ruskin was elected Lord Rector of the University of St. Andrew's. He had shortly before been proposed for the rectorship of Glasgow University, but the choice fell on Mr. Disraeli.

* **RUSSELL, RIGHT HONOURABLE JOHN RUSSELL, EARL**, formerly known as Lord John Russell [E. C. vol. v. col. 207]. On the return of Lord Palmerston to power in June, 1859, Lord John Russell resumed office in his administration as Minister for Foreign Affairs ; and in this capacity assisted in concluding the commercial treaty with France in January, 1860. On the 1st of March following, he introduced a scheme of Parliamentary Reform ; which, after a series of languid debates, was finally withdrawn on the 11th of June. On the 31st of July he addressed a note to the Sardinian Government, dissuading it from attacking Austria or Naples ; but when, by the unauthorised expedition of Garibaldi, the territory of Naples had been virtually won for Victor Emmanuel, he encouraged the latter in its appropriation as a part of his dominions. "Her Majesty's Government," he said, in a despatch to the British minister at Turin, dated October 27, 1860, "could see no sufficient ground for the severe censure with which Austria, France, Prussia, and Russia, have visited the acts of the King of Sardinia. Her Majesty's Government will turn their eyes rather to the gratifying prospect of a people building up the edifice of their liberties, and consolidating the work of their independence, amid the sympathies and good wishes of Europe." The position of the British Government in relation to Italy, about the epoch referred to in the foregoing extract, was illustrated at the time by the publication of 'Italy. Corrected Report of the Speeches of Lord John Russell, delivered in the House of Commons, February 5 and 6, 1861,' 8vo, London, 1861. On the 24th of July, 1861, Lord John Russell issued his farewell address to the electors of the City of London, whose representative he had been for twenty years ; and six days afterwards, July 30, took his seat in the House of Lords as Earl Russell, of Kingston-Russell, in Dorsetshire, and Viscount Amberley, of Amberley, in Gloucestershire, and of Ardsalla, co. Meath. Earl Russell was made a Knight of the Garter on the 21st of May, 1862 ; and, in 1863, was elected Lord Rector of the University of Aberdeen, of which city he had been made a burgess in September, 1859 ; on the 9th of August, 1863, received the freedom of Dundee ; and made, a few days after, at a banquet given in his honour at Blairgowrie, a speech in which occurred the phrase, afterwards so amusingly canvassed, that, so far as Reform was concerned, the nation might "rest and be thankful."

On the 2nd of March, 1863, Earl Russell addressed remonstrances to Russia on behalf of Poland ; and on the 17th of June, concurrently with France and Austria, followed up this step with a note, in which the grievances of the Poles were exhibited under six different heads, and redress demanded. In November of the same year he declined to accept the invitation of the Emperor of the French to take part in a congress proposed

to be assembled at Paris for the settlement of the affairs of Europe ; on the ground that, where good-will was wanting, such a congress would lack authority peacefully to enforce its decisions. Earl Russell displayed skill and firmness in the manner in which he consistently maintained and defended the neutrality of Great Britain during the civil war in America ; a course which he had to pursue against the appeals of the one party to the contest, and the remonstrances of the other. In May, 1865, he made a concise and logical statement of the dilemma in which President Lincoln's proclamation of March, 1861, declaring the ports of the Confederate States to be under blockade, had placed the British Government. The latter, Lord Russell explained, had two alternatives : either to acknowledge the belligerent rights of the North, and by consequence of the South, or else to refuse to acknowledge the blockade. The former course was adopted as a necessary consequence to the acknowledgment of the rights of blockade claimed by the United States.

In the earlier stages of the quarrel between Denmark and the German powers in 1863, Lord Russell sought to mediate between the two parties ; and even when he found that the Danish Government obstinately refused to give any pledge that the grievances to which the Germans of the Duchies were subjected should be redressed, he still was reluctant not to carry out the engagements which were common to the five powers who had signed the treaty of London. Of these signatories, Austria and Prussia were hostile to the integrity of Denmark ; France and Russia were indifferent ; whilst "England alone," as Earl Russell claims in his pamphlet, 'The Foreign Policy of England from the Year 1570 to the Year 1870,' 8vo, 1871, "sincerely endeavoured to fulfil her promise. . . . It became a great question for Lord Palmerston's Cabinet whether, if they could obtain a binding stipulation from Denmark in favour of her German subjects, they should advise the Queen to offer to the King of Denmark naval and military aid for his defence. The Cabinet, after much deliberation, decided that in the case supposed they should offer to assist Denmark by force only in case France would join in an alliance for that purpose. . . . Had England and France guaranteed the performance by Denmark of her own solemn engagements, Prussia and Austria would have had no case for war ; had they entered upon it, the military forces of France and England, the naval forces of England and France, would have been a powerful assistance to Denmark. The Emperor of the French twice rejected this proposal. . . . A further attempt at pacification was made at the Conference of London. But Denmark, with a small army, and guns which could not reach the Prussian army, was confident in her own power of resistance to the end. She declined the good offices of the neutral powers, and fell a victim to her blindness. Lord Palmerston, by a happy suggestion, saved her from the probable destruction of her capital."

Viscount Palmerston died on the 18th of October, 1865, and Earl Russell succeeded to the premiership. On the 12th of March, 1866, Mr. Gladstone, at that time Chancellor of the Exchequer, and leader of the House of Commons, introduced a Franchise Bill, which, after considerable discussion, was read a second time on the 28th of April. With this bill, a second for the redistribution of seats was incorporated on the 7th of May ; and on the 18th of June, the Government was defeated, by a majority of 315 to 304, on Lord Dunkellin's amendment in favour of a borough franchise based on rating instead of "clear yearly value," or rental. The defeat was taken as decisive ; and led to the dissolution of the administration on the 26th of June ; since which time Earl Russell has pursued a career of independent and unofficial liberalism in the House of Lords, in which he introduced a bill, April 9, 1869, empowering the Crown to confer a limited number of life peerages. The bill passed through committee on the 3rd of June, but on the 8th of July, was rejected, on the motion for a third reading, by a majority of 106 votes against 77. On the 20th of June, 1870, he introduced a motion for a commission to inquire into the relation between the mother country and the colonies, especially with reference to the defence of the latter ; which motion, after a debate, was withdrawn.

During the agitation of the question of the disestablishment and disendowment of the Irish Church, Earl Russell freely, and in various ways, ventilated his opinions. Thus he published a 'Speech on the Irish Church. With a Preface,' 8vo, London, 1867, as well as three letters which were largely conversant about the same, and were severally entitled, 'Letter to the Right Honourable Chichester Fortescue on the State of

Ireland,' 8vo, London, 1868, second 'Letter,' 8vo, 1868, third 'Letter,' 8vo, 1869; and at a meeting over which he presided at St. James's Hall, on the 16th of April, 1868, he expressed his opinion that the great point to be secured was equality, which might result either from the endowment of all the different communions in Ireland, or from a general disendowment. On the whole, looking at public opinion, and discarding any preferences of his own, he sought for general disendowment.

Lord Russell has at all times taken deep interest in educational questions, and in societies intended for the moral and material well-being of the people. He was president of the National Association for the Promotion of Social Science, at its second annual meeting at Liverpool, in 1858; and, on the 12th of October, delivered an address which was published with the title of 'The Improvement of the Law, Health, Education, and Morals of the People. The Inaugural Address,' &c., 12mo, London, 1858. Of more local interest was his 'Inaugural Address delivered at Tavistock . . . at the fifth Annual Meeting of the Devon Association for the Advancement of Literature, Science, and Art,' 8vo, London, 1866. Of his more distinctively literary productions may be mentioned a new edition of his 'Essay on the History of the English Government and Constitution,' &c., 8vo, London, 1865, French translation, by C. B. Derosne, 8vo, Paris, 1865; 'The Life and Times of Charles James Fox,' 3 vols., 8vo, London, 1859-66; and 'Selections from Speeches of Earl Russell, 1817 to 1841; and from Despatches, 1859 to 1865. With Introductions,' 2 vols. 8vo, London, 1870. Earl Russell enjoys several honours and offices which are incidental to his talent and position; being one of the Lords of the Privy Council; G. C. M. G.; F.R.S.; a Governor of the Charterhouse; an Elder Brother of the Trinity House; a Commissioner of Chelsea Hospital; and a Trustee of the British and Hunterian Museums.

RUSSELL, JOHN SCOTT, F.R.S. [E. C. vol. vi. col. 1019].

* RUSSELL, WILLIAM HOWARD, LL.D. [E. C. vol. v. col. 213.] As soon as the importance and extent of the Sepoy Mutiny were understood, Mr. Russell was requested by the proprietors of the 'Times' to proceed to India as their Special Correspondent. He reached India in the latter part of 1857; was attached to the head-quarters of Lord Clyde, and, till the entire suppression of the mutiny in 1858, continued with the army, sharing its perils and regularly chronicling its prowess, notwithstanding considerable physical suffering from the effects of the climate, which resulted in a serious illness. After his return he published 'My Diary in India in the year 1858-9,' 2 vols. 8vo, 1860, of which the seventh thousand was published in the same year. In 1858 he established the 'Army and Navy Gazette,' of which he took the chief editorship. The same year he published a revised edition of 'The British Expedition to the Crimea,' and in 1859 a work entitled 'Rifle Clubs and Volunteer Corps.' The outbreak of the civil war in America, 1861, led to his visiting that country in his old vocation of special correspondent to the 'Times,' and his graphic narratives of the early engagements which appeared in that journal excited intense interest. But his description of the encounters at Bull Run offended the susceptibilities of the North, and he was refused permission to accompany the Federal army in the following campaign. He, in consequence, returned to England in 1862 and published 'My Diary North and South,' 2 vols. 8vo, 1863, to which he added a third volume in 1865, especially devoted to Canada. The narrative of the reception of the Princess Alexandra, and of the incidents connected with the marriage of the Prince of Wales, which he wrote for the 'Times,' was reprinted in America with the title 'The Marriage of the Prince of Wales and Princess Alexandra of Denmark. Collected from the description in the London 'Times' by W. H. Russell,' 8vo, Boston, U. S., Cambridge, U. S., 1863; and he himself, in the following year, published a distinct account in a richly illustrated volume, 'A Memorial of the Marriage of H. R. H. Albert Edward Prince of Wales and H. R. H. Alexandra Princess of Denmark, &c.,' folio, 1864. His next important expedition was in the 'Great Eastern,' 1865, in the unsuccessful attempt to lay the Atlantic Telegraph, relating to which he published 'The Atlantic Telegraph (Dedicated to the Prince of Wales),' 4to, 1866. In the war of 1866, he was with the Austrian army. In 1868 he appeared in the novel characters, first, of a novelist by the publication of 'The Adventures of Dr. Brady;' and, secondly, of a candidate for the representation of Chelsea in parliament in the Conservative interest; but in neither was he successful. At the beginning of 1869 he left England in order to accompany the Prince and Princess of Wales in their long Eastern tour, of which,

besides the letters in the 'Times,' he published a separate account in 'A Diary in the East during the Tour of the Prince and Princess of Wales,' 8vo, 1869. The declaration of war between France and Germany, July, 1870, again led him to the battle-field. During the whole campaign he was with the headquarters of the German army, and he sent ample reports of the events he witnessed to the 'Times,' but hitherto he has not published any separate work on the Franco-German war. He was treated with great distinction in the German camp, and the Emperor of Germany marked his approval of Mr. Russell's record of German prowess by conferring on him the iron cross of the Order of Merit.

RUSTICI, GIOVANNI FRANCESCO, an eminent Italian sculptor, was born at Florence of a noble family, about 1470. Whilst studying and modelling in the garden of the Medici, which had been opened as a sort of academy, Rustici was singled out by Lorenzo the Magnificent, and placed as a pupil with Andrea del Verrochio, and when he left Florence, with Leonardo da Vinci. One of Rustici's earliest works was a bronze Mercury for a fountain in the Medici palace, and which was made to turn round by the falling water. He also executed reliefs of the Annunciation in bronze and in marble, a Leda, and other classical figures; and for the guild of merchants three colossal bronze statues, St. John, a Pharisee, and a Levite, for the Baptistery of Florence. These were regarded as the finest modern works produced in bronze up to that time; but Rustici was very inadequately remunerated, and became so disgusted that for some time he seems to have neglected his profession. He was generous and devout, but of somewhat eccentric manners. One of his whims was to keep a number of animals about his house and gardens, and among the rest he had a room full of different kinds of serpents, whose habits he delighted to watch. He modelled horses with great spirit, and these and other things he used to present to his friends. He also modelled in terra-cotta, and gave to the convent of Santa Lucia a rilievo of 'Christ appearing to Mary Magdalene in the Garden,' which was afterwards vitrified by G. Della Robbia. On the expulsion of the Medici from Florence, Rustici accepted an invitation from Francis I. of France, who assigned him a residence, and bestowed on him a handsome pension. Rustici executed some minor works, and prepared the design of a colossal equestrian statue of Francis. But he always worked slowly, and Francis died before the model was ready; and his successor not only refused to have it completed, but deprived the sculptor of his house and pension. Rustici found shelter for his old age in a French abbey, where he died in 1550.

RUTHERFORD, SAMUEL, a Scottish scholar and divine, "a gentleman by extraction," but of whose earliest years little is known, was born about 1600, in the parish of Nisbet, now annexed to Crailing, in Roxburghshire. In 1617 he became a student at the University of Edinburgh, where he took the degree of M.A. in 1621, and where he was occupied from 1623 to 1625 at once as a regent in philosophy and a student in divinity. In 1627 he was ordained minister of the parish of Anwoth, in the stewartry of Kirkcudbright, to which he was appointed "by means of the then Viscount Kenmure, and without any acknowledgment or engagement to the Bishop." Here he distinguished himself by his devotion to study and the conscientious performance of his pastoral duties, until the publication of his work against Arminianism, entitled 'Exercitationes apologetice pro divina Gratia, adversus Jacobum Arminium ejusque Assecclas,' 8vo, Amsterdam, 1636, of which an earlier edition had already been issued in 1630. In June of the latter year, he was summoned, on account of this work, before the High Commission Court at Edinburgh; and although a concurrence of fortunate accidents stayed the proceedings for that time, they were some years afterwards resumed at the instance of the Bishop of Galloway. Rutherford was charged with non-conformity, with preaching against the five Articles of Perth, and with the production of the 'Exercitationes;' but when he came before the Court of High Commission, he "altogether declined it as a lawful judicatory, and would not give the chancellor (being a clergyman) and the bishops their titles." Notwithstanding that he was befriended by Lord Lorne, afterwards Marquis of Argyle, and others, he was sentenced on the 27th of July, 1638, to deposition from his ministerial functions, and was ordered to repair within six months to Aberdeen, and there to confine himself during the king's pleasure. He continued at Aberdeen for upwards of a year and a half; and whilst in that city wrote to various correspondents a series of letters which form the bulk of a volume afterwards posthumously

published with the title of 'Joshua Redivivus: or, Mr. Rutherford's Letters,' &c., 2 parts, second edition, 8vo, London, 1671, third edition, in which the omissions and inaccuracies of the second were corrected by reference to the first, and which contained sixty-eight additional letters, 3 parts, 8vo, 1675, &c., lately reprinted at Bonmahon, co. Waterford, under the editorial care of the Rev. D. A. Doudney, as 'Letters. By the eminently godly and learned Rev. Samuel Rutherford, Professor of Divinity, St. Andrew's,' 8vo, London, 1857. Political circumstances at length favoured his enlargement, and he returned to Anwoth in February, 1638, and resumed his ministerial functions in that place with such ardour and success that the whole of the neighbouring district is said to have formed his particular flock. He was appointed a delegate for the presbytery of Kirkcudbright to the memorable General Assembly which met at Glasgow in November, 1638; before the members of which he rehearsed the particulars of his previous career, of his confinement, and the causes which occasioned it. By this Assembly he was appointed to the professorship of divinity in the University of St. Andrew's, whither he proceeded in October, 1639, and where he was associated with Mr. Blair in the pastorate of the parish church. In 1643 he was deputed as one of the Scots Commissioners to the Assembly of Divines at Westminster, from which he finally returned in November, 1647. During his stay in London, in the course of which he occasionally preached before both Houses of Parliament, he produced various works, amongst which may be mentioned his 'Divine Right of Presbytery: or, a peaceable Plea for the Government of the Church of Scotland,' 4to, London, 1644; 'The Trial and Triumph of Faith,' London, 1645; 'The Divine Right of Church Government, in opposition to the Erastians,' 4to, London, 1646; 'Christ dying, and drawing Sinners,' London, 1647; 'A Survey of the Spiritual Antichrist,' &c., 2 parts, 4to, London, 1648; and 'Lex Rex,' a reply to a piece of exaggerated loyalty by John Maxwell, the excommunicated Bishop of Ross, of which King Charles is reported to have said that "it would scarcely ever get an answer," and on account of which, several years subsequently, he was deprived of his academical preferments, his stipend confiscated, and himself confined to his house, and cited to appear before the ensuing parliament on a charge of high treason, whilst already lying on his death-bed. The 'Lex Rex' was burned by the hangman

at the cross at Edinburgh in 1661, and also at the gates of the New College of St. Andrew's, of which Rutherford had been appointed principal in January, 1649, and, shortly after, rector of the University. He refused more than one offer of academical employment and distinction abroad; and died at St. Andrew's on the 20th of March, 1661, having nearly a month before, and in full view of his death, published a remarkably clear and particular 'Testimony' to the Reformation in Great Britain and Ireland.

Rutherford was one of the most able, learned, and consistent of the Presbyterians of the 17th century; and it has been observed by Wodrow, that those who knew him best "were at a loss which to admire, his sublime genius in the school, or his familiar condescension in the pulpit, where he was one of the most moving and affectionate preachers of his time, or perhaps in any age of the Church." Yet it must be said that Rutherford, in spite of his exemplary and laborious zeal as a scholar, pastor, and professor, was himself scarcely in advance of the most bigoted party of his age in the matter of toleration, as indeed he exemplified in several of his controversial works, and in particular in his 'Free Disputation against pretended Liberty of Conscience,' London, 1649, a work principally directed against the Independents.

RYCKAERT, DAVID, a celebrated Flemish painter, the third of that name of a family of painters, born at Antwerp in 1612, was the son and scholar of the second David Ryckaert, a painter of some note, born 1590, died 1642. David Ryckaert painted somewhat in the manner of Teniers. His subjects are commonly interiors, with peasants regaling; occasionally fairs and other rustic gatherings; chemists' laboratories, &c.; and he has also left, like Teniers, some representations of the Temptations of St. Anthony. Ryckaert's pictures are much admired for their lively, spirited composition, the expression of the heads, and clear golden colour. The Antwerp Museum possesses a 'Village Festival' by him (No. 559). He was appointed dean of the fraternity of St. Luke in 1652, and died in that city between September 18, 1661, and February 18, 1662. Bryan's biography of David Ryckaert is full of errors, which were pointed out and the correct dates for the first time supplied by Van Lerius in the 'Supplément au Catalogue du Musée d'Anvers,' 1863, pp. 60-68.

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* SABINE, GENERAL SIR EDWARD, R.A., K.C.B. [E. C. vol. vi. col. 1081.] In 1865 Major-General Sabine was promoted to be lieutenant-general; in 1869 he was made general, knighted, and created K.C.B. In 1871 "the increasing weight of years" led him to resign the presidency of the Royal Society, which he had held for eleven years, to the general satisfaction of the fellows and benefit to the society; and on the anniversary meeting, November 30, 1871, he relinquished the chair to his successor, Professor Airy, the Astronomer Royal. His observations 'On the Cosmical Features of Terrestrial Magnetism' appeared in 1862.

SADELER, the name of a family of Flemish engravers, of whom the following are the most eminent:—JEAN SADELER, born at Brussels about 1550, was brought up to his father's business of damascening, or engraving iron and steel in patterns, and inlaying it with gold or silver; but having studied drawing the figure, he, when about 20, began to engrave on copper. His early plates, chiefly after German designers, were hard and meagre in manner; but he went to Italy, and there acquired a freer and better style. In all, he engraved nearly 200 plates. His best are scriptural subjects, after Bassano, Caravaggio, Van Orley, &c., in which there are peculiar effects of light and shadow. He also engraved many portraits, and some landscapes. He died at Venice about 1600.—RAPHAEL SADELER, younger brother and scholar of Jean Sadeler, was born at Brussels about 1555. He assisted his brother in many of his plates; but about 150 bear his own signature. Several of these are from his own designs, but the best are those after Jan van Achen and Martin de Vos. He engraved with spirit and freedom, and his best prints are much

esteemed. He is said by some authorities to have died at Venice in 1617, while others say he removed to Munich, and died there in 1628.—GILLES or EGIDIUS SADELER, brother, or nephew, and scholar of Jean and Raphael Sadeler, was born at Antwerp in 1570. He was by far the best engraver of the family. He designed and drew with spirit and facility; engraved with firmness, clearness, and precision; and was free from stiffness in manner. His prints embrace almost every variety of subject. Some, including scriptural and classical subjects, and a series of 52 views of Roman antiquities, are from his own designs; others are after Raffaele and other great Italian masters, or Albert Dürer and other German and Netherlandish artists, and many are portraits. In all, there are 231 plates by him. Gilles Sadeler went to Prague at the invitation of the Emperor Rudolph II., and continued to be patronised by his two successors. He died at Prague in 1629. There was a succeeding generation of Sadelers, engravers, but their works are of little value.

SAFARIK, PAL JOZSEF [E. C. vol. v. col. 237], died on the 26th of June, 1861.

SAGRA, RAMON DE LA, a Spanish economist and naturalist, was born at Coruña in 1798. After receiving his education at Madrid, he was appointed director of the botanical gardens at Havana, in the island of Cuba, and professor of agricultural botany, in 1820. In 1835 he returned to Paris, at which city and at Madrid his subsequent time was chiefly spent. From 1854 to 1856 he sat in the Spanish Cortes; but on the forcible dissolution of the General Assembly by General O'Donnell and the restoration of the form of government of

1845, he retired into private life. He wrote a large number of works, many of them pamphlets, on natural history, political economy, and social matters. The most important of these are the following:—'*Licções di Economia Social*,' 12mo, Madrid, 1840; and his works on Cuba. The latter are essentially different editions of the same work. It first took form in 1831 as '*Historia economica politica, y estadística de la Isla de Cuba*,' 4to, Havana. It appeared in a much enlarged form under a somewhat different title, in two folio volumes in 1837—42; and a still larger work was commenced in 1861, having for title, '*Historia física economica, etc., de la Isla de Cuba*,' which he proposed to complete in ten folio volumes. He also published '*Icones plantarum in flora Cubena descriptorum*,' folio, 1863, with 133 plates. He died in the early part of 1871.

SAINT-HILAIRE, AUGUSTE. [E. C. vol. v. col. 242.] Though known as Auguste Saint-Hilaire, his full name was Augustin François César Prouvensal de Saint-Hilaire. He died at Orleans, September 30, 1853.

SAINT-HILAIRE, ISIDORE GEOFFROY, zoologist, was born at Paris, December 16, 1805. He was the son of Geoffroy Étienne Saint-Hilaire, whose work he continued, and in whose footsteps he closely followed. His education was received in Paris, and he commenced writing, as also performing official duties, in his 19th year; for in 1824 he acted as assistant naturalist at the Jardin des Plantes. In 1829 he became assistant professor of zoology to his father in the Museum of Natural History, and in 1837 his assistant at the Faculty of Sciences. In 1838 he went to Bordeaux as dean of the Faculty of Sciences there, for the purpose of organising that faculty; but as soon as the task was performed he returned to Paris. In 1840 he acted as inspector-general of the University of Paris, and, his father becoming blind in 1841, he succeeded to the professorship of zoology at the Museum of Natural History. In 1850 he succeeded M. de Blainville in the similar professorship at the Faculty of Sciences. In 1854 he was appointed the first president of the Société d'Acclimatation, in the founding and organising of which he had the principal share. He died November 10, 1861. Like his father, he wrote numerous works and papers, and, like him, he belonged to the school of philosophical naturalists. The one great aim which he constantly pursued was the construction of a general system of zoology. The germs of the ideas which he developed more fully in later life were enunciated by him in writings published before his 30th year, such as the articles on the *Mammalia*, in the '*Dictionnaire Classique d'Histoire Naturelle*.' The articles were subsequently collected into a volume, which is remarkable for the strong generalising tendency which was one of his chief characteristics. He carried on the investigations into monstrosities commenced by his father, and showed that abnormal developments were as much amenable to law as normal structures, and that they afforded considerable aid to the zoological systematist. He objected to the system of linear classifications generally adopted by naturalists, and showed how essential it was that collateral should be indicated alongside with the direct affinities, which object he sought to effect by means of his system of parallel classification. The great work of his life was his '*Histoire naturelle générale des règnes organiques, principalement étudiée chez l'homme et les animaux*,' 8vo, Paris, 1854—62. The work is only a fragment, and was in progress when he died. The published portion comprises the first two volumes and nineteen chapters of the third. The ground covered extends over two only of the six sections in which he proposed to develop his subject. The programme of the work prefixed to the first volume indicates that several more volumes would have been required to complete it. Two other works of high value were written by him. The first is entitled '*Histoire générale et particulière des anomalies de l'organisation chez l'homme et les animaux, ou traité de Tératologie*,' 3 vols. 8vo, Paris, 1832—37; and the second, '*Acclimatation et domestication des Animaux utiles*,' 4^e ed. 8vo, Paris, 1861. He was popularly known as one of the principal advocates of the use of horse-flesh for human consumption. A memoir of him is given by M. de Quatrefages in the '*Bulletin de la Société d'Acclimatation*' for 1862, of which an English translation appears in the '*Smithsonian Report*' for the same year.

SAINT-JUST, LOUIS ANTOINE, one of the most prominent actors in the first French revolution, was born at Decize, in the Nivernais, August 25th, 1767. He received a good education at Soissons, studied law at Rheims, and went to Paris in 1789 to find a publisher for a satirical poem, '*Organt*,' which appeared in two volumes in that year. The revolution was just becoming of serious import; he threw himself into it with eager-

ness, and soon acquired influence by his ability, eloquence, and knowledge. He could not enter the National Assembly because he had not attained the age of 25; but he formed intimacies with some of the leading spirits of the time, and in 1791 published his '*Esprit de la Révolution et de la Constitution de la France*,' in which he breathed forth the most enthusiastic yearnings for liberty, equality, and the other watchwords of the day. In 1792 he entered the National Convention as deputy for Aisne, just after the September massacres; and in his first speech, on the 13th of November, drew attention by the intensity with which he advocated the death of the king. The Girondists wished him to join their party, but he refused to adopt their comparatively moderate views. After the execution of the king, Saint-Just introduced many measures for improving the army and encountering the enemy, who were threatening the frontiers. He became at the same time president of the Convention, a member of the Committee of Public Safety, and (in spite of his education and high moral character) one of the most merciless organisers of the Reign of Terror. Any one suspected of royalism, or even of timid republicanism, was by him at once consigned to the guillotine, with no more hesitation than was exhibited by Robespierre and Couthon, with whom he maintained a close alliance. In the winter of 1793—4 he spent much time on the frontier, exercising almost despotic power over the generals in command of the armies of the Rhine and of the North, and greatly contributing towards their success by his energy and ability in obtaining supplies for the troops. In Paris, after he had joined them in revolutionary movements, he voted for the condemnation of the Hébertists, and then of the Dantonists, but remained in unbroken amity with Robespierre. It is believed by some French historians that Saint-Just had great influence over Robespierre, although current views represent the latter as a master and the former as his disciple. During one of his visits to the army of the north in 1794 a plot was formed against him by Collot d'Herbois, Fouché, Tallien, and others, who resented the destruction of Danton. Saint-Just shared with Robespierre, Couthon, and Le Bas the accusation, trial, and condemnation which brought them to the guillotine on the 28th of July, 1794. He met death with sullen silence. None of the leaders of the revolution presented a more remarkable study than Saint-Just; for his dignified private character and cultivated mind never for an instant stood in the way of his remorseless slaughter of all whom he believed to be unfaithful to the republic. Six years after his death appeared '*Fragments d'Institutions Républicaines*,' 1800; a collection of "ideas" picked out from his speeches and reports, with a preface by Nodier.

(Hamel, *Histoire de Saint-Just*, Paris, 1859.)

SAINT-PIERRE, J. H. BERNARDIN. [PIERRE, BERNARDIN DE ST., E. C. vol. iv. col. 827.]

SAINTE-BEUVE, CHARLES AUGUSTIN, a French poet and critic, was born on the 23rd of December, 1804, at Boulogne-sur-Mer, where his father, who died two months before his birth, was a principal comptroller in the revenue department. His early training consequently fell on his mother, who was an English lady, and who executed her task with care and discretion. He was educated until his 14th year at a school at Boulogne, after which he was sent to Paris, where he studied successively at the Institution Landry, the Collège Charlemagne, and the Collège Bourbon. Choosing medicine as a profession, and especially devoting himself to anatomy, he distinguished himself as a student of the Hôpital Saint-Louis. He became possessed, however, with an ambition for literary distinction; and in 1824 began to contribute to '*Le Globe*,' in which he wrote, in January, 1827—the same year in which he severed his connection with the Hôpital Saint-Louis—a critique of the '*Odes et Ballades*' of Victor Hugo. His first published work was entitled '*Tableau historique et critique de la Poésie française et du Théâtre français du seizième Siècle*,' 12mo, Paris, 1828, "édition revue et très-augmentée, suivie de Portraits particuliers des principaux Poètes," 12mo, Paris, 1843, which was received by the '*Revue Française*' as a model of criticism, and which was followed by a volume of great power and realism, entitled '*Vie, Poésies, et Pensées de Joseph Delorme*,' 16mo, Paris, 1829, 8vo, 1830, and reissued, with '*Les Consolations*' and other poems, or groups of poems, which had also been severally published, in '*Poésies Complètes*,' 12mo, Paris, 1840, and in a more perfect edition, entitled '*Poésies Complètes*. 1^{re} Partie: Vie, Poésies, et Pensées de Joseph Delorme. 2^e Partie: Les Consolations. Pensées d'Août. Notes et Souvenirs. Un dernier Rêve,' 2 vols. 8vo, Paris, 1863. In 1829 he commenced, in the '*Revue de Paris*,' a series of '*Portraits littéraires*,' of which the first was devoted to

Boileau, and which, from the year 1831, he continued in the 'Revue des Deux Mondes.' They were afterwards published in 2 vols. 12mo, Paris, 1844, "nouvelle édition, revue et corrigée," 3 vols. 12mo, Paris, 1864. After the Revolution of July, 1830, M. Sainte-Beuve endeavoured to turn the 'Globe,' at that time under the direction of M. Leroux, into an organ of Saint-Simonianism; and about 1831 became a contributor to the 'National.' In 1832 he made the acquaintance of Lamennais, and signalised the influence of that eccentric man upon his character by the production of a romance devoted to the illustration of the strife between flesh and spirit, entitled 'Volupté,' 12mo, Paris, 1834, fifth edition, 12mo, Paris, 1861. In 1837 he made a tour in Switzerland, during which he delivered an academical course of lectures at Lausanne on the history of Port-Royal; a subject which he afterwards treated in a remarkable work, entitled 'Port-Royal,' 3 vols. 8vo, Paris, 1840—48, second edition, 5 vols. 8vo, Paris, 1860. It was in 1837 that he first published the 'Pensées d'Août,' 18mo, Paris, which have been already mentioned. In 1840 he was made librarian of the Bibliothèque Mazarine; and on the 27th of February, 1845, was received as a member of the Académie Française, in succession to M. Casimir Delavigne, on which occasion the reply to the speech of the new member was pronounced by M. Victor Hugo. In October, 1848, M. Sainte-Beuve absented himself temporarily from France, and delivered at the University of Liège a course of lectures on French literature, afterwards published with the title of 'Chateaubriand et son Groupe littéraire sous l'Empire. Cours professé à Liège en 1848—1849,' 2 vols. 8vo, Paris, 1860, second edition, 2 vols. 12mo, Paris, 1861. In 1850 he became connected with the 'Constitutionnel,' to which, and to the 'Moniteur Universel,' which he joined in 1852, he contributed those remarkable literary and biographical articles afterwards published with the title of 'Causeries du Lundi,' 15 vols. 12mo, Paris, 1857—62, and parts of which were reissued as 'Galerie des Femmes célèbres, tirée des Causeries du Lundi,' 8vo, Paris, 1859, and 'Galerie nouvelle,' &c., 8vo, Paris, 1864. The 'Causeries' were remarkable for the fineness and lightness of the author's manipulation, for his knowledge of human nature, for his wide sympathies and minute curiosity, and for his good taste and good sense. In 1852 M. Sainte-Beuve was appointed professor of Latin poetry in the Collège de France; but as his lectures were interrupted by a noisy and adverse party of the students, he gave them publicity in another form, with the title of 'Étude sur Virgile, suivie d'une Étude sur Quintus de Smyrne,' 12mo, Paris, 1857. About the end of the last-named year he accepted the post of master of conferences at the École Normale, which he resigned in 1861, on the occasion of his resumption of his intermitted connection with the 'Constitutionnel.' He was promoted on the 28th of April, 1865, to be a member of the Senate, in which he distinguished himself for his love of the principles of free thought. He defended the reputation of M. Ernest Renan; and the last work on which he was engaged was a defence of Proudhon. During his latter years M. Sainte-Beuve suffered from the stone, against which he struggled with great constancy and cheerfulness, but of which he at length died on the 13th of October, 1869. To the list of works of M. Sainte-Beuve, which have been already mentioned, may be added, 'Portraits contemporains et divers,' 2 vols. 12mo, Paris, 1846, new edition, 3 vols. 12mo, 1855; 'Portraits des Femmes,' 12mo, Paris, 1844, new edition, 1855; and 'Nouveaux Lundis,' vols. i.—x. 12mo, Paris, 1863—68.

* SAINTE-CLAIRE DEVILLE, CHARLES, geologist and physical geographer, was born at the island of St. Thomas, in the West Indies, in 1814. His education was received at Paris, and as soon as it was completed he undertook a scientific journey, 1839—43, through the group of islands of which St. Thomas formed one. On his voyage out he stopped for a time, first at the island of Tenerife, and then at the Cape de Verd Islands. A whole year was devoted to Guadalupe, during which it was subjected to a violent earthquake. He then returned to Paris, and devoted a portion of his time to publishing an account of his researches. In 1855 he went to Italy, and was an attentive observer of the volcanic phenomena afforded by Vesuvius. This volcano was again visited by him in 1861. More recently he has made a careful study of the volcanic eruptions at Santorin. Latterly his attention has been given largely to meteorological questions. He has for many years supplemented Elie de Beaumont's geological lectures at the Collège de France, Paris. His writings are somewhat voluminous. Almost his first important publication was his 'Voyage géologique aux Antilles et aux îles de Tenerife et de Fogo, &c.,' folio, Paris, 1847—48; and

another edition appeared in quarto in 1856—64. Most of his papers have been contributed to the 'Comptes Rendus.' Those on volcanoes, meteorology, and on the modifications of sulphur by heat and solvents are of special value. He is a member of the Academy of Sciences, as also of numerous other learned bodies in France and elsewhere, and is an officer of the Legion of Honour.

* SAINTE-CLAIRE DEVILLE, HENRI ÉTIENNE, French chemist, younger brother of the geologist, was born on the island of St. Thomas, March 11th, 1818. On completing his literary education in France, he instructed himself in the rudiments of science. Making chemistry his special study, he fitted up for himself a laboratory, engaged for several years in experimental research, and obtained the doctorate of science and of medicine. In 1844, when a faculty of science was established at Besançon, he was charged with its organisation, and in the following year became dean and professor of chemistry. In 1851 he was appointed to the chair of chemistry at the École Normale; in 1853 he became adjunct, and in 1859 successor, to M. Dumas in the chair of chemistry at the Faculty of Sciences. He was decorated with the Legion of Honour in 1855, and in 1861 was admitted into the Académie des Sciences, succeeding Berthier in the section of mineralogy. Many of the earlier experiments of M. H. E. Sainte-Claire Deville were on essences and resins, and were described in 'Recherches théoriques sur les Essences et les Résins,' as one of the 'Collection des Thèses,' published by the École de Médecine, 1843. In 1849 his experiments on nitric acid settled some disputed points concerning its constitution and atomic relations. In 1853 he introduced a new method of mineral analysis by the employment of gaseous and vaporic reagents, thereby getting rid of errors attendant on the filtering of liquids. In the same year he, by desire of the Emperor, commenced his important researches into the possible modes of obtaining aluminium, associating himself in the work with Debray, in the manufactory at Javel. Wöhler's discovery of aluminium as an independent metal had shown chemists how to isolate it for experimental and special purposes; but the cost was too great to permit of the use of the metal in general manufactures. Sainte-Claire Deville pursued his investigations to a great length, and with marked success [ALUMINIUM, E. C. vol. i. col. 262; and ALUMINIUM; ALUMINIUM BRONZE, E. C. S. col. 110]. The results were published in the French scientific journals from time to time, especially in the 'Annales de Chimie et de Physique,' vols. xliii. and xlv., and afterwards collected in a treatise, 'De l'Aluminium; ses propriétés, sa fabrication, et ses applications,' 1859. Other important papers by him are on metallic carbonates and their combinations; on the three molecular states of silica; on a general method of eliminating simple substances from volatile compounds; on the variations in chemical affinity by changes of temperature; on the metallurgy of platinum; on the permeability of iron to gases at high temperatures; on the measurement of high temperatures, &c. Published in a separate form are 'Des lois des Nombres en Chimie, et de la Variation de leurs Constants,' 1861; Notes and Appendix to a French translation of Faraday's 'History of a Candle,' relating to lamps, stearine, gas-lighting, &c., 1865; 'Leçons sur la Dissociation,' published by the Société Chimique de France, 1866; 'Leçons de Chimie, professées en 1865 and 1867,' published by the same society, 1869; 'Propriétés physiques et Pouvoir calorifique des Pétroles et les Huiles minérales,' 1869.

SAISSET, ÉMILE EDMOND, a French philosopher, was born on the 16th of September, 1814, at Montpellier, where his father practised as a physician. In 1833 he entered the École Normale, which he quitted with the title of agrégé de philosophie, and to which, after giving instruction in various colleges in the provinces, and in Paris at the Collège Henri IV., he returned in 1842 to occupy the post of assistant professor of the history of philosophy. He subsequently filled other academical offices, and from 1849 to 1852 lectured at the Sorbonne on the history of philosophy, as assistant professor to M. Damiron, whom, after his death, on the 11th of January, 1862, he succeeded in his chair as professor, as well as in that which he occupied as a member of the Académie des Sciences Morales et Politiques, to the latter of which distinctions M. Saisset was received on the 7th of February, 1863. M. Saisset was decreed a knight of the Legion of Honour on the 28th of March, 1851; and he died at Paris on the 17th of December, 1863.

His works include a thesis, entitled 'Ænésidème,' 8vo, Paris, 1840, which was afterwards incorporated, with other articles, in a volume, entitled 'Le Scepticisme. Ænésidème. Pascal. Kant. Études pour servir à l'Histoire critique du Scepticisme ancien et

moderne,' 8vo, Paris, 1865, new edition, 12mo, 1865; 'Essais sur la Philosophie et la Religion au XIX^e Siècle,' 12mo, Paris, 1845, a collection of articles from the 'Revue des Deux Mondes,' the sections entitled 'Morale' and 'Théodicée,' forming half the volume called 'Manuel de Philosophie, à l'Usage des Collèges,' 8vo, Paris, 1845, fourth edition, 8vo, 1863, to which M. Amadée Jacques contributed the 'Introduction' and 'Psychologie,' and M. Jules Simon the sections on 'Logique' and 'Histoire de la Philosophie'; 'Mélanges d'Histoire, de Morale et de Critique,' 12mo, Paris, 1859; 'Essai de Philosophie religieuse,' 2 vols. 12mo, Paris, 1859, third edition, "revue et augmentée d'éclaircissements," 2 vols. 12mo, Paris, 1862, English translation, bearing the double titles of 'Modern Pantheism' and 'Essay on Religious Philosophy,' 2 vols. 8vo, Edinburgh, London, and Dublin, 1863; 'Précurseurs et Disciples de Descartes,' &c., 8vo and 12mo, Paris, 1862; and two volumes of posthumous publication, each of which formed part of the 'Bibliothèque de Philosophie contemporaine,' entitled respectively 'L'Âme et la Vie. Étude sur la Renaissance de l'Animisme, suivie d'un Examen critique de l'Esthétique française,' 12mo, Paris, 1864, and 'Critique et Histoire de la Philosophie. Fragment et Discours,' 12mo, Paris, 1865. M. Saisset likewise produced an annotated translation of St. Augustine's 'City of God,' entitled 'La Cité de Dieu. Traduction nouvelle, avec une Introduction et des Notes,' &c., 4 vols. 12mo, Paris, 1855; an amended translation of the 'Letters' of Leonhard Euler, 'Lettres à une Princesse d'Allemagne sur divers Sujets de Physique et de Philosophie, précédées de l'Éloge d'Euler, par Condorcet,' 12mo, Paris, 1843, illustrated edition, 2 vols. 12mo, Paris, 1859, new edition, 1866; and a critical translation, the first which had been made into French, of the 'Works' of Spinoza, 'Œuvres. Traduites, &c., avec une Introduction critique,' 2 vols. 12mo, Paris, 1843, new edition, "revue et augmentée," 3 vols. 12mo, Paris, 1861.

* SALA, GEORGE AUGUSTUS, a journalist, novelist, and miscellaneous author, whose father was an Italian, and whose mother was a popular English vocalist of West Indian extraction, was born in London in 1828. He was educated as an artist, but soon abandoned his profession in favour of a literary career. He was amongst the earliest contributors to 'Household Words,' and wrote many of the articles and sketches of modern life, and especially of London life, which conduced to the popularity of that publication. He was an extensive and regular contributor to the 'Welcome Guest,' and the founder and first editor of 'Temple Bar,' and wrote, for the 'Cornhill Magazine,' a series of papers on Hogarth. He has been connected, more or less intimately, with various other periodicals; and he wrote for several years in the 'Illustrated London News.' Of late he has been most prominently known as a correspondent of the 'Daily Telegraph,' which he has represented in various parts of Europe, as well as in Algeria and the United States of America. During a professional sojourn at Paris, in the earlier stages of the late war between France and Germany, he became, on one occasion, a victim to the popular suspicion, and was subjected to a short imprisonment, in the course of which he encountered several indignities. On the 17th of February, 1871, he appeared as plaintiff in an action in the Court of Queen's Bench, against Messrs. Hodder and Stoughton, as the publishers of a work by Mr. Hain Friswell, entitled 'Modern Men of Letters honestly Criticised,' and which was charged with embodying libellous matter. On the second day of trial the jury returned a verdict in favour of the plaintiff, with 500*l.* damages against the defendants.

Mr. Sala is one of the most prolific writers of the day, and enjoys a high reputation for his powers of description, which he, however, too frequently overlays with excessive ornamentation, and impairs with wordiness and diffuseness. His numerous works, which are generally re-issues of his contributions to magazines and newspapers, comprise 'A Journey due North: being Notes of a Residence in Russia in the Summer of 1856,' 8vo, London, 1858, and other editions, English and American, a series of articles which had appeared in 'Household Words,' 'How I tamed Mrs. Cruiser,' &c., 12mo, 1858; 'Twice Round the Clock: or, the Hours of the Day and Night in London,' 8vo, 1859, and other editions; 'Gaslight and Daylight: with some London Scenes they shine upon,' 8vo, 1859, second edition, 1860; 'The Baddington Peerage,' 3 vols., 8vo, 1860, &c.; 'Lady Chesterfield's Letters to her Daughters,' 18mo, 1860; 'Looking at Life,' 8vo, 1860; 'Make your Game,' &c., 8vo, 1860, &c.; 'Dutch Pictures, with some Sketches in the Flemish Manner,' 8vo, 1861; 'The Seven Sons of Mammon,' 3 vols., 8vo, 1861, and other English and American editions; 'Strange

Adventures of Captain Dangerous,' 3 vols. 8vo, 1863, &c., American edition, 8vo, Boston, 1863; 'Quite Alone,' 3 vols., 8vo, 1864, and 8vo, New York, 1865, the completion of which, as it first appeared in a serial form, was rendered necessary by another pen; 'My Diary in America in the Midst of War,' 2 vols. 8vo, first two editions, 1865; 'Trip to Barbary by a Roundabout Route,' 8vo, 1865; 'From Waterloo to the Peninsula,' 2 vols. 8vo, 1866; 'William Hogarth: Essays on the Man, the Work, and the Times,' 8vo, London, 1866; 'Rome and Venice, with other Wanderings, 1866—67,' 8vo, London, 1869; and an edition, still incomplete, of Charles Lamb's works, entitled 'The Complete Correspondence and Works of Charles Lamb, with an Essay on his Life and Genius,' 8vo, vol. i. 1868.

* SALDANHA OLIVEIRA E DAUN, JOÃO CARLOS, DUQUE DE, a Portuguese soldier and politician, was born on the 17th of November, 1791; and, as descending from two of the greatest families of his native country, received his earlier education at the College for Nobles at Lisbon. From this institution he proceeded to the University of Coimbra, which he left in order to embrace a military career. He spent some years in Brazil, in the affairs of which he played an important part; and, having returned to Portugal after the re-establishment of the constitutional government, was appointed in February, 1825, to the Ministry of Foreign Affairs. In the following year he became military governor of Oporto, and whilst holding this office distinguished himself for the bold and successful liberalism of his proceedings in proclaiming the constitution of Dom Pedro, and for the vigour with which he upheld the cause of the regent, Isabella Maria, against the attempts of the partisans of Dom Miguel. He fulfilled for a short time the duties of Minister of War, but was driven from office by the predominant influence of the court party, and took refuge in England. He returned to Portugal in May, 1828, and made an attempt to rally and re-organise the constitutional army. When this attempt proved abortive, he resumed his position of exile; and, successively in England and France, planned measures, in concert with his political friends, in favour of Doña Maria, of whose government he became, upon his landing at Oporto in 1833, the moving and sustaining power, and whose authority he upheld in a series of victorious movements which had the effect of crushing the fortunes of Dom Miguel, who by the capitulation of Evora, in 1834, renounced all his pretensions. For his important services Saldanha was rewarded with a marquisate, and promoted to the rank of marshal; yet either from a certain inconstancy, or from the promptings of ambition, he now placed himself at the head of the opposition in the Cortes opened by Dom Pedro on the 5th of August, 1834, and by this means forced himself into office, May 27th, 1835, as President of the Council of Ministers and Minister of War, but was compelled to resign in November following. A liberal by reputation and by the majority of his antecedents, Saldanha, nevertheless, upon the breaking out of the revolution of September, 1836, became the champion of the Queen in her tendency to reactionary measures, and joined a number of peers in protesting against the abolition of their exceptional privileges. But, when this policy failed, he joined the Duque de Terceira, in July, 1837, in an abortive attempt to raise an insurrection in defence of the outraged constitution of Dom Pedro, and took refuge from the consequences of his defeat in an exile which he divided chiefly between France and England. He was summoned, in 1846, to the counsels of Doña Maria, by whom he was appointed in October of that year to be President of the Council and Minister of War, and was afterwards elevated to a dukedom in recognition of the services he performed against various formidable insurrectionary movements. He held office until the 22nd of August, 1847; and, after having varied his political life by fulfilling for a short time the duties of ambassador at the court of Madrid, returned to power in December, 1847. He was once more appointed, January, 1849, to the Presidency of the Council; which, having lost office by his refusal to associate himself with the reactionary measures of Costa Cabral, he once more gained by a successful insurrection in the liberal interest, in which he was seconded by Sylva Cabral, the brother of the dictator. His final term of office extended from May, 1851, to June, 1856, in the course of which period he had to encounter the difficulties consequent upon a regency, which compelled him to measures fatal to his popularity. In 1860 he succeeded the Duque de Terceira as president of the Supreme Council of Military Justice; and in the following year suffered from so severe an attack of illness that his death was reported, and accredited to so great an extent that the majority of his biographers to this day still continue to repeat the falsehood.

Only a year or two ago, in spite of his advanced age, he was busied with diplomatic functions, and engaged in political movements, which necessitated several journeys between Lisbon and Paris; since which time he has passed into the repose and retirement that befit his years.

The Duque de Saldanha is a member of many of the most distinguished of the scientific societies of Europe, as well as vice-president of the Academy of Sciences at Lisbon, of which the sovereign is *ex officio* president. He has produced a few works of interest, including a concordance of the natural sciences, 'Concordancia das Sciencias Naturas, e principalmente da Geologia com o Genesis,' &c., 8vo., Vienna, 1845; and 'Estado da Medicina em 1858,' 8vo., Lisbon, 1858, second edition, 1859.

SALE, MAJOR-GENERAL SIR ROBERT HENRY, a distinguished Anglo-Indian officer, was born in 1782. His father, a colonel in the East India Company's service, after having had him educated in a private school at Ealing, procured for him an ensigncy in the 36th foot at the early age of thirteen; and the youth was a lieutenant before he reached his sixteenth year. Young Sale was engaged at Malavelly and Seringapatam, and in various other actions before the close of the century. He rose to the rank of captain in 1806, led a company at the storming of the lines of Trevancore in 1809, was promoted to major in 1813, served in the Mauritius, and bore an active part in the Burmese war, receiving a severe wound at the capture of Rangoon in 1824. His services in the Burmese war were rewarded with a lieutenant-colonelcy and the companionship of the Bath. As colonel, he took command of the first Bengal brigade in the Afghan war of 1838; he was severely wounded at the capture of Ghuznee on the 23rd of July, when he headed the storming party. His reputation was so much enhanced by his participation in this war that he was promoted to the rank of major-general, and received the decorations of K.C.B. and the Dourannee Order. In 1840 he commanded the force sent to subdue the Kohistan country, defeated Dost Mohammed Khan, and compelled him to surrender as prisoner to Sir W. M'Naghten. In 1841 and 1842 occurred the events which brought Sir Robert Sale prominently into notice. When the British had secured military possession of the city of Cabul, it was essential to keep open communication with Peshawur and the Indus. The Ghilzees and other Afghan tribes commanded the rugged mountain passes at and near the frontier, especially the Khoord Cabul Pass and the Khyber Pass. Sale was sent with a column to force these passes, and keep the route open. He fought and defeated the Ghilzees at Teezen, Jugdulluck, and Mamoo Kail, but could not penetrate farther east than Jellallabad, where he intrenched himself, and kept a numerous enemy at bay for several months—himself cut off from all communication with Cabul on the one hand and Peshawur on the other. It was not until Sir George Pollock, marching with a column from Peshawur, forced the Khyber Pass by a series of brilliant operations that Sale could be relieved. Sir Robert took part in the recapture of Cabul, and at the conclusion of the war received the thanks of parliament and the decoration of G.C.B. He came to England for a time, but returned to India to take part in the Sikh war of 1845. He was appointed quartermaster-general to the army of the Sutlej, under Sir Hugh Gough. Quite early in the campaign, his left thigh was shattered by grape-shot at the battle of Moodkee, and he died on the 18th of December. Sir Robert Peel afterwards paid a graceful compliment to Sir Robert Sale, in a speech in the House of Commons relating to the war.

LADY SALE calls for a brief notice as one who worthily filled the position of a soldier's wife at a critical period. Her maiden name was Florentine Wynch, and she was married to Sir Robert (then Captain) Sale in 1809. When the British were at Cabul in 1841, in an ill-planned and ill-provisioned cantonment outside the city, Sir Robert was one of the officers, and his wife one among a small number of English ladies quartered with their husbands. Sale (as above stated) was engaged in his eventful operations during the winter. During his absence, the terrible disasters occurred to the British at Cabul and in the Khoord Cabul Pass, by which almost every man in the British force was destroyed. Lady Sale, Lady M'Naghten, Mrs. Trevor, and five other ladies, were kept as hostages by Akhbar Khan, the Afghan chief. Sale knew of these deplorable events, but was helplessly shut up in Jellallabad. Akhbar Khan sent him, promising to give up the ladies, if Sale would consent to a treaty humiliating to the British; but Lady Sale contrived to send a private message, entreating him not to think of her, but to maintain the honour of the flag. She was in captivity from January to September, 1842, when the victorious advance of Sir George

Pollock compelled Akhbar Khan to surrender the ladies—who, it ought to be recorded, had been treated with unvarying respect and decorum by the Afghans. The events of these two years are treated in Lady Sale's 'Journal of the Disasters in Afghanistan,' 12mo., London, 1843; Gleig's 'Sale's Brigade in Afghanistan,' 1846; Sale's 'Defence of Jellallabad,' and Lady Sale's 'Narrative of her Prison and Fellow-Prisoners,' with folio lithographic plates, 1846; and Kaye's 'History of the War in Afghanistan,' 1851.

SALT, HENRY, was born at Lichfield in 1785, and was educated at the grammar school of that city. Appointed secretary to Lord Valentia in 1802, he accompanied that nobleman in his extensive travels in India, and in 1805 was sent on a separate mission into Abyssinia. Having rejoined Lord Valentia, they returned to England together in 1808. Mr. Salt greatly assisted in the preparation of Lord Valentia's narratives of his travels, and the reputation he thus acquired induced the government to send him on an independent mission to Abyssinia. Although unsuccessful in his principal object, he was able to acquire considerable acquaintance with the country, then little known to Europeans, and his 'Account of a Voyage to Abyssinia, and Travels in the Interior Part of that Country in 1809 and 1810,' 4to., London, 1814, French translation by P. F. Henry, 2 vols. 8vo., with atlas, Paris, 1816, was warmly welcomed, and procured his election as corresponding member of the French Académie des Inscriptions, 1816. In 1815 he was appointed consul-general at Cairo, and henceforth devoted all his leisure to the study of the history and language of the ancient Egyptians. He formed an extensive collection of Egyptian antiquities, deciphered various inscriptions, and rendered valuable assistance to Belzoni and other travellers and investigators. He published 'Egypt, a Descriptive Poem,' 8vo., Alexandria, 1824; and 'An Essay on Young's and Champollion's Phonetic System of Hieroglyphics,' 8vo., 1825, French translation by L. Devère, 8vo., Paris, 1827. He died on his way from Cairo to Alexandria, October 30th, 1827. (J. J. Hall, *Life and Correspondence of Henry Salt*, 2 vols., 8vo., London, 1854.)

* SALT, SIR TITUS, founder of one of the largest manufacturing establishments in England, was born at Morley, West Riding of Yorkshire, in 1803, and was educated at Wakefield. He established himself as a manufacturer of stuffs or worsted goods at Bradford, in the same county, and was the chief means of introducing the alpaca manufacture. He possessed factories in Bradford for these products; but in 1853 he built a magnificent establishment near Shipley, about three miles from Bradford. Having a frontage on one side to the river Aire, the owner compounded his own name with that of the river, and called the place *Saltaire*. The entire buildings of the factory comprise or enclose an area of six acres. The chief structure, the "mill," is a stone edifice 550 feet long, 6 stories in height, architectural in character, and the windows glazed with large sheets of plate glass. Hollow-brick floors give lightness and facilitate ventilation; while cast-iron beams and columns are employed with a view to rendering the structure fireproof. Running northward from the main centre are two wings, each 330 feet long, of less height. Various large but low buildings are appropriated to the preparatory processes in the treatment of wool and alpaca; others contain the vast ranges of weaving-machines; while the main edifice is chiefly devoted to the spinning-machines. Quays and wharfs by the side of the Leeds and Liverpool Canal, stations and steam hoists by the side of the Leeds and Skipton Railway, bridges and roads over the river, the canal, and the railway, facilitate the arrival and departure of merchandise. Two large structures contain the steam-engines and boilers; while the smoke from the furnaces finds an exit up an Italian campanile tower, 250 feet high. Reservoirs for 500,000 gallons of rain water, and gas works for 5000 jets, are provided. There is complete working room and machinery for from 4000 to 5000 hands; and the town of Saltaire was founded by Sir Titus Salt, and built by him expressly for these hands and their families, and provided with churches and chapels, clubs, libraries, and a public park, and educational and sanitary arrangements far in advance of those in most manufacturing towns. Sir Titus Salt was created a baronet in 1869; he is a justice of the peace and deputy-lieutenant for the West Riding, and a magistrate of Bradford, which borough he represented in parliament from 1859 to 1861, in the Liberal interest.

SALVI, GIOVANNI BATTISTA. [SASSOFERRATO, E. C. S.] SANCHEZ-COELLO, ALONZO, an eminent early Spanish painter, was born about 1515, at Benifayro, in Valencia. He began to practise his art in Madrid, and there formed the ac-

quaintance of Antonio Moro, whom he accompanied to Lisbon in 1552, and entered the service of the Prince John. On the death of the prince, his widow recommended Sanchez-Coello to the protection of her brother, Philip II. of Spain, who gave him an apartment in one of his palaces. Sanchez soon became a great favourite of the king, who used to enter his painting-room at all times without ceremony, in order to watch him work, and gave him frequent sittings. Sanchez painted the king on foot, on horseback, in a full suit of armour, in state and in ordinary costume; the queen, Anne of Austria, and the leading members of the court, and principal nobles; the ambassadors and chief prelates; the popes Gregory XIII. and Sixtus V.; the Emperor of Germany, the King and Queen of Portugal, and other distinguished potentates. He also painted several altar-pieces, especially the high altar of Del Espinar; but he was greatest in portraiture, in which he was the worthy precursor of Velasquez, though wanting his breadth and majesty of style and handling. Many of his best works perished in the fire at the Alcazar and Pardo palaces, but those preserved vindicate his reputation. A portrait of the unhappy Don Carlos, son of Philip II., another of Antonio Perez, his almost equally unhappy minister, and one of Philip's favourite daughter, Isabel, in the Museo, Madrid, are good examples of his style. Sanchez died at Madrid in 1590. —His daughter and scholar, DOÑA ELISABETH SANCHEZ-COELLA, born at Madrid 1564, died there February 5, 1612, had a great reputation as a portrait-painter.

* SAND, GEORGES [DUDEVANT, MADAME AMANTINE AURORE, E. C. vol. ii. col. 658].

* SANT, JAMES, R.A., was born in London in 1820. In 1840 he entered the Royal Academy as a student, having previously been a pupil of John Varley. Mr. Sant early acquired a high position as a portrait-painter; his portraits of ladies and children being especially admired for their grace and beauty, and his pictures generally for their rich, warm colour. Mr. Sant has painted portraits of the Prince Consort, the Princesses Helena, Louisa, and Beatrice, and a large number of the nobility and members of the fashionable world. Among his portraits may be named a series, exhibited in London in 1860, of twenty portraits of distinguished persons, painted for the Countess of Waldegrave. But Mr. Sant has not confined himself to portraiture; his works exhibited at the Royal Academy and the British Institution include, among others, the 'Children in the Wood'; 'Samuel'; 'Saxon Women watching a Battle Field'; 'The Whisper'; 'Alone'; 'The Schoolmaster's Daughter';—his diploma work, 1871; and a few landscapes. Mr. Sant was elected A.R.A. in 1861, and R.A. in 1870. On January 27, 1871, he was appointed principal painter in ordinary to her Majesty in the room of the late Sir George Hayter.

* SANTA-ANNA, ANTONIO LOPEZ DE. [E. C. vol. v. col. 276.] During the brief French occupation of Mexico in 1864, Santa-Anna reappeared on the scene, but was ordered by Marshal Bazaine to quit the country. Some months later, however, he was made by Maximilian grand marshal of the empire. On the fall of the empire Santa-Anna withdrew to the United States, and took up his residence on Staten Island, near New York. In 1868 he planned an expedition against Juarez, and set sail from New York on board a merchant steamer trading between that port and Vera Cruz. His arrival was anticipated by agents in his interest, who had landed on the coast of Mexico, and proceeded to disseminate a proclamation drawn up by Santa-Anna, in order to prepare the minds of the people for his disembarkation. The first blow which he intended to strike was for the possession of Juan d'Ulloa, the fortress of Vera Cruz. The commander of the fortress and of the city of Vera Cruz made a pretence of entering into negotiations; but when the vessel on board of which Santa Anna was a passenger had arrived in the neighbourhood of the fortress, a boat containing an armed crew put off from the fort, boarded the steamer, and captured Santa-Anna and his secretary, whom they compelled to enter the boat, and conveyed as prisoners to the castle. Santa-Anna underwent a trial by court-martial, and was condemned to death; but, after some delay, President Juarez extended to him a free pardon, on condition that he would leave Mexico, and never return to that country. He has since resided on Staten Island, where he is reputed to divide his time between cock-fighting and three-card monte.

SANTI, or SANZIO GIOVANNI, an Italian painter of eminence in his day, but now better known as the father of Raffaele, was born towards the middle of the 15th century, at Colbordolo, in Urbino, where was a small family property. He settled in Urbino, where his famous son was born, in 1483, and

he died there on the 1st of August, 1494. Giovanni Santi was a careful, conscientious, and able painter; but his works display, with the tendency to mysticism which belonged to his age, something of timidity in the treatment and poverty of colour. Many of his female heads have great sweetness and gentleness of expression, and his children are always pleasing. He was his son's first teacher, and something of his father's manner may be observed in Raffaele's early works. The best extant picture by Giovanni Santi—the altar-piece in the Berlin Gallery long attributed to him being now by general agreement transferred to another hand—is a 'Madonna and Child surrounded by Saints,' in the church of the Franciscans at Urbino. A 'Madonna and Saints,' in the hospital church of Santa Croce, is also highly esteemed. Several other works by him are still preserved in the churches of Urbino and Ancona, the Brera Gallery, &c. The National Gallery possesses a 'Madonna and Child' (No. 751) ascribed to Giovanni Santi.

SARPI, PIETRO. [PAUL, FATHER, E. C. vol. iv. col. 695.]

SARS, MICHAEL, zoologist, was born at Bergen, August 30, 1805, and educated at Christiania. In 1830 he was appointed pastor of Kinn, and in 1840 was transferred to Manger, both of which places are seaside villages near Bergen. In 1854 he became professor of zoology in the University of Christiania. He died October 22, 1869. He spent much of his time in investigating the zoology of the Norwegian coasts, to which subject most of his seventy-four published works and articles are devoted. These form an important section of zoological literature. His first paper was a 'Bidrag til Söedryenes Naturhistorie,' published in 1829. His most celebrated work was a 'Fauna littoralis Norwegiæ,' 1846—1856; and his last work, 'Mémoires pour servir à la connaissance des Crinoides vivants,' 8vo, Christiania, 1868. He discovered the remarkable changes of form which the medusa-bearing *Hydrozoa* pass through during development; and he was the first to show that the apicrioid family of echinoderms, which was supposed to be extinct, was still represented by living species in the depths of the Norwegian seas. The species he found was named *Rhizocrinus loffotensis*; and about the same time Pourtales found an apicrioid in deep water off Florida, which he referred to *Bourgueticrinus*, but which has been ascertained to belong to the same species as Sars found. This discovery was the first main inducement for prosecuting zoological researches by means of dredging operations in deep seas, which operations form one of the most characteristic features of the present phase of zoological science.—One of his sons, GEORGE OSSIAN SARS, is well known as an authority on the crustaceans of Norway, on which he has written several elaborate and profusely illustrated memoirs.

SASSOFERRATO, GIOVANNI BATTISTA SALVI, Italian painter, called, from his birthplace, Sassoferrato, was born July 11th, 1605, and learned painting of his father, Tarquinio Salvi, but became one of the followers of the Carracci. His works are smooth, elegant, and highly finished, much resembling those of Carlo Dolce, and have always been popular; but they display little originality and less power. Most of the great galleries possess pictures by him; the Louvre has three, all Madonnas; the National Gallery, two,—No. 200, 'The Madonna in Prayer,' No. 740, 'The Madonna with the Infant Christ.' Sassoferrato died at Rome on the 8th of August, 1685.

SAVIGNY, FRIEDRICH CARL VON. [E. C. vol. v. col. 289.] The last years of the great jurist and scholar were spent in the retirement of private life. He died on the 25th of October, 1861, in the 83rd year of his age.

SAXO, commonly known, on account of his learning, as SAXO GRAMMATICUS, the most celebrated of the old Danish historians, was a native of the island of Zealand, and flourished in the latter part of the 12th century. He is generally described as having been provost of Roskilde, which, although now a place of inconsiderable importance, was, for several centuries before Copenhagen was founded, the residence of the kings of Denmark. But this assertion has been lately challenged as involving a confusion of his identity with that of another Saxo, his contemporary. Little is known about the events of his life, the greater part of which was probably spent in a monastery in Scania, or Schonen, of which Lund is the capital. In spite of the difficulties arising from the limited number of classical authors to which he had access, he became the most celebrated Latin scholar of his age and nation; and the masterly force, vividness, and elegance with which he used that language in the work by which he is at present remembered, have called forth the praise and admiration of several learned critics, and especially of Erasmus. He found a patron in the celebrated Absalon,

Archbishop of Lund, one of the most remarkable men of his time, to whom he acted as secretary, and by whom he was commissioned to undertake a history of Danish affairs, for the execution of which the materials of former collectors and annalists were placed at his disposal. He accordingly devoted himself for about twenty years before his death, in 1204, to the composition of his '*Historia Danica*,' in sixteen books, which he brought down to the year 1186. Of this work the first nine books are legendary and uncritical, although they throw valuable light upon the manners and customs of the ancient Scandinavians; but the last seven books, which carry the history forward from the 10th century, may in general be considered as presenting an authentic narrative of events. The principal editions of the great work of Saxo, '*Regum Heroumque Danorum Historiæ*,' are those published in folio, Paris, 1514, folio, Basel, 1534, folio, Frankfurt-am-Main, 1576, and folio, Sorø, 1644, the last of which is rendered more valuable by the Prolegomena of Stephanus, 4to, Leipzig, 1771, and an edition, which is esteemed the best of all, in 2 vols. 8vo, Copenhagen, 1830—58. Amongst the Danish translations by which the '*Historiæ*' has been rendered popular may be mentioned one published in folio, Copenhagen, 1575 and 1845—51, and another by Grundtvig, in 2 vols. 4to, Copenhagen, 1818—22.

SAY, HORACE ÉMILE, a French writer on political economy, eldest son of the distinguished economist, Jean Baptiste Say [E. C. vol. v. col. 294], was born at Noisy, near Paris, on the 11th of March, 1794, and received his education at Geneva. He commenced his career in the counting-house of his relative, M. Delaroché-Delessert; and in 1813 made a voyage to the United States in the capacity of supercargo. Two years afterwards he repaired to Brazil, where he stayed for a considerable period; and, during all the remainder of the Legitimist restoration, devoted himself exclusively to the affairs of commerce. In 1831 he was appointed judge of the Tribunal of Commerce of the Seine; and in 1834 became a member of the Chamber. Henceforth his functions were undisturbed by political considerations, and remained unaffected by the successive changes in the form of the government of France. He held office as a member of the Municipal Council; and in 1837, and again in 1846, was elected a member of the Conseil Général for the Department of the Seine. He was elected a member of the Council of State by the National Assembly in 1849, and vacated this office on the occasion of the coup d'état, December 2nd, 1851. From 1848 to 1851 he directed the inquiry undertaken by the Chamber of Commerce into the statistics of the various industries of Paris; and his '*Report*' obtained in 1853 the statistical prize awarded by the Académie des Sciences Morales et Politiques, of which he was elected an honorary member in 1857. He became a chevalier of the Legion of Honour; and died at Paris, on the 26th of July, 1860.

The principal works of M. Horace Say are a brochure, entitled '*Avant Propos à la Discussion d'une nouvelle Loi sur les Faillites*,' 8vo, Paris, 1836; '*Histoire des Relations commerciales entre la France et le Brésil, et Considérations sur les Monnaies, les Changes, les Banques, et le Commerce extérieur*,' 8vo, Paris, 1839, "avec Plans, Carte, et Tableaux;" '*Études sur l'Administration de la Ville de Paris et du Département de la Seine*,' 8vo, Paris, 1846; and '*Paris. Son Octroi et ses Emprunts*,' 8vo, Paris, 1847. He was a contributor to MM. Ch. Coquelin and Guillaumin's '*Dictionnaire de l'Économie politique*;' to the '*Dictionnaire du Commerce et des Marchandises*;' the '*Encyclopédie du Droit*;' the '*Journal des Économistes*;' and other scientific publications. M. Horace Say is also known for his careful issue of the later editions of his father's most important works:—'*Cours complet d'Économie politique*,' 2 vols. 8vo, Paris, 1839, new (third) edition, 1852; '*Traité d'Économie politique*,' 8vo, Paris, sixth edition, 1841; '*Œuvres diverses*,' 8vo, Paris, 1848; and especially for his arrangement and annotation of manuscripts left by his father, consisting of moral, economical, and political reflections, and collected under the title of '*Petit Volume contenant quelques Aperçus des Hommes et de la Société*,' 32mo, Paris, 1839. The family reputation for economical science is upheld in the present generation by

* JEAN BAPTISTE LÉON SAY, son of the preceding, who was born in 1826; and who, having distinguished himself as a journalist, as a writer on economic science, and for his administrative skill as a director of the Chemin de Fer du Nord, is at present discharging (December, 1871), under the government of M. Thiers, the functions of Prefect of the Seine. It was in this capacity that, accompanied by M. Vautrain, president of the Municipal

Council of Paris, he visited London, October, 1871, in order to express the gratitude of the French people for the assistance derived from the "Lord Mayor's Fund," which had been raised by public subscription in Great Britain and Ireland for the re- victualling of Paris after the capitulation of that city to the Germans. M. Say was the bearer from the French government of the grand cross of the Legion of Honour for the Lord Mayor; together with a representation in bronze, finely executed, and on a large scale, of the Hôtel de Ville, as it appeared up to the time of the memorable fire, inscribed, "*La Ville de Paris à la Cité de Londres. Ravitaillement de Paris. Février, 1871. Témoinage de Reconnaissance*." He was also the bearer to the Lord Mayor, for the City of London, of two medals—one in gold, from the Société de Prévoyance des Pharmaciens de la Seine, and the other, in silver, from the mayors of the department of the Seine, each bearing an appropriate inscription commemorative of the circumstances under which it was presented. M. Léon Say arrived in London early on the morning of Tuesday, October 17th, 1871, and became the guest of the Lord Mayor at the Mansion House; where, on the evening of the following day, he was publicly entertained at a splendid banquet in the Egyptian Hall.

SAY, THOMAS, entomologist and conchologist, was born at Philadelphia, July 27, 1787, and educated at a school at West Town, near Philadelphia. On leaving school his father, who was an apothecary in Philadelphia, took him into his shop, and afterwards established him in a business. Owing to want of prudence in money matters, and a general aversion to commercial pursuits, he got involved in debt, and turned to his zoological knowledge for the means of support. In 1812 he joined the Academy of Natural Sciences of Philadelphia, of which he was one of the earliest members, and to whose publications he was a constant contributor. At first the academy was simply a social club for naturalists, but it gradually developed into a scientific society. In 1818 he visited some of the more southern of the United States. He was employed in the two expeditions sent out by the United States Government under Major Long, his duty being to describe the zoology of the regions visited. In 1825 he joined Messrs. Maclure and Owen in their social scheme of establishing a happy brotherhood at New Harmony, Indiana, which ended before many years had passed in the members of the brotherhood quarrelling, and seeking the aid of the lawyers in settling their disputes. He then went to take charge of some property at Wabash; but he had not been there long before he contracted a fever, of which he died October 10, 1834. Mr. Say was for several years professor of natural history in the University of Philadelphia. His principal claim to notice is that he was the founder and pioneer of entomological science in the United States. His writings are numerous. They mainly consist of diagnoses of species, of which not a few are wanting in clearness, owing partly to the haste in which they were drawn up, in order to secure priority of publication, and partly to the inadequate knowledge he possessed of exotic species. His knowledge of the American species was, however, very extensive so far as regards their forms, for he paid little attention to their habits or internal structure. He described more new species than perhaps any other naturalist of his time. His principal work was '*American Entomology*,' costly and well executed, which however, only reached to the third volume. His '*American Conchology*,' 8vo, New Harmony, 1830, &c., is less meritorious, although important on account of the numerous species which were first described in it. His publications have been brought together in the following works:—'*The Complete Writings of Thomas Say on the Conchology of the United States*. Edited by W. J. Binney,' 8vo, New York, 1858; and '*The Complete Writings of T. Say on the Entomology of North America*. Edited by J. E. Leconte. With a Memoir of the Author, by G. Ord,' 2 vols. 8vo, New York, 1859.

SCHADOW-GODENHAUS, FRIEDRICH WILHELM, VON. [E. C. vol. v. col. 306.] Despite the increasing infirmities of age and failure of sight, Von Schadow-Godenhaus retained the directorship of the Düsseldorf Academy till 1859, when he was permitted to retire. He died on the 19th of March, 1862, aged 72. A street in Düsseldorf has been named after him.

* SCHAMYL, a Circassian warrior-priest and patriot, whose name in its various forms of Shamyl, Shamil, and others, is equivalent to Samuel, was born in June, 1797, at the *aul*, or village, of Himry, in the north of Daghestan. He hardened a feeble frame and constitution into vigour and robustness by

bold and manly exercises; and in his youth gave signs of a rare energy and determination of character. Early initiated into the doctrine of Sufeyism, the object of which was the purification and reformation of Islamism, Schamyl recognised in its teaching the possible realisation of the theological unity, as well as a firmer national cohesion amongst his countrymen, at that time divided by schism and political differences. He became a fervid mystic; and in accordance with one of the leading tenets of Sufeyism, which inculcates the periodical appearance of a man elected by God to the government of his fellows, set himself to the task of winning the divinely commissioned vicegerency. For this purpose he laboured to turn the full tide of Sufeyite enthusiasm into the practical and patriotic channel of opposition to the Russians, with whom he first joined issue about 1824, as one of the followers of Ghazy Mollah, the leader of the Lesghians, who were the most warlike of the tribes. In 1831 he so distinguished himself in a terrible encounter against odds, which was fatal to Ghazy Mollah, that he was called upon by the popular voice to succeed him as *Imam*. The grievous wounds which he had sustained made it impossible, however, for him to accept the dignity, to which he did not arrive until a few years afterwards, when, in spite of the opposition of a minority, he was elected to fill the office left vacant by Ghazy Mollah's successor. Schamyl now exhibited himself at once as a valiant champion of independence and an able politician; and was so skilful an administrator that for twenty-five years he was able to keep up the struggle against the overwhelming power of Russia. He combined with the ardour and courage of the warrior the functions of the priest and the sanctity and reverence of the prophet; and made religion the centre and motive of all his policy. He brought a considerable amount of method to bear upon the internal administration of the affairs of the country, the *élite* of the youthful valour and patriotism of which he formed into a guard who were specially devoted to the execution of his military designs and to the security of his person. The troops at his disposal at one time amounted to between 50,000 and 60,000 men of all arms, whom he made constant and partially successful efforts to strengthen with the newest weapons and other warlike resources of European civilisation. He was generous and even lavish in his rewards; prompt and severe in the exaction of compensation or the infliction of punishment. The latter qualities, although traceable, like all others of his character, to his patriotism and religion, excited enmity and opposition, so that, despairing of his ability to keep up a regular warfare against the Russians, he opposed them by ambushes, surprises, and other practices of the guerilla. Thus he was able to destroy their armies in detail; and his power and influence were so great that, during the earlier stages of the Crimean war, the allies calculated upon his co-operation, which he was diverted from according by the arrogance of the Turkish authorities. Worn out by his successes, his power gradually declined before the introduction of more competent methods on the part of the Russians; and in December, 1859, he was surprised by superior numbers on the plateau of Gounib. At this place, after a most heroic defence, in which he lost all but forty-seven out of the four hundred men under his command, he surrendered to Prince Bariatinsky, the Russian commander-in-chief, who sent him under escort to St. Petersburg. He was received with much consideration and kindness by the Emperor Alexander II., who assigned him the town of Kaluga, about a hundred miles S. S. W. of Moscow, as his residence, and allotted him a pension of 10,000 roubles. In his retirement the dreaded warrior, whose romantic career had presented a graphic theme for the romancer and the dramatist, has conducted himself and his family affairs with quiet dignity and resignation, bowing to the fate which, in overtaking himself, had, he knew, overthrown the independence of his native country, and presenting an ideal of the Mussalman of the highest and most spiritual type.

* SCHARF, GEORGE, F.S.A., secretary and keeper of the National Portrait Gallery, was born in London in 1816. He learned drawing and the principles of design from his father, George Scharf, a skilful German artist settled in London, who was for many years draughtsman to the Geological Society, and in due time became a student at the Royal Academy. He accompanied Mr. (afterwards Sir Charles) Fellows as draughtsman in his journeys of exploration in Lycia, 1839–44 [FELLOWS, SIR CHARLES, E. C. vol. ii. col. 886], and made a vast number of drawings of the scenery and antiquities, many of which were engraved for Sir C. Fellows's account of his dis-

coveries, 8vo, 1841, and folio, 1847, while many of the most interesting were deposited in the British Museum, and others supplied the materials for several oil paintings which were exhibited at the Royal Academy and British Institution. Mr. Scharf's success with these drawings led to his being much employed for some years in making drawings, chiefly in outline, for illustrating books of a classical character, such as Dean Milman's 'Life and Works of Horace,' 8vo, 1849, for which he made 300 drawings from the antique of coins, gems, &c.; Macaulay's 'Lays of Ancient Rome,' 1847, &c.; Schmitz's 'History of Greece'; 'The Poetical Works of John Keats,' 8vo, 1849 (120 designs); Wordsworth's 'Greece,' &c. Mr. Scharf, who had in 1847 published 'Observations on the Peculiarities of Sculptures seen on the Monuments of Ancient Lycia,' was elected a fellow of the Society of Antiquaries in 1852, and by his contributions to the *Archæologia* and elsewhere became known as an accomplished archæologist and art-critic, as well as an able artist, and in 1857 he was requested to act as art secretary to the Manchester Art-Treasures Exhibition, his successful conduct of which, and the papers he wrote in connection with it, added greatly to his reputation. But a new field had already been opened for his exertions. In 1856–57 the National Portrait Gallery was founded, and, fortunately for its successful operation, Mr. Scharf was appointed the secretary and keeper. He addressed himself with energy to its organization, and by the end of the year had brought it into good working order, and arranged the portraits for exhibition. Since then the management and extension of the gallery have been his chief occupation, and in connection with it he has prosecuted his study of English portraiture till he has acquired the position of a leading authority on the subject. Besides the official Catalogue of the gallery, which, however, is biographical rather than artistic, he has delivered courses of lectures on portraiture at the Royal and London Institutions, and written valuable papers 'On the principal Portraits of Shakespeare,' on 'The Visit of Queen Elizabeth to Blackfriars in 1600: being a new interpretation of the Hunsdon Picture,' 1868; a paper on the more interesting portraits in the collection at Hampton Court; 'Observations on the Westminster Abbey portrait and other representations of King Richard II.,' 1867; &c. Besides these and other contributions to the *Archæologia* and *Journal of the Archæological Institute*, Mr. Scharf has written 'A History of the Characteristics of Greek Art,' for a new edition of Wordsworth's 'Greece,' 1859; 'Notes on the Old Tapestry in St. Mary's Hall, Coventry'; 'Artistic Notes on the Windows of King's College Chapel, Cambridge,' 1855; 'Artistic and Descriptive Notes of the most remarkable Pictures in the British Institution Exhibition of the Ancient Masters,' 1859; 'Catalogue raisonné; or, a List of the Pictures in Blenheim Palace,' 8vo, 1861; 'Catalogue of Pictures belonging to the Society of Antiquaries,' 8vo, 1865; and popular catalogues of the Blenheim pictures and the Greek, Roman, and Pompeian Courts at the Crystal Palace.

SCHEFFER, ARY. [E. C. vol. v. col. 308.] This eminent French painter died at Paris on the 15th of June, 1858. His death produced a deep impression in France, and various memoirs of him and criticisms of his works were published. The most valuable was 'L'Œuvre d'Ary Scheffer reproduit en photographie par Bingham: avec Notice, &c., par Vitet,' folio, Paris, 1860. A brief 'Life of Ary Scheffer,' by Mrs. Grote, was published in London, 8vo, 1860.

SCHEFFER, HENRI [E. C. vol. v. col. 308], the youngest brother of Ary Scheffer, and a very able portrait-painter, died on the 15th of March, 1861, aged 62. His daughter is the wife of Ernest Renan.

SCHLAGINTWEIT, ADOLPH, naturalist and traveller, was born January 9, 1829. He was one of five brothers, four of whom have taken a more or less active part in investigating the physical and biological phenomena of India, more especially the northern part of that continent, comprising the mountainous regions of the Himalaya range, and of the area immediately to the north of it. As his travels were undertaken, for the most part, in conjunction with his brothers Hermann and Robert (born 1833), further details are given in the notice of Hermann, which follows. Adolph Schlagintweit's death is said to have occurred on August 26, 1857.

* SCHLAGINTWEIT-SAKÜNLÜNSKI, BARON HERMANN VON, the explorer of the Alps and Himalayas, was born at Munich, May 13, 1826. He and his brother Adolph made most of their researches together. Their first scientific expedition was to the Alps, in examining which mountain range they spent upwards of two years, 1846–1848. The results of

their investigations appeared in 'Untersuchungen über die physikalische Geographie der Alpen in ihren Beziehungen zur den Phänomenen der Gletscher, zur Geologie, Meteorologie und Pflanzen-Geographie,' 4to, Leipzig, 1850. Humboldt praised this work highly, and became one of the Schlagintweits' warmest friends. The two brothers then visited England and Scotland, after which they returned to Berlin. In 1851 they continued their researches in the Alps, and, amongst other feats, ascended Monte Rosa, August 28, 1851, the summit of which had never previously been reached. In 1852 and 1853 Hermann lectured on meteorology and physical geography in the University of Berlin. In 1854 was published 'Neue Untersuchungen über die physikalische Geographie . . . der Alpen,' 4to, by himself and Adolph. These works on the Alps won for the brothers a high reputation, so that Humboldt was easily able to procure for them an appointment to make a scientific voyage in India, the expense of which was to be defrayed jointly by the East India Company and the King of Prussia. Their brother Robert was associated with them. The three started for Egypt, September 20, 1854. In India the brothers sometimes worked together, and sometimes singly. They went from Bombay overland to Madras, following two routes. Adolph and Robert then explored the north-west provinces, and in May, 1856, they joined Hermann at Simla. They then travelled together through Sikkim, Bhotan, and Assam; then Ladak, Kashmir, and Baltistan were examined. Hermann and Robert next traversed the Muztagh and Kuenlun ranges, and returned to the Punjab in December, 1856. The two brothers landed at Trieste, June 8, 1857. Adolph remained in India, his intention being to cross the Himalayas and make his way overland to Russia. He was arrested before he had proceeded far on his long and perilous journey. He reached Kashgar, a city which had, in modern times, been visited by one European, and that a Russian named Ephraïmoff. Here Adolph was murdered in August, 1857, by Wulle Khan, who had temporarily usurped the supreme power of the country, but who was himself killed by Yakoub Beg, the Ataligh Ghazee (i.e. Defender of the Faith) and ruler of Eastern Turkistan. The Indian researches of the brothers are given in 'Results of a Scientific Mission to India and High Asia,' by H., A., and R. de Schlagintweit, 4 vols. 4to, Leipzig, 1860—1866, and a large folio atlas, with 120 plates. This work is replete with information on the subject to which it relates. The Paris Geographical Society awarded it their gold medal, and Hermann was ordered by the King of Prussia to assume the honorary name of Sakintlinski in August, 1864, he being the first to make a scientific expedition to the Kuenlun mountains.

SCHLOSSER, FRIEDRICH CHRISTOPH. [E. C. vol. v. col. 329.] This eminent German historian, after having served for over forty years as professor of history at the University of Heidelberg, died on the 23rd of September, 1861, within two months of the completion of the 85th year of his age. (Gervinus, *Nekrolog Schlossers*, 8vo, Leipzig, 1861.)

* SCHNEIDER, EUGENE, French manufacturer and legislator, was born at Nancy, April, 1805. He was engaged for a time in the banking house of M. Seillière; but, turning his attention to mechanical engineering, became manager of the Bazeilles Iron Works. In 1830 he removed to the works at Creuzot, situated between Autun and Chalons-sur Saône. These iron works, established in 1769, first attained importance by the discovery of coal close to the surface in 1782. During the wars of Napoleon large numbers of cannon balls and bombs were cast there; and after the war, machines and iron-work for general engineering, together with the mining of coal, became the staple trades of the place. The proprietorship changed hands in 1815 and in 1826; and after M. Schneider had managed the works for a few years, he and an elder brother became the proprietors in 1837, at which time the works gave employment to about one thousand hands. The bridges of Brest and of Freiburg, the large steam-boats on the Rhone, the rails for several thousand miles of railway, many of the largest iron-wrought erections of France, and almost all kinds of locomotives, steam-engines, and machines have come from Creuzot. Even some of the English railways have been supplied from thence with locomotives since 1865. The works have undergone repeated enlargements, until they now employ 11,000 persons, and support the town of Creuzot, with a population of 20,000. No women or girls are employed at the works; no boys under 14. Houses, churches, and schools have been built and maintained for the workpeople. More than 400 children attend the schools, which furnish the more skilled and intelligent workpeople; some of them being

especially trained as accountants, mechanical draughtsmen, and metallurgists. Many of the most experienced engineers of France have received part of their training at Creuzot.

In 1845 M. Schneider entered the Chamber of Deputies (of which his elder brother and their cousin, General Schneider, had been members) as representative of Saône-et-Loire, for which department he was re-elected in the following year. He also succeeded his brother as member of the Conseil-Général for the same department. In the early part of 1851 he was appointed Minister of Agriculture. After the coup d'état, at the end of that year, he formed one of the "Commission Consultative" to assist in drawing up a scheme for the Empire, and in 1852 was chosen member of the Corps Législatif. He was re-elected in 1857, 1863, and 1869; and such was his influence in the Corps that he held the post of vice-president from 1852 to 1865, and then that of president until 1870. As regent of the Bank of France, and president of various Chambers of Agriculture, Commerce, and Manufactures, he has been intimately associated with the industrial and commercial progress of France. Instigated by the International Society, a formidable strike took place at Creuzot in January, 1870, but the tact and firmness of M. Schneider brought it to a satisfactory termination.

SCHOMBURGK, SIR ROBERT HERMANN [E. C. vol. v. col. 335]. The explorer of British Guiana, died February 11, 1865, in his 61st year.

SCHÖNLEIN, JOHAN LUK [E. C. vol. v. col. 336], returned in 1859 to his native place, Bamberg, where he died on the 23rd of January, 1864, aged 70.

SCHOOLCRAFT, HENRY ROWE [E. C. vol. v. col. 336]. Mr. Schoolcraft, or COLCRAFT, as his name was written in his later years, completed his great work on the Indian tribes of the United States, in six quarto volumes, the last being published in 1860. He died at Washington, December 10, 1864.

SCHOPENHAUER, ARTHUR, a German philosopher, son of a merchant of Dantzic, was born in that city on the 22nd of February, 1788; and manifested an early determination to the study of metaphysics. He was educated successively at the Universities of Göttingen, Berlin (where he was an unsatisfied pupil of Fichte), and Jena, where he took his doctor's degree in 1814. Subsequently he made the acquaintance of Goethe and of Frederick Mayer, the orientalist, at Weimar, where he passed a winter, and became inspired with a taste for the study of Indian antiquities. He afterwards alternated his residence in Germany, where he principally sojourned at Dresden or Berlin, and in Italy, where he stayed chiefly at Rome or Naples. In 1831 he settled at Frankfurt-am-Main, where he died of cholera on the 21st of September, 1860.

The leading idea of the system of Schopenhauer, which assimilated much of the ancient speculations of India, is a kind of philosophical apotheosis of Will; and everything besides the immense, eternal, and infinite Volition which he conceived, he regarded as phenomena merely, from which category even the reason itself was not excepted. The supreme Will was invested with the attributes of fate; and human wisdom was made to consist in a self-abnegation which extended to personal annihilation. With the infinite Will an infinite Love was united, which embraced, in conformity with the philosophical doctrines of India, all the phenomena and existences of the world, from man and animals down to plants and stones. After many years of neglect, the system of Schopenhauer found an ardently appreciative expositor in Dr. Julius Frauenstädt, who brought out an edition of one of his most popular works, as well as a volume of his Remains, consisting of Essays, Observations, Aphorisms, and Fragments, entitled 'Aus Arthur Schopenhauer's Handschriftlichem Nachlass. Abhandlungen, Anmerkungen, Aphorismen, und Fragmente,' 8vo, Leipzig, 1864.

The principal works of Schopenhauer, who, in addition to Dr. Frauenstädt, had many commentators and critics in Germany, France, and England, are an Essay on Sight and Colours, 'Ueber das Sehen und die Farben,' 8vo, Leipzig, 1816, second edition, 1854; the World considered as Will and Phenomena, 'Die Welt als Wille und Vorstellung,' 8vo, Leipzig, 1819, second (enlarged) edition, 2 vols., 1845, a work which offers the most full and characteristic exposition of the author's system; an Essay on the quadruple Root of the Proposition of the Sufficient Reason, 'Ueber die vierfache Wurzel des Satzes vom zureichenden Grunde. Eine philosophische Abhandlung,' 8vo, Rudolstadt, 1813, second edition, 8vo, Frankfurt-am-Main, 1847, third (posthumous) edition, by Julius Frauenstädt, 8vo, Leipzig, 1864; On Will in Nature, &c., 'Ueber den Willen in der Natur,' &c., 8vo, Frankfurt, 1836, second edition 1854; Two Dissertations

on the Fundamental Problems of Ethics, 'Die beiden Grundprobleme der Ethik,' 8vo, Frankfurt, 1841, second edition, Leipzig, 1880, comprising an Essay on the Freedom of the Human Will, 'Ueber die Freiheit des menschen Willens,' and another on the Foundation of Morals, 'Ueber das Fundament der Moral,' which obtained the prizes severally of the Royal Scientific Society of Drontheim and the Academy of Copenhagen; and a collection of Philosophical Miscellanies, entitled 'Parerga und Paralipomena: kleine philosophische Schriften,' 2 vols., 8vo, Berlin, 1851, second edition, 1862.

SCHOUW, JOACHIM FRIEDRICH [E. C. vol. v. col. 340], botanist, died April 23, 1852.

* SCHRADER, JULIUS, German painter, was born at Berlin, June 16th, 1815. He studied under Schadow at Düsseldorf, but was the most prominent among the younger painters who departed from the severe academical style of that master. Herr Schrader spent some years in Italy and the East, and laboured to introduce a richer and more Venetian tone of colour among his countrymen. His earlier works were chiefly of Eastern and general subjects; his later, more strictly historical, several having been from English history. The titles of a few of his principal pictures will sufficiently indicate his class of subjects:—'Odalisques in a Harem'; 'The Temptation'; 'Edward III. Pardoning the Burgesses of Calais'; 'Milton Dictating to his Daughters'; 'Lady Macbeth Walking in her Sleep'; 'The Death of Leonardo da Vinci at Fontainebleau.' The last two were sent by the artist to the International Exhibition of 1862, but hardly sustained the estimate of the painter's power formed by native critics. He has since painted 'Cromwell at his Daughter's Deathbed,' a sentimental perversion of history, now in Cologne museum, and several portraits.

* SCHRANDOLPH, JOHANN, German painter, was born in 1808, at Qberdorf, in Bavaria. He studied in the Munich Art Academy under Cornelius; and then spent some time in Rome, studying the early Italian masters. Herr Schrandolph was one of the painters so liberally patronised by Ludwig I. of Bavaria. He has almost exclusively devoted himself to the painting of religious subjects, and he has for some years held the post of professor of religious painting in the Munich Academy. His chief work is the vast series of frescoes on gold grounds in Speier cathedral, on which he was engaged for ten years, 1844—53. He also painted several of the frescoes in the basilica of St. Bonifacius, and in some other of the churches of Munich; and he assisted in the decoration of Ratisbon cathedral. In the New Pinacothek are two of his large gallery pictures, purchased by Ludwig I., 'The Ascension' and 'Christ and the Disciples of St. John the Baptist.' Several of his pictures have been engraved.

SCHUBERT, GOTTHILF HEINRICH VON [E. C. vol. v. col. 341], naturalist, died at Laufzorn in Bavaria, July 1, 1860. One of his latest works was 'Der Erwerb aus einem vergangenen und die Erwartungen von einem zukünftigen Leben. Ein Selbstbiographie,' 3 Bde. 8vo, Erlangen, 1854—1856.

SCHULTZ-SCHULTZENSTEIN, KARL HEINRICH [E. C. vol. v. col. 342], botanist and physiologist, died suddenly at Berlin, March 23, 1871.

SCOTT, WINFIELD, general of the United States Army, was born at Petersburg, Virginia, January 13th, 1786. His father, a Scotchman, had fought for the Pretender, and escaped to America after the events of 1745. Winfield Scott studied for two years at the William and Mary College, Virginia; then directed his attention to the law, and was called to the bar in 1806. After practising for a short time at Charleston, he abandoned the law, adopted the military profession, and became captain of light artillery stationed at Baton Rouge, in Louisiana, in 1808. Having spoken disrespectfully of his chief, General Wilkinson, he was suspended for a year, which he spent in the diligent study of the military sciences. At the commencement of the war with England in 1812, he was sent as lieutenant-colonel to Blackrock, on the Canadian frontier. He fought at Queenstown Heights, and was taken prisoner, but was speedily exchanged, and resumed active service in 1813. As colonel and adjutant under General Dearborn, he captured Fort George in Upper Canada, where he was wounded by an explosion. With the rank of brigadier-general, he was actively engaged in the campaign of 1814; won the battles of Fort Erie and Chippewa, in the latter of which he defeated General Riall. At Lundy's Lane, or Niagara, he was twice wounded, and had two horses killed under him. His bravery in this service, and his success in training recruits at a camp of instruction, obtained for him promotion to the rank of major-general. When the war was

ended, he was offered, but declined, the post of secretary of war. He came to Europe in 1815, partly for the recovery of his health, partly to study the organisation and tactics of the French army. He returned to America in 1816, married, and retired from the service for several years. In 1832, and thence till 1838, he was engaged in the operations against the Black Hawk and Seminole Indians; in settling slave-state insurrections in South Carolina; and in quelling disturbances on the Canadian frontier. With the rank of general of division, he remained at head quarters from 1842 till the breaking out of the Mexican war in 1846. Throughout this war, he successfully commanded the United States army. At Vera Cruz, in March, 1847; at Cerro Gordo, Jalapa, and Perote, in April; at Puebla, in May; at El Penon, Contreras, and Churubusco, in August; at Molino el Rey and Mexico city, in September, he defeated the Mexican general Santa Anna at all points, and brought the war to an advantageous conclusion. Although held in high esteem, General Scott failed in two attempts to obtain the presidency of the Republic; being defeated by Taylor in 1848, and by Pierce in 1852. In 1855 he was made lieutenant-general, the highest rank in the American army. When the civil war broke out in 1861, the Confederates made urgent appeals to him, as a Southerner, to join their flag; but he refused, and proceeded to defend the district of Columbia and the city of Washington. He thought President Buchanan's policy was too Southern, President Lincoln's too Northern, in its sympathies, to hold out hopes of pacification; and, finding his own counsels disregarded, he retired from the army early in the struggle, but at the ripe age of seventy-five. The Congress of the United States, to mark their sense of his long services, passed a special act to enable him to retain his full pay and allowances. He again visited Europe for a few months, but, returning to America, he died at Washington, May 29th, 1866. He was the author of 'General Regulations for the Army,' 1825; 'Infantry Tactics' (from the French), 1835; and 'Autobiography,' 2 vols., 1864.

SCRIBE, AUGUSTIN EUGÈNE. [E. C. vol. v. col. 374.] This prolific dramatist continued to put forth vaudevilles, comediettas, and librettas with unabated fertility till death stayed their production, February 20, 1861. There has, we believe, been no complete edition of his dramatic works: one of the fullest is that of 1855—58, of which 20 volumes only were published.

SCRIVEN, EDWARD, an eminent engraver in the chalk and dotted manner, was born at Alcester, Warwickshire, in 1775. He was a pupil of Robert Thew, and after quitting him continued to engrave in the style of his master. Scriven at first executed a few plates for Boydell; he was afterwards employed by the Dilettanti Society in engraving their 'Specimens of Ancient Sculpture,' and in executing for publishers various illustrations of costly books. One of his most extensive series of plates was 'The Beauties of the Court of Charles II.,' after Lely. He was in his manner an excellent engraver, refined in style, careful in finish, and admirable in expression. As a man he was much esteemed, and he deserves remembrance as the most active and zealous of the founders of that useful institution, the Artists' Fund. He died August 23rd, 1841.

* SCROPE, GEORGE POULETT, F.R.S., geologist and writer on social reforms, is the son of J. Poulett Thomson, Esq., and was born in London in 1797. He was educated at Harrow and Cambridge. In 1819 he commenced his researches on volcanoes by a study of Vesuvius and the neighbouring country, which was followed by a careful examination of the volcanic area of which Etna is the prominent feature. In 1821 he married and assumed the family name of his wife, which was Scrope. He then explored the extinct volcanoes of Central France, the volcanic districts of Northern Italy, and in October, 1822, witnessed the great eruption of Vesuvius, then in full activity. In 1823 he visited the volcanic district of the Lower Rhine province. In 1824 he and Sir Charles Lyell were the secretaries to the Geological Society. In 1828 he published his work 'Considerations on Volcanoes, the character and probable causes of their phenomena, and their connection with the present state and past history of the Earth,' &c., of which a second edition appeared in 1862. In 1827 another work of his was issued, entitled 'On the Geology and Extinct Volcanoes of Central France,' with an atlas of maps and plates. The former work did not meet with a favourable reception, owing in part to its novel views, and in part to the manner in which these were brought forward. The latter work met with more success. The second edition of his earlier work was greatly improved by a more systematic treatment of the subject, and by the incorporation of new matter. His original

views regarding the volcanic origin of lavas, trachytes, and other igneous rocks, and more especially the important share which water has had in their production, were more fully illustrated by the confirmatory experiments which had been made by Sorby, Daubree, and others. His works on volcanoes also deal with another subject, namely, that of denudation. He showed conclusively that in Central France the moulding of the earth's surface into eminences and depressions has been almost entirely effected by meteoric agents. His views on sub-aërial denudation were long neglected, but have latterly found many supporters. In 1867 the Geological Society of London conferred on him the Wollaston Medal for his researches on volcanoes. Mr. Scrope was member of parliament for Stroud from 1833 to 1868; he felt great interest in the condition of the agricultural labourer, and wrote in consequence several pamphlets and reports on the revision of the poor laws; and took a prominent part in all the discussions on this subject. He is a fellow of the Royal, the Geological, and numerous other societies.

* SEELEY, PROFESSOR JOHN ROBERT, son of the late Mr. Seeley, publisher, of Fleet Street, London, was born about the year 1835, and was educated successively at the City of London School, of which he became "captain," and at Christ's College, Cambridge, of which he became a fellow in July, 1858. He took his B.A. degree in 1857, when he was bracketed with three others at the head of the first class in the Classical Tripos; and was soon afterwards declared senior Chancellor's medallist of the year. He proceeded M.A. in due course; and in 1863 was appointed to the Professorship of Latin in University College, London, where, on the 13th of October, he delivered an introductory lecture, afterwards published with the title of 'Classical Studies as an Introduction to the Moral Sciences,' 8vo, London, 1864. On the 24th of September, 1869, he was promoted to be Regius Professor of Modern History in the University of Cambridge; and has since been elected a life-governor of University College, London.

The principal work of Professor Seeley is entitled 'Ecce Homo: a Survey of the Life and Work of Jesus Christ,' 8vo, London and Cambridge, 1866 [1865], fifth edition, with a new Preface, 8vo, London, 1868, and subsequent editions. All Protestant Christendom was stirred by this publication, and presently a host of works, having more or less reference to it, appeared, manifesting various degrees of sympathy or antagonism, and generally suggesting by their own titles the title of the book which had called them into existence. A few of them may be mentioned:—'Ithuriel's Spear: or, Is this Christianity? Being a Vindication of Christian Doctrine, and an Examination of the Book called "Ecce Homo,"' &c., 8vo, London, 1867, by H. Shephard; 'Ecce Deus. Essays on the Life and Doctrine of Jesus Christ, with controversial Notes on "Ecce Homo,"' 8vo, Edinburgh, 1867, third edition, 8vo, London and Frome, 1868, American edition, Boston, 1867, by Joseph Parker, D.D.; 'Ecce Homo,' 8vo, London and Edinburgh, 1868, being a reprint of articles contributed, as a review of Professor Seeley's work, to 'Good Words,' by the Right Hon. W. E. Gladstone; "'Ecce Homo": its Character and Teaching,' 8vo, London and Bristol, 1868, by Edward Ash, M.D. In America, the controversy was represented by works entitled respectively, 'Deus Homo: God-Man,' 8vo, Chicago, 1867, by Theophilus Parsons, LL.D.; 'Ecce Deus Homo: or, the Work and Kingdom of the Christ of Scripture,' 12mo, Philadelphia, 1868; 'Semper Deus,' and, by the same author, 'Deus Semper,' Philadelphia, 1869; and 'The Life of Jesus the Christ,' 8vo, New York, 1870, by Henry Ward Beecher, D.D. It may be interesting to mention the fact that the title of 'Ecce Homo' is not a new one, as it was borne by a French work, an English translation of which, by G. Houston, was published as 'Ecce Homo: or, a Critical Enquiry into the History of Jesus Christ, being a Rational Analysis of the Gospels,' 12mo, London, 1799, second edition, 1813.

Very early in life Mr. Seeley contributed a 'Parallel between Shakespeare's Tragedy of King Lear and the Œdipus in Colono of Sophocles,' to a volume produced jointly by himself and Messrs. W. Young and E. A. Hart, and entitled, 'Three Essays on Shakespeare's Tragedy of King Lear. By Pupils of the City of London School,' 8vo, London, 1851; and he contributed an article on 'Liberal Education in Universities,' to a volume edited by the Rev. F. W. Farrar, with the title of 'Essays on a Liberal Education,' 8vo, London, 1867; and an essay on 'The Church as a Teacher of Morality,' to 'Essays on Church Policy,' &c., 8vo, London, 1868, edited by the Rev. Walter Lowe Clay. Besides numerous contributions to 'Macmillan's Magazine' and other periodicals, Professor Seeley has edited a series of articles

collectively entitled, 'The Student's Guide to the University of Cambridge,' 8vo, Cambridge, 1863, second edition, revised, 8vo, Cambridge and London, 1866; and has further published a volume of 'Lectures and Essays,' 8vo, London, 1870; and, conjointly with the Rev. E. A. Abbott, M.A., Head Master of the City of London School, 'An English Primer: or, Course of English Instruction for Schools,' 8vo, London, 1869. His latest literary employment partakes more strictly still of an academical character, and consists in the preparation of an edition of 'Livy,' the first Book of which has just been issued as one of the "Clarendon Press Series," "with Introduction, Historical Examination, and Notes," 8vo, Oxford, 1871. In this volume Professor Seeley takes up a sceptical position with regard to the credibility of the early (regal) history of Rome, about which the only trustworthy sources of information are laid down to be, (1) The physical geography and topography of the region in which the history transacted itself; (2) Comparative philology, which will give a series of historical facts respecting the migrations and intercourse of tribes; (3) Comparative mythology; (4) Comparative law; (5) Archæology; and (6) The later history of Rome, from which we may infer a considerable number of facts about the earlier.

SEGNA DI BUONAVENTURA, an early Italian painter, is said to have been a pupil of Duccio di Buoninsegna; but all that is certainly known of him is that he was occupied in painting at Siena between the years 1305 and 1319. His works are extremely scarce. The most important is a signed painting of the Virgin, St. Paul, and two other saints, in the gallery at Siena. In the National Gallery is a large altar-piece (No. 567) of the Crucifixion, with an inscription on the projecting nimbus which surrounds the head of the Saviour: it was formerly in the Vanni Collection at Siena.

* SEN, KESHUB CHUNDER (KESAVA CHANDRA), a Hindoo reformer, leader of the progressive or liberal party in the Brahmo Somaj, or Society of the one God [BRAHMO SOMAJ, E. C. S., ARTS & SCIENCES DIV., col. 354], founded in 1830 by the late Rajah Rammohun Roy, was born at Calcutta, about the year 1836, of a family belonging to the Vaidya, or physician caste, and was the grandson of Ram Comul Sen, the associate and coadjutor of the late Professor H. H. Wilson, of Oxford, during the many years in which the latter was principal of the Sanskrit College at Calcutta. His father died early, and his education devolved upon his uncle, who placed him at an English school, which he left for the College of Calcutta; where, although he did not graduate, he attained an extensive knowledge of the language, literature, and history of England. Early in his career he learned to despise the worship of idols; and, shrinking from the utter scepticism which on the other hand threatened him, he arrived, through much anguish of mind, and by thought, reflection, and prayer—the last being, as he afterwards averred, the main instrument—at a belief in monotheism, and in 1859 gave in his adhesion to the Brahmo Somaj, then under the direction of Debendra Nath Tagore. Under the guidance and with the co-operation of this gentleman, who was a Brahman of high position, of great wealth, and of great dignity of character, Keshub Chunder Sen at once proceeded to found a Sunday school in connection with the Calcutta Brahmo Somaj, with the object of bringing together a number of young men, and to impart to them in weekly lectures a regular course of instruction in Brahmic theology and ethics. The course extended over three years; and after that term had been reached with much encouragement arising from the success of the system on the pupils, several of whom became missionaries of the Brahmo Somaj, the school closed, to be re-opened again in 1867, by Keshub Chunder Sen, who, on the 5th and 12th of May, delivered two remarkable lectures on 'The Religious Importance of Mental Philosophy,' being the first two lectures of a course on the Philosophy of Religion, delivered for the purpose of supplementing, by religious instruction, the secular studies of the young university students at Calcutta. These lectures were published in England, in a volume entitled 'The Brahmo Somaj. Lectures and tracts by Keshub Chunder Sen. First and second series. Edited by Sophia Dobson Collett,' 8vo, London, 1870. In June, 1860, Keshub Chunder Sen commenced the issue of a long series of addresses with a tract, 'Young Bengal,' in which, as in the succeeding ones, he insisted upon the necessity of religion as the only possible basis on which to found a superstructure of practical and beneficent reform. From this time he devoted himself to missionary journeys in Bengal, the north-western and the central provinces, the Punjab, Bombay, and Madras, founding new branch

churches, and writing and preaching with an amount of fervour and eloquence that well-nigh made him the object of idolatry to many of his less-instructed countrymen. His labours attained their utmost expansion, however, only after he seceded from the Calcutta Brahmo Somaj, which, under Tagore, was too conservative and too tender of Hindooism, and proceeded, November, 1866, to enrol the younger and more liberal members into a progressive society, called the Brahmo Somaj of India, with the design of making it the Brahmic centre of the entire country. As the head of a reforming party amongst reformers, he became what Lord Lawrence (who was in some degree instrumental in inducing Sen to pay a visit to England) described as "the representative of the most advanced section of the great reforming party which was rising in Bengal." The visit to England was paid in 1870. On the 12th of April of that year, a "Welcome Soirée" was given to Mr. Sen in the Hanover Square Rooms, London, "on the invitation of the committee of the British and Foreign Unitarian Association;" which body also organised the "Farewell Soirée," held in the same place, on the 12th of September. Early in the morning of the 17th, he left London for Southampton, where, after delivering a farewell address in the Unitarian "Church of the Saviour," he embarked for India the same afternoon. During his stay in this country he delivered numerous sermons, speeches, and addresses, in London, Edinburgh, Glasgow, Liverpool, Leeds, Birmingham, and other principal towns, and was throughout received with very general sympathy and admiration. The burden of his addresses, as described by himself, was "the sweetness and the all-conquering power of God's mercy, of man's unworthiness, and the need of prayer and humility. He protested against worldliness and weak faith, against the heartless worship of an abstract and absent Deity, and against impurity of character concealed under the cloak of theological conformity. He pointed out the difference between the spirit of Christ and the dogmas of Christianity; and protested against all manner of sectarian antipathy and unbrotherliness, and advocated the purification of all churches and sects in the love of the One True God. He denounced war and the use of intoxicating liquors, and advocated the Peace movement and the Temperance movement. He discoursed also on England's duty to India, and urged the importance of diffusing the blessings of liberal education among all sections of the Indian population, high and low, men and women; and demanded, in the name of justice and humanity, a better treatment of his countrymen by the dominant race."

The works of Keshub Chunder Sen include his 'Jesus Christ: Europe and Asia, being the Substance of a Lecture delivered extempore in the Theatre of Calcutta Medical College, &c., Saturday, May 5th, 1866,' 8vo, London, 1866, reprinted in the 'Brahmo Somaj,' 8vo, London, 1870, already mentioned; in which were also reproduced his lecture on 'Great Men;' his sermon on 'Prayer,' delivered on the 26th of March, 1868, before the Prarthana Somaj, or Prayer Association of Bombay; his tract on 'True Faith,' issued in 1866, and "intended to be a guide to Brahmo Missionaries;" and the 'Theist's Prayer-book,' which first appeared in 1861, third edition, 1870. Another volume, likewise under the editorship of Miss Collett, and comprising his addresses and sermons delivered in England, was published with the title of 'The Brahmo Somaj. Keshub Chunder Sen's English Visit,' 8vo, London, 1871.

SENANCOUR, ÉTIENNE PIVERT DE, was born at Paris, in November, 1770, the son of a contrôleur des rentes. He was educated at the Collège de la Marche, and afterwards at Saint-Sulpice; but he had adopted the opinions of Rousseau, and feeling an invincible repugnance to the priesthood, he left the seminary, and, after a period of hesitation, went to reside in Switzerland. Here, for some years, he led an errant life; at times rambling about the mountains, at others settling for a while in a country village, occupying himself in landscape painting (which, however, he soon abandoned), and always pursuing with more or less avidity his literary and philosophical studies. Whilst in Switzerland he married, somewhat unhappily, and, it is said, fell into intemperate habits. He had been denounced at Paris as an emigrant; but his resources became exhausted, and he ventured to return to Paris, where he sought a livelihood by his pen. He seems to have written for various journals and miscellaneous publications, and performed any work that publishers would entrust to him. His first separate publication, evidently suggested by his study of Rousseau, was entitled 'Réveries sur la Nature primitive de l'Homme,' 8vo, Paris, 1798, and several times reprinted. This was followed, however, by a far more original

and remarkable book, 'Obermann: Lettres,' 2 vols. 8vo, Paris, 1804. This is Senancour's chief contribution to French literature, and that by which his name will be long remembered. Though read, and producing a certain impression at the time of publication, it was far from reaching popularity. But, after almost passing out of memory, it has been revived again and again—most notably in the editions of 1840, to which Sainte-Beuve prefixed a highly appreciative introduction, and those of 1844 and 1863, for which Georges Sand wrote a sympathetic preface; and now it may be considered to have taken permanent rank as a French classic. 'Obermann' is not a system of philosophy, nor, as some have represented it, an attack on Christianity; but it is impregnated with a dreary, depressing philosophy of man and nature, and is studiously depreciatory of religion, as Senancour found it in France. Over some minds the book exerts a strange fascination, and those who least like its general spirit admit that it abounds with passages full of poetry, beauty, and pathos, with striking thoughts and admirable descriptions. 'Obermann' was followed by another volume, 'De l'Amour,' 8vo, 1805, which has also been reprinted at distant dates, but has never been much read. He was now driven by necessity more and more to fugitive writing, and he never again published anything which displayed much original power. The most original of his remaining works, and the only one calling for mention, was his romance, 'Isabelle,' 8vo, 1833; but, though it contained brilliant passages, it was for the most part desultory, forced, and extravagant, while as a story it was utterly devoid of interest. In his later years M. Senancour was in the receipt of a small pension, granted by the ministry of M. Thiers, which was afterwards somewhat increased through the friendly interest of M. Villemain. He died at St. Cloud in January, 1846, at the age of seventy-five, asking as his last request that only the words "Éternité, deviens mon Asile!" might be inscribed on his tombstone.

SENARMONT, HENRI HUREAU DE, mineralogist, was born at Broué, September 6, 1808. In 1826 he entered the École Polytechnique, and from it passed into the École des Mines. As his object was to be an engineer, one of the duties entrusted to him was to superintend the steam-engines in the Seine department. This avocation required a large amount of travelling, of which he availed himself by examining the geological structure of the country, one result of which examination was the publication of geological maps of some of the home departments. His reputation, however, is based not on these, but on his researches into the physical properties of crystals. His investigation of the behaviour of reflected light at the surfaces of crystals was conducted with remarkable skill and judgment. He also studied the relationship which exists between the crystalline form and the conducting power of heat and electricity. He made valuable experiments on the artificial formation of minerals by the moist way, and demonstrated that mineral veins can be formed by the agency of hot springs, as also that pressure and temperature exercise great influence in modifying the affinities of substances as ordinarily known. Thus he proved that, under certain circumstances, anhydrous and insoluble compounds may be formed in the midst of liquids, which compounds, it was thought by some, could only be formed by the dry way. His researches on isomorphism are important, more especially on account of their indicating why bodies having similar crystalline forms possess different optical properties. He was, for a time, director of the Creuzot Iron Works; but during the later portion of his life he was professor of mineralogy, director of studies, librarian, and secretary to the council at the École des Mines, as also professor of physics at the École Polytechnique. He died at Paris, June 30th, 1862.

SENIOR, NASSAU WILLIAM, a political economist, eldest son of the Rev. J. R. Senior, vicar of Durnford, Wilts, was born on the 26th of September, 1790, at Compton, in Berkshire, and was educated successively at Eton and at Magdalen College, Oxford, where he graduated B.A., taking a distinguished first class in classics on the 14th of January, 1812, and proceeded M.A. on the 16th of June, 1814. On the 28th of June, 1819, he was called to the bar by the Society of Lincoln's Inn; and in 1836, during the chancellorship of Lord Cottenham, was appointed a Master in Chancery. He was elected in 1825 to the then newly-founded professorship of political economy in the University of Oxford—an office which he resigned in 1830, and to which he was re-appointed in 1847, after it had been occupied in the interval successively by Dr. Whately, afterwards Archbishop of Dublin, and Dr. Travers Twiss. The infirmities of age forced him to final re-

tiement in 1862, and he died at Kensington Gore on the 4th of June, 1864.

The writings of Mr. Senior, who for several years acted as examiner in political economy in the University of London, are almost exclusively conversant about the science which he academically professed. The principal of these are 'An Introductory Lecture before the University of Oxford,' 8vo, London, 1827, and many succeeding editions; 'Three Lectures on the Transmission of the Precious Metals from Country to Country, and the Mercantile Theory of Wealth, delivered before the University of Oxford,' 8vo, London, 1828; 'Two Lectures on Population, &c., to which is added a Correspondence between the Author and Mr. Malthus,' 8vo, London, 1829; 'Three Lectures on the Rate of Wages, with a Preface on the Causes and Remedies of the Present Disturbances,' 8vo, London, 1830; 'Three Lectures on the Cost of obtaining Money, and on some Effects of Private and Government Paper Money,' 8vo, London, 1830; 'A Letter to Lord Howick on a Legal Provision for the Irish Poor, a Commutation of Tithes, and a Provision for the Catholic Clergy,' 8vo, London, second edition, 1831, third edition, 1832; 'An Outline of the Science of Political Economy,' 4to, London, 1836, originally contributed to the 'Encyclopædia Metropolitana'; 'Letters on the Factory Act, as it affects the Cotton Manufacture,' 8vo, London, 1837, &c.; 'A Lecture on the Production of Wealth,' 8vo, Oxford, 1847; 'Political Economy,' 8vo, London, 1850; 'Four Introductory Lectures on Political Economy, delivered before the University of Oxford,' 8vo, London, 1852; 'A Journal kept in Turkey and Greece in the Autumn of 1857 and the Beginning of 1858,' 8vo, London, 1859, French version, 'La Turquie Contemporaine,' 12mo, Paris, 1861; 'Suggestions on Popular Education,' 8vo, London, 1861; 'American Slavery,' 8vo, London, 1861, being a reprint of an article on 'Uncle Tom's Cabin,' of which a portion was inserted in No. CCVI. of the 'Edinburgh Review,' and of Mr. Sumner's speech of the 19th and 20th of May, 1856, delivered before the Senate of the United States, and afterwards published as 'The Crime against Kansas,' 12mo, Washington, 1856; 'Biographical Sketches,' 8vo, London, 1863, of all of which law and lawyers are the topics, and seven of which originally appeared in the 'Edinburgh Review,' whilst the remaining three were reprinted from other periodicals; 'Essays on Fiction,' 8vo, London, 1864, a collection of articles on Scott, Thackeray, Mrs. Stowe, and others, which had made their first appearance in the leading Reviews between the years 1851 and 1857; and a volume of posthumous publication, consisting, with one exception, of reprints from the 'Edinburgh Review,' and entitled 'Historical and Philosophical Essays,' 2 vols. 8vo, London, 1865, "edited by M. C. M. Senior."

* SÉQUARD, CHARLES EDWARD BROWN, one of the most eminent of living experimental physiologists, was born in the island of Mauritius, where his early boyhood was spent. His father was Edward Brown, a native of Philadelphia, and his mother was a Séquard, whose name he adopted. In 1838 he went to Paris for the purpose of completing his education, and in 1840 he took his degree of M.D. there. In 1847, a paper by him was inserted in the 'Comptes Rendus,' on the duration of the life of frogs in autumn and winter, after the spinal column and other parts of the nervous system had been removed, which was the first of the hundred and odd papers which have followed it in quick succession. A large proportion of these contain accounts of experiments on nerves, while another large proportion are devoted to the properties of muscles. These researches have won for him five prizes from the Academy of Sciences at Paris, and more than one grant from the fund which government has placed under the management of the Royal Society for the prosecution of scientific inquiries. The facts he has collected are of the highest value, although his interpretation of their meaning has frequently been contested. He found that blood, which had been deprived of its fibrin, regained it on being injected into the separated limb of an animal, and excited muscular irritability, even after it had been removed from the body for many hours. He demonstrated by experiment the correctness of Sir C. Bell's views, that the anterior roots of the spinal nerves conduct motor impulses, while the posterior transmit sensory impressions; as also of Lockhart Clarke's description of the course of the nervous fibres, based upon the examination of prepared sections. He has ascertained that while certain poisons cause a considerable reduction in the temperature of the body, the effect of artificially raising or maintaining the temperature of the body is to retard or weaken the action of the poisons. His other experiments and researches are important, but too numerous for detailed notice here.

BIOG. DIV.—SUP.

His earlier papers are published in the 'Comptes Rendus,' and in the 'Mémoires' of the Biological Society of Paris; and his later papers are given in the 'Journal de la Physiologie de l'Homme et des Animaux,' which was started in 1858, and of which he is the editor. He has delivered successful courses of lectures at the Royal College of Surgeons, London, and in America. Amongst his separate works, which are few in number, may be cited the 'Course of Lectures on the Physiology and Pathology of the Central Nervous System,' 8vo, Philadelphia, 1860, and his lectures on the principal forms of paralysis in the lower limbs.

* SERRANO Y DOMINGUEZ, FRANCISCO, DUKE DE LA TORRE, a Spanish marshal and statesman, and a grandee of the first class, son of General Serrano y Cuenca, was born at San Fernando, near Cadiz, on the 10th of November, 1810. At fifteen years of age he entered the army as a cadet, and on the breaking out of the war of succession, after the death of Ferdinand VII., September 29th, 1833, adopted the cause of the infant queen, and especially of the queen-mother, Maria Christina, through whose influence he had attained, at the age of thirty, the rank of a general of division. On the 11th of May, 1843, being at that time a major-general, deputy of Malaga, and vice-president of the Chamber of Deputies, he undertook the ministry of war, in the nine days' administration of Lopez, whose resignation, to the great anger of the people, was forced upon him through the want of co-operation on the part of the Regent Espartero, to effect whose downfall Serrano, jointly with Prim and Narvaez, now devoted himself. This was presently accomplished; and on the 24th of July, 1843, the supporters of the cause of the queen-mother made a triumphant entry into Madrid, where Serrano encountered much popular odium for not carrying out the terms of capitulation. On the 19th of November of the same year he commenced a ten days' tenure of office as minister of war under Olozaga, for whose overthrow he successfully intrigued with Narvaez, with the intention of retaining his portfolio in the administration of Olozaga's successor. Serrano now spent some time in retirement, and even in a sort of exile, from which he emerged in 1845, when he was promoted to be a lieutenant-general and a senator, and held in successive short-lived ministerial combinations the position of minister of war. The influence which he acquired over the queen soon after her unhappy marriage, October 10, 1846, was the occasion of quarrels and estrangement within the palace, and of scandal without; and the ministry of the day thought it expedient to remove him from Madrid, by appointing him to the military command of Navarre. This he refused to accept; and, after the institution of proceedings against him for his contumacy, and a short sojourn in Andalusia for the benefit of his health, from which he was recalled in a few days at, as is said, the express desire of the king, he was appointed in the latter part of 1847 to be captain-general of Granada. For being implicated in an insurrection which broke out at Saragossa in February, 1854, he was sentenced to exile, from which he returned to join Espartero and O'Donnell in the revolution of July of the same year, which resulted in the overthrow of the government of the queen-mother, and in the formation of a cabinet in which Espartero held the office of president of the council, and O'Donnell that of minister of war. Serrano was appointed captain-general of artillery, but exchanged this post in 1856 for that of captain-general of New Castile, of which position he took advantage to give strong military support to the coup d'état by which O'Donnell drove his colleague and benefactor, Espartero, into resignation, in July of the last-named year. In 1857 he succeeded Olozaga as ambassador to the court of the Tuileries, from which he was recalled after the fall of the O'Donnell administration in September; and in 1859 was appointed director and colonel-general of artillery. Soon afterwards he was appointed to the governorship of the island of Cuba, and signalled his term of office by the negotiations and the expedition which brought back St. Domingo, in March, 1861, to the sovereignty of Spain. The colony was abandoned in 1866; but the temporary extension of the empire, of which Serrano was the agent, occasioned, in 1862, his promotion to be Duke de la Torre, and a grandee of the first class. Returning to Spain, Marshal Serrano became in June, 1865, captain-general of Madrid; and, in September, 1868, having been exiled in July previous, took a prominent part in the insurrection which drove the queen to seek refuge in France, and resulted in the formation of a provisional government, under which he became president of the council of ministers, on the 8th of October, 1868. On the 18th of June, 1869, he was ap-

pointed Regent of Spain; and though he used the power and influence of his position for the encouragement and consolidation of liberal measures, he was of accord with Prim in the desire to secure and to perpetuate a monarchical form to the government of Spain. This aspiration was gratified, at length, by the acceptance of the crown by Amadeo, duke of Aosta, son of the king of Italy, who entered Madrid, and took the oaths as sovereign, on the 2nd of January, 1871, in the presence of the Cortes Constituyentes, into whose hands Serrano had just surrendered his powers as regent. On the 3rd of January, he was placed, by a royal decree, at the head of an administration, in which he combined the offices of president of the council and minister of war, formed on principles of comprehension and conciliation, and including unionists, progressists, and democrats. He resigned on the 20th of July, 1871; and being baffled in his attempts to form a new cabinet, in which he would have retained his old offices, and many of his old colleagues, was succeeded, on the 24th, by Zorilla, who assumed office with a cabinet entirely composed of Progressistas.

SEVERINO, SAN. In the early part of the 15th century the brothers Lorenzo and Jacopo di San Severino were among the most distinguished painters in Urbino. Lorenzo, the elder brother, was the abler artist; but they painted together, and, among other things, in 1416, a series of frescoes in the oratory of San Giovanni Battista, representing the leading events in the history of St. John the Baptist and of the Saviour, some of which are still extant, though much injured. Lanzi says that the brothers were living and painting in 1470, which hardly seems probable. A 'Marriage of St. Catherine,' formerly the altarpiece in the sacristy of S. Lucia in Fabriano, and now in the National Gallery (No. 249), has the name of the painter "Laurentius II. Severinus" inscribed on it, and has usually been attributed to the elder of the brothers; but Mr. Wornum ('Cat. of Nat. Gal.') thinks, from the lateness of the execution, and the fact of the signature being Laurentius II., that it was perhaps the work of "a second Lorenzo di San Severino, who may have been the son of the first Lorenzo." It is, however, by no means certain that the 'Marriage of St. Catherine' is not by the celebrated Lorenzo: at any rate, artistic biography is silent as to a second of that name.

* **SEWARD, WILLIAM HENRY**, an American statesman, was born at Florida, Orange county, in the State of New York, May 16, 1801. His father, who had realised a moderate fortune as a physician and a merchant, and who had also held the post of magistrate, placed him, in 1810, at a school in Goshen, and, in 1816, at the Union College. In 1819, while engaged for a few months as teacher of a school in Georgia, he formed opinions so unfavourable to slavery as to influence his political conduct in later life. He returned home, took a degree, studied law, was called to the bar in 1822, and settled at Auburn in partnership with Mr. Miller, whose daughter he married. He began to engage in politics in 1824, attracted attention by a speech made at Syracuse in 1825, became a recognised member of the Republican or anti-slavery party, was chosen president of a State Convention in 1828, and in 1830 entered the Senate of New York state, where he distinguished himself in an opposition raised at that time against the Freemasons. In 1833 he visited Europe, and wrote letters on the politics and society of Europe, for insertion in the Albany 'Evening Journal.' On his return to America in 1834, he competed in an election for governor of New York, but was defeated by the Democratic candidate. In 1836, he accepted a lucrative appointment as American agent of the Holland Land Company. A second candidature for the governorship of New York being successful in 1838, he entered actively into new schemes for social and commercial improvement, especially popular education, a geological survey of the state, an improvement in the banking system, the establishment of lunatic asylums, law reform, abolition of imprisonment for debt, facilities for the reception of immigrants, the encouragement of public works, and the discouragement of slavery. Resigning the governorship in 1840, he resumed practice at the bar, by which he greatly increased his fame and fortune. Elected to the Senate of the United States in 1849, as representative of the state of New York, he speedily became leader of the Republican party, uniformly opposing the slave-owning senators from the South, and being in almost perpetual conflict with them. In discussing the terms on which California was to be admitted as a State into the Union, he adverted to "the law of God, and the interests of humanity," as being paramount to any law of Congress in regard to slavery; and, in 1868, laid it down

as an axiom, that the struggle between freedom and slavery was irrepressible, never to cease until the United States had become entirely free labour or entirely slave-owning. In 1859, Mr. Seward made a tour in Europe, Egypt, and the Holy Land. On returning to America, he again plunged into the turmoils of public life; he had been re-elected to the Senate in 1855, and had tried unsuccessfully for the presidency in 1856. He attempted again in 1860, but finding Abraham Lincoln to be the probable favourite, he threw all his energies into insuring Lincoln's success, making speeches in his favour throughout the western states. He became secretary of state, or foreign secretary, to President Lincoln; and from 1861 till 1869 the career of Mr. Seward was bound up with the foreign relations of the United States. The 'Trent' difficulty and the 'Alabama' difficulty with England, especially the latter, were the subjects of voluminous despatches by him, in which there was a tone of asperity, and a hardihood of assertion, which sorely tried the temper of the British Government, and did not enhance Mr. Seward's reputation for statesmanship. He was, nevertheless, one of the assenting parties to the drawing up of an amicable settlement of the 'Alabama' question in 1867—68, by Lord Stanley and Mr. Reverdy Johnson—a settlement, however, cancelled and annulled by the Senate of the United States in 1869. Mr. Seward was uninterruptedly secretary of state throughout the presidencies of Abraham Lincoln and Andrew Johnson; but his official labours were temporarily suspended in April, 1865, by a wound which he received from a confederate of the assassin of Mr. Lincoln. During the presidency of General Grant, 1869—72, Mr. Seward has been free from official duties, and has availed himself of his leisure to make an extended tour. He has written 'Notes on New York,' 1842, being part of a larger work published by the legislature of that State; 'The Elements of Empire in America,' 1844; 'Life of John Quincy Adams,' which has run through many editions; 'Life of De Witt Clinton'; orations on Quincy Adams, O'Connell, and Lafayette; mortuary speeches on Clay, Webster, and Clayton; addresses and speeches at colleges, schools, and public meetings; political speeches, messages, and official papers; forensic arguments, and miscellaneous papers. His works, edited by G. G. Baker, have been published at New York, in 4 vols. 8vo, 1853—61.

SHEEPSHANKS, JOHN [E. C. vol. v. col. 468], the munificent donor of the Sheepshanks Collection of Paintings to the South Kensington Museum, died on the 5th of October, 1863, at the age of 75.

* **SHERIDAN, MAJOR-GENERAL PHILIP HENRY**, of the United States army, was born of humble Irish parents at Albany, New York state, in 1831. His early years were passed at Somerset, Ohio, whence, attracting the notice of General Ritchie, he was sent to the West Point Military Academy in 1848. Graduating in 1853, he obtained his first commission as lieutenant of a cavalry regiment, with which he served in Texas, Oregon, California, and the Indian territories. When the civil war began in 1861, he was engaged as captain and quartermaster with the South-West Missouri army. In 1862, as quartermaster of the western department, and colonel of the 2nd Michigan Volunteer Cavalry, he fought under General Buell against General Bragg; cutting the enemy's line of communication south of Corinth, and being actively engaged at Baldwin, Gunton, and Boonesville. He was then raised to the rank of brigadier-general, and placed in command of the third division of the army of Ohio. Early in 1863 he fought under Rosecranz at Murfreesboro; and when the field of Chickamauga was lost, he earned reputation by a clever flank march. Promotion rapidly awaited the still-young officer: he was made major-general; and, after various cavalry skirmishes, by which he gained for himself the title of "the Murat of America," he became early in 1864 commander of the cavalry in the army of the Potomac. He worked round to the rear of General Lee and the Confederate forces, defeated detached bodies of them at Danville and elsewhere, and laid waste much of the country to which the Confederates had looked for their supplies. In the Shenandoah valley, where Generals Early and Longstreet were threatening the approaches to Washington, he encountered them, defeated them at Winchester, Cedar Creek, and other places, and compelled them to retreat. In the early months of 1865 he pressed closely upon Lee's forces, and, by winning the battle of Five Forks, compelled the Confederates to retreat. Another victory by Sheridan at Sailor's Creek, on April 6th, rendered Lee's position hopeless; and he surrendered to Grant on the 9th. Sheridan, by these services, established his name as the best cavalry officer

in the army. When the war closed, he was commander of all the cavalry in Grant's army, as well as general of the fifth army corps. In 1866 he was appointed commander of the department of the Gulf of Mexico; and had trying duties to perform at New Orleans in organising the new relations between the South and the North. A fifth military district being established, with Louisiana as its centre, he was placed in command of it; but, owing to a difference with President Johnson (in which General Grant protested against the President's views), Sheridan resigned it in 1867, and took a command under Sherman in the department of Missouri. During 1868 and 1869 he was actively engaged in settling the remaining Indians on reserved lands between the Mississippi and the Rocky Mountains.

* **SHERMAN, LIEUTENANT-GENERAL WILLIAM TECUMSEH**, a distinguished American commander, was born at Lancaster, in the state of Ohio, February 8th, 1820. He entered West Point Military Academy in 1836, graduated in 1840, received the commission of second lieutenant in the same year, and that of first lieutenant in the following year. He served in the Mexican war, and in 1847 filled the post of assistant adjutant-general in California. With the higher ranks of captain and commissary, he remained in California in 1848 and following years. Resigning the Californian appointment in 1853, he was made president of the State Military Institute of Louisiana, at New Orleans. When the civil war broke out in 1861, he at once asked for active service on the side of the Federals, obtained a commission as colonel of the 13th infantry, and shared the disasters of the first battle of Bull Run. In November he was placed in command of the Port Royal forts, in North Carolina. After the reorganisations of the Federal forces in the ensuing winter, he became brigadier-general of volunteers, acting first near the Cumberland River, and then near the Missouri. Distinguished services which he rendered to General Grant at the battle of Shiloh, in 1862, obtained for him the rank of major-general; and later in the year he commanded the 15th army corps, with which he made an unsuccessful attempt to take Vicksburg. In 1863 he commanded a wing of the army that captured Fort Hindman, in Arkansas, in January; took part in the successful siege of Vicksburg in July; received from General Grant the command of the department of Tennessee; forced the Confederates under Longstreet to retreat; and, with General Thomas, defeated Bragg at Chattanooga. In the spring of 1864 he encountered checks at Mobile and at Sabine Cross Roads; but recovered his ground by the march or raid which has made his name famous. Placed in command of the army of Georgia in May, he defeated the Confederates under Johnston, and then three times under Hood, who slowly retreated to Atlanta, from which place Sherman drove him in September. Hood, however, by taking up a new position, threatened Sherman in turn, and placed in peril his supplies and lines of communication. Then it was that Sherman adopted his bold course of marching across Georgia to Savannah and Charleston, and feeding his army by what he could find on the way. He left Atlanta on November 21st, started with 200 head of cattle, rationed his troops at the farms as he passed, and brought 1200 head of live stock into Savannah; he also brought in 700 negroes, and an immense train of horses, mules, and waggon. His line of march was sometimes 60 miles wide, so far did he send out his foraging parties. He stormed Fort M'Alister, and then took possession of Savannah; and on the 22nd of December telegraphed to President Lincoln, "I beg to present you, as a Christmas gift, the city of Savannah, with 500 heavy guns, plenty of ammunition, and 25,000 bales of cotton." This achievement was of great importance, inasmuch as it gave the Federals command of a line of sea-coast, with a new base of operations for acting against the Confederates in South Carolina. Early in 1865 Sherman marched into that State, defeated Johnston, and made with him a treaty so liberal that the Cabinet refused to sanction it; and Johnston was thereupon forced to surrender with his army. With Sherman on the south, and Grant on the north, the Confederate commander, General Lee, was obliged to yield, and the war ended. In 1866 a special Act of Congress conferred the rank of general upon Grant, and lieutenant-general upon Sherman, they being the only holders of such ranks in the United States army. Sherman was placed in command of the military division of Missouri, with head-quarters at St. Louis; and in 1868 he conducted the settlement of the few remaining tribes of Indians between the Mississippi and the Rocky Mountains. General Sherman shares with Grant the reputation of being the best Federal commanders produced by the war; like Lee and Stonewall Jackson on the other side, they are spoken of with respect

both by North and South. The great march through Georgia has been made the subject of many military pamphlets; of which may be named, 'Sherman and his Campaign,' by Bowman and Irwin; 'Sherman's March from Chattanooga,' by Heady; 'Story of the great March of General Sherman through Georgia,' by Nichols; and 'Sherman's Feldzug in Georgien,' by F. S. A. Von Meerheimb.

SIAM, KINGS OF. [E. C. vol. v. col. 489.] Somdetch Phra Paramendr Maha Mongkut, or, according to his Siamese names, Chom Klan Chau yu Hua, First King of Siam, died on the 1st of October, 1868, of fever caught while on a visit to Hua Wau to witness an eclipse. He was succeeded in the rank and title of first king by his brother, the Second or Junior King, Somdetch Pin Klan Chau yu Hua; George Kromamun Bawarawichi Chau, the eldest son of the late First King, succeeding his uncle as Second or Junior King.

* **SIEBOLD, CARL THEODOR ERNST VON**, physiologist and anatomist, was born at Würzburg, February 16, 1804. His earlier education was received from his father at home, and subsequently he went to Heilsberg and Königsberg. In 1835 he was appointed director of the Lying-in Hospital at Dantzic; in 1840, professor of zoology at Erlangen; in 1850, professor of physiology at Breslau; and at a later period professor of physiology, comparative anatomy, and zoology in the Physiological Institute founded by himself at Munich. He has contributed largely to our knowledge of the structure, development, and modes of reproduction of the entozoa and other invertebrates. His 'Lehrbuch der vergleichenden Anatomie der wirbellosen Thiere,' 2 vols. 8vo, Berlin, 1848-1849, is an excellent manual of its kind, and has been translated into English and French. His 'Wahre Parthenogenesis bei Schmetterlingen und Bienen,' 8vo, Leipzig, 1856, attracted much attention. Amongst his other works are the 'Reports on the Progress of Zoology,' first published in German, and afterwards translated into English, to form part of the Ray Society's collection of works; 'On Tape and Cystic Worms,' 8vo, 1857, published by the Sydenham Society; 'Ueber die Band- und Blasenwürmer,' 8vo, Leipzig, 1854; 'Ueber Parthenogenesis,' 4to, Munich, 1862; and 'Die Süßwasser Fische von Mittel Europa,' 8vo, Leipzig, 1863. He is joint editor with Kölliker of the 'Zeitschrift für wissenschaftliche Zoologie,' to which he has contributed many papers.

SIEBOLD, PHILIPP FRANZ VON, traveller and naturalist, and brother of the subject of the preceding notice, was born at Würzburg, February 17, 1796. He was educated at, and took his degree of doctor from, the university of that town. In 1820 he entered the Dutch service, and proceeded to Java as a sanitary officer. While occupying this post, he was attached to a scientific expedition to Japan. He received unusual facilities from the Japanese authorities, and was thus enabled to examine most parts of the kingdom. He spent several years in Japan, but his stay was brought to a summary conclusion, in consequence of his having received from the Emperor of Japan's librarian a copy of the map of the country, which had just been issued by the Japanese government. He was arrested, imprisoned, and dismissed the country. His return to Europe occurred in July, 1830. In 1859 he again visited Japan, and was employed to negotiate various diplomatic subjects with the Tycoon. In 1862 he returned to Europe, and lived for a time at Würzburg. In 1866 he went to Munich, in order to found an ethnographical museum in that city. His magnificent collections of Japanese objects now form part of the museums at Leyden and Munich. He died at Munich, October 18, 1866. His works are the principal authorities on most matters connected with Japan. The titles of the more important are as follows:—'Epitomæ linguae Japonicæ,' Batavia, 1826; 'Nippon. Archiv zur Beschreibung von Japan und dessen Neben und Schutzländern,' 6 vols. folio, Leyden, 1832-1852; 'Fauna Japonica,' 5 vols. folio, 1833-1850, in which he had the assistance of Temminck, Schlegel, and Haan; 'Bibliotheca Japonica,' 6 vols. 4to, 1833-1841; 'Flora Japonica,' 1835-1853; and 'Voyage au Japon,' 8vo, and folio atlas, 1838, &c.

SIGOURNEY, LYDIA HUNTLEY. [E. C. vol. v. col. 511.] In 1857 Mrs. Sigourney published a volume, entitled 'Olive Leaves,' which reached a second edition in 1870; and, in 1860, 'Lucy Howard's Journal.' 'Biographies of Great and Good Women,' and 'Letters of Life,' 8vo, New York, 1866, were of posthumous publication. She died on the 11th of June, 1865.

SILLIMAN, BENJAMIN, founder of 'The American Journal of Science and Arts,' and one of the most eminent of the science teachers of America, was born at Trumbull, Connec-

ticut, August 8, 1779. He entered Yale College in 1792, graduated in 1796, became a tutor in the same institution in 1799, and remained on its teaching and governing staff for 54 years. At first he intended to enter the legal profession, and, having studied with that end, he was admitted to the bar in 1802. But shortly before this occurred, Dr. Dwight, the president of Yale College, told him confidentially that a professorship of chemistry and natural history was about to be established, and offered his influence in obtaining Silliman the appointment. Accordingly, in September, 1802, he was elected to the professorship, although at the time he knew very little about chemistry. The lectures, however, were not to be commenced for some time, and the interval was actively employed in preparation, principally by attendance on the classes at Philadelphia. His first lecture was given in April, 1804; and from the first he met with great success, both in the treatment of his subjects and the conducting of the experiments. In 1805 he visited Europe on a commission to collect books for the library of Yale College, and he usefully employed his time in sight-seeing, making the acquaintance of the principal scientific celebrities, and attending classes in London and in Edinburgh. At that time science was in a very backward state in America, and the information which he acquired in Europe materially helped forward the standard of teaching in his own college. He gave three courses of lectures, which respectively related to chemistry, mineralogy, and geology. The acquisition of the Gibbs collection of minerals, the Clark telescope, and the Trumbull gallery of paintings, was mainly due to his influence. He also aided in founding and establishing the medical institution connected with Yale College. In 1818 he established the 'American Journal of Science,' and was the principal editor from the beginning until within a short period of his death. His occupations as professor and editor left him little leisure for original research, so that apart from these he wrote little. He was frequently called upon to give courses of lectures on geology at New Haven, Boston, New Orleans, and many other of the cities of the United States, which were exceedingly popular. He visited Europe in 1851. The results of this, as also of the earlier visit, were published by him, and passed through several editions. The titles of his principal works are—'Elements of Chemistry,' 2 vols. 8vo, Newhaven, 1830; 'A Journal of Travels in England, Holland, and Scotland, and of two Passages over the Atlantic in the years 1805 and 1806,' second edition, 2 vols. 8vo, Boston, 1812, third edition, 3 vols. 1820; and 'A Visit to Europe in 1851,' 2 vols. 8vo, New York, 1854. In 1853 he retired from active service, but retained the honorary distinction of professor emeritus. He died November 24, 1864. A life of him has been compiled by G. P. Fisher, in 2 vols. 8vo, 1866, which consists mainly of selections from his own letters and from the autobiographical sketch which he left in manuscript.

* SILLIMAN, BENJAMIN, son of the foregoing, was born at Newhaven, December 4, 1816. He graduated at Yale College in 1837; and in the following year commenced teaching in that institution chemistry, mineralogy, and geology. In 1842 he opened a laboratory for analytical chemistry. In 1846 he was appointed professor of chemistry applied to the arts in the Sheffield scientific school, which was founded in connection with Yale College. From 1849 to 1854 he was professor of toxicology and medical professor in the University of Louisville, Kentucky; but in the last-mentioned year he returned to Yale College as successor to his father. He accompanied his father in his visit to Europe in 1851. He was for many years secretary to the American Association for the Advancement of Science, and editor of its 'Transactions.' He has been one of the editors of the 'American Journal of Science' since 1838, and has contributed numerous papers to that journal. In the United States he is well known as a popular lecturer on scientific subjects. His separate works are not numerous: the more important are, 'First Principles of Chemistry,' 12mo, Philadelphia, 1847; and 'Principles of Physics,' 8vo, 1858, second edition, 1861.

SILVESTRE DE SACY, ANTOINE ISAAC. [SACY, ANTOINE ISAAC SILVESTRE DE, E. C. vol. v. col. 235.]

SIMEON, REV. CHARLES, M.A., who in his day occupied the foremost rank amongst the leaders of the Evangelical party in the Church of England, was born at Reading on the 24th of September, 1759, and was educated successively at Eton, where he was in due course admitted on the foundation, and at King's College, Cambridge, which, having succeeded to a scholarship, he entered on the 29th of January, 1779. A few days after his commencement of residence, he was thrown into an agony of preparation, extending over three weeks, previous to a com-

pulsory reception of the Sacrament; and the impressions of which he at that time became the subject continued with him throughout his after-life. Whilst still an undergraduate he obtained a fellowship at King's College, upon which, as a title, he was admitted to deacon's orders on Trinity Sunday, May 26, 1782, in Ely Cathedral, by Dr. Yorke, bishop of the diocese; and soon afterwards commenced his clerical career by undertaking the charge of St. Edward's Church, Cambridge, in the absence of the incumbent during the long vacation. Whilst still in deacon's orders, he was presented by Bishop Yorke, into whose hands the patronage of the living had fallen by sequestration, to the vicarage of Trinity, Cambridge, in the church of which parish—his first and final preferment—he commenced his duties on the 4th of January, 1783. On the 28th of September following, he was ordained priest in the chapel of Trinity College, by Dr. Hinchcliffe, Bishop of Peterborough and Master of Trinity. From the very first, he had much opposition to encounter, and the zeal with which he performed his pastoral duties, and the affectionate concern which he showed for the spiritual interests of the students of the University, whom he regarded as the future evangelists of the country, rendered him obnoxious to the charge of fanaticism. He was scorned and rejected by high and low. It was considered to be almost an abandonment of reputation for a clergyman to officiate in Trinity Church; and those who worshipped there were thought to have repudiated common sense, sobriety, and attachment to the establishment. Some of the principal persons of his own parish joined the clamour against him, not only refusing to attend themselves, but locking their pew doors that others might not occupy them. "The truth is," as Dr. Dealtry states, "that the fashion, and feelings, and manners of the times were against him," and intimates that, "amidst a prevailing unconcern about religion," there was not wanting some "hostility to religion itself." His services were liable to disturbance, and in the streets his personal safety was occasionally so much endangered that a number of undergraduates, who attended and prized his ministrations, formed themselves into a body-guard for his defence. His disposition did not predispose him to conciliation. His temper, which was naturally quick and vehement, was the more easily provoked from certain feelings of vanity and self-importance, which during the whole of his life were a subject of conflict and trial to him. Nearly two-thirds of his ministry were passed under very considerable discouragement; but, after a protracted period of difficulty, coldness, and resistance, he enjoyed, during the closing twelve or fifteen years of his career, the full influence and honour which belonged to his experience, piety, and activity. He was remarkable for his assiduous application to duty; for his consistency and decision of character; for his moderation in contested and doubtful points of theology; for his devotional spirit; for the laborious preparation he bestowed on his sermons, of one of which he told Mr. Carus that he had re-composed the plan nearly thirty times; and for the close and frequently munificent interest which he exhibited in various religious and philanthropic societies,—as the Society for Promoting Christian Knowledge; the Church Missionary Society, of which he may be considered as one of the founders; the British and Foreign Bible Society; the Society for the Conversion of the Jews; the Prayer-book and Homily Society; and the London Clerical Education Society. But the phase of activity most peculiar to himself was his plan of purchasing advowsons and presentations, in order to bestow them upon clergymen who gave prominence to those views of Christian truth which he deemed most important. The number of advowsons so purchased amounted in 1836 to more than forty; and at present the "Trustees of the Rev. Charles Simeon" hold in their hands the patronage of between fifty and sixty benefices, distributed over about half the counties of England, and generally in populous districts. He exercised a diligent oversight over the parishes for whose spiritual wants he thus sought to provide; and in the early part of the summer of 1836, he commenced a tour of visitation to the churches under his patronage, from the completion of which the infirmity of his health compelled him to desist. In September following he preached his last sermon in the church of which he had been vicar for nearly fifty-four years; and died on the 13th of November, 1836, at which time he had been for a considerable period the senior fellow of his college, in the chapel of which he was buried on Saturday, the 19th of the same month, amidst profound tokens of respect and affection from all classes both of the town and the University. Five of the funeral sermons delivered in Cambridge on the day of his interment or on the day following (Sunday) were published; and

biographies and other illustrative works of greater or less volume and pretension have been produced in considerable numbers. Amongst these may be mentioned 'A Brief Memoir of the Rev. Charles Simeon,' &c., 12mo, London, 1348; 'Souvenirs de Charles Simeon, Ministre de l'Eglise de la Trinité,' &c., 12mo, Toulouse, 1853, issued by the Société des Livres Religieux; 'Recollections of the Conversation Parties of the Rev. Charles Simeon. With Introductory Notice by Abner William Brown,' 8vo, London, 1863; and last, what is really the standard biography, the 'Memoirs of the Life of the Rev. Charles Simeon, M.A., late Senior Fellow of King's College, and Minister of Trinity Church, Cambridge. With a Selection from his Writings and Correspondence. Edited by the Rev. William Carus, M.A., Fellow and Senior Dean of Trinity College, and Minister of Trinity Church, Cambridge,' 8vo, London and Cambridge, 1847, and other editions, American edition, with an Introduction by Bishop Mac Ilvaine, 8vo, New York, 1847, which incorporated much of the early autobiography drawn up by Mr. Simeon in the summer of 1813, when on a visit in search of health to Sandgate.

Mr. Simeon was indefatigable in the use which he made of the press as an instrument of propaganda. His works include 'Claude's Essay on the Composition of a Sermon. With an Appendix containing One Hundred Skeletons of Sermons,' 8vo, 1796; 'Helps to Composition: or, Six Hundred Skeletons of Sermons,' 2 vols. 8vo, Cambridge, 1802, second edition, 5 vols. 8vo, London, 1808, third edition, 1815; 'Candour: or, Four Sermons preached before the University of Cambridge,' 8vo, London, 1816; 'The Excellency of the Liturgy, in Four Discourses preached before the University of Cambridge,' &c., 8vo, London, 1816; 'Horæ Homileticæ: or, Discourses (in the Form of Skeletons) upon the whole Scriptures,' 11 vols. 8vo, London, 1819–20; 'Appendix to the Horæ Homileticæ,' 6 vols. 8vo, London, 1828. These volumes, along with other subsequent groupings and collections of sermons, are reproduced in an edition of Simeon's works, 'Horæ Homileticæ. To which is annexed an improved Edition of a Translation of Claude's Essay on the Composition of a Sermon. With copious Indexes by the Rev. Thomas Hartwell Horne,' 21 vols. 8vo, London, 1832–33, and other editions, in which are contained 2536 sermons and skeletons of sermons.

* SIMON, JULES, a French philosopher and politician, whose name is more fully read as Jules François Simon Suisse, was born at Lorient, in the department of Morbihan, on the 31st of December, 1814; and, having received his preparatory education at the Collège of his native town, and other institutions, was entered in 1833 as a student of the École Normale. In 1836 he was admitted *agrégé de philosophie*, and became a teacher in that faculty successively at the Lycée of Caen and the Lycée of Versailles, at each of which he continued about a year. He was recalled by M. Cousin, one of whose most promising pupils he had been, to Paris; where, after an interval during which he acted as professor of the history of philosophy at the École Normale, he entered, in 1839, on the assistant-professorship, under M. Cousin, of the same subject, at the Sorbonne, where for a period of twelve years he lectured with great reputation and success. His academical duties were suspended, on account of the obnoxiousness of his political principles to the Prince-President, by a decree of the 16th of December, 1861; and they were finally terminated a few months later. The public life of M. Simon commenced after the Revolution of February, 1848, with his election as a member of the Constituent Assembly, for the department of Côtes-du-Nord, for which, two years previously, he had been an unsuccessful candidate; and in the course of the insurrection of June following, he distinguished himself as a member of the moderate republican party. His career in the Chamber was chiefly remarkable for his devotion to questions of domestic, economic, and social interest, and especially to the cause of education, whether superior or primary; the latter of which, in his opinion, should be at once gratuitous and compulsory. Besides acting as a prominent member of commissions bearing upon public instruction, M. Simon was a member, and also the secretary, of the provisional commission formed to exercise the functions of the Council of State, a body at that time in abeyance, and of which, upon its re-organisation in the beginning of 1849, he served for some time as a member, and as president of the committee of pardons. Upon ceasing to be a member of the Council of State, M. Simon indulged in a vacation from political life; and, from the year 1855, paid several visits to Belgium, in the chief towns of which he delivered lectures on philosophical subjects which met with an almost enthusiastic acceptance. In 1863 he was returned as a

member of the Corps Législatif by the eighth circumscription of the Seine; by which constituency, as well as by that of the second circumscription of the Gironde—for which he preferred to take his seat—he was returned in the general elections of May, 1869. M. Simon's opinions gravitated more and more in the direction of democracy, so that he has acquired a rather sinister reputation as "Number 606 of the International;" but he continued his advocacy of a liberal system of public instruction in its widest sense, whether as conducted by the school or the press; and he distinguished himself for the statistical ability with which he advocated the principles of free trade, and especially for the power of the arguments with which, on the 21st of March, 1870, he presented and sustained a proposition in favour of the abolition of capital punishment. He is at present, December, 1871, a member of the government of M. Thiers, in whose name he delivered—with the credit, according to current Paris opinion, of having previously composed it—the "President's Message" of the 13th of September, which preceded by three days the prorogation of the Assembly to the 4th of December.

M. Simon, who on the 27th of April, 1845, was made a knight of the Legion of Honour, and on the 21st of February, 1863, was elected a member of the Académie des Sciences Morales et Politiques, in succession to M. Dunoyer, is a voluminous author on the subjects which have been already indicated. His works comprise a thesis, 'Du Commentaire de Proclus sur le Timée de Platon,' 8vo, Paris, 1839; 'Études sur la Théodicée de Platon et d'Aristote,' 8vo, Paris, 1840; 'Histoire de l'École d'Alexandrie,' 2 vols. 8vo, Paris, 1844–45, new edition, 1861; the sections entitled 'Logique' and 'Histoire de la Philosophie,' in the volume entitled 'Manuel de Philosophie, à l'Usage des Collèges,' 8vo, 1845, fourth edition, 8vo, 1863, to which M. Amadée Jacques and M. E. E. Saisset were his fellow-contributors; 'Le Devoir,' 8vo, 1854, fourth edition, 1856; 'La Religion naturelle,' 8vo, 1856, second edition, 12mo, 1856, English translation, by J. W. Cole, and edited, with Preface and Notes, by J. B. Marsden, 8vo, London, 1857; 'La Liberté de Conscience,' 12mo, 1857, fourth edition, 8vo, 1867, a summary of the lectures delivered by the author in Belgium; 'La Liberté,' 2 vols. 8vo, Paris, 1859, and 12mo, 1859; 'La Liberté civile,' 8vo, Paris, third edition, 1867; 'L'Ouvrière,' 8vo, 1861, second edition, 12mo, 1861, &c., German translation, by F. Nessler, 'Die Arbeiterin,' 8vo, Zurich, 1862; 'L'École,' 8vo, Paris, 1864, third edition, 1865; 'Discours sur la Loi des Coalitions' (29 Avril, 1864), 12mo, Paris and Versailles, 1864; 'Discours sur la Situation des Instituteurs et des Institutrices' (19 Mai, 1864), 12mo, Paris and Versailles, 1864; 'Le Travail,' 8vo, Paris, second edition, 1866; and 'La Peine de Mort,' 12mo, Paris and Saint Germain, 1869. M. Simon has also produced new editions of the philosophical works of four writers, the titles of which vary in nothing but the names of the authors, entitled respectively 'Œuvres Philosophiques de Jacques Bénédict Bossuet. Nouvelle Édition, collationnée sur les meilleurs Textes et précédée d'une Introduction,' &c., 12mo, Paris, 1842; 'Œuvres Philosophiques d'Antoine Arnauld,' &c., 12mo, Paris, 1843; 'Œuvres Philosophiques du P. Nicolas de Malebranche,' &c., 2 vols. 12mo, Paris, 1842, new edition, 1859; 'Œuvres Philosophiques de René Descartes,' &c., 12mo, Paris, 1850, &c., new edition, 1865; and a Preface to M. F. Passy's 'De la Propriété intellectuelle,' 12mo, 1859.

SIMON, THOMAS, an eminent medallist, was born about 1612, of French descent, but a native of Yorkshire. In 1633 he became pupil and assistant to Nicholas Briot, engraver to the Mint; and when Briot left England after the execution of Charles I., Simon was appointed his successor. His first important work was a new broad seal for the Admiralty in 1636; and in 1643 he engraved a new great seal of England. Simon cut the great seals, commemoration medals, and coins during the protectorate of Oliver Cromwell and that of Richard Cromwell. At the Restoration he was deprived of his place as engraver to the Mint, notwithstanding he produced a now famous "trial-piece," in order to show that he was not inferior to the French engraver who displaced him. Simon retained, however, the post of engraver of the royal seals till his death, which occurred in June of the plague-year, 1665. Thomas Simon was by far the ablest engraver of the national seals, medals, and coins we have ever had; and his coins and seals are not only admirable as works of art, but also as historical memorials. He always represented faithfully the protector or the sovereign as he then was, unlike the foolish custom of recent engravers to the Mint, who give an always youthful and idealized portrait, worthless as a likeness

and misleading as a memorial. At a recent sale a copy of Simon's "crown trial-piece" sold for the surprising sum of £275. Besides the dies executed for the government, Simon engraved several private medals of eminent persons; a great seal for the Royal Society, &c. A quarto volume of engravings, and descriptions of the 'Medals, Coins, Great Seals, &c., of T. Simon,' was published by Vertue, the engraver, in 1753.

SIMPSON, SIR JAMES YOUNG, BART. [E. C. vol. vi. col. 1023.] In 1867 Sir J. Y. Simpson published a treatise on 'Archaic Sculpturings of Cups, Circles, &c. upon Stones and Rocks in England, Scotland, and other Countries.' A third volume of his collected works, on the diseases of women, is almost ready for publication. In consideration of his high professional services he was created a baronet, and a D.C.L. at Oxford, in 1866; and, in 1869, the corporation of Edinburgh presented him with the freedom of the city. He died at Edinburgh, May 7, 1870.

SINCLAIR, MISS CATHERINE [E. C. vol. v. col. 522], died on the 6th of August, 1864.

SJÖGREN, ANDREAS JOHANN [E. C. vol. v. col. 529], died on the 18th of January, 1855.

* **SLINGENEYER, ERNEST**, Belgian painter, was born, May 20th, 1823, at Loochristy, near Ghent. He studied under Baron Wappers in the Antwerp Academy, but ranks among the followers of M. Gallait. M. Slingeneyer's subjects are chiefly historical episodes or biographical incidents. Among his best-known pictures are—the 'Death of Jacobsen,' in the collection of the King of the Belgians; the 'Death of Claessens,' in that of the King of Holland; the 'Death of Nelson,' 'An Episode in the Massacre of St. Bartholomew,' 'The Shipwreck of Camoens,' &c. In the International Exhibition of 1862, his pictures of the 'Physician Vésale following the Army of Charles V.,' from the Musée Royal, Brussels, and 'A Christian Martyr under Diocletian,' attracted general notice—the latter especially, on account of some curious effects of sunlight, which, however, were rather tricks of art than belonging to the legitimate province of painting of an elevated order. M. Slingeneyer is a member of the Académie royale de Belgique, commander of the order of Leopold, and knight of the orders of the Lion of the Netherlands, of Merit, Saxony, of Our Lady of Villa Viciosa, of Nichan Iftikhar, &c.

* **SMILES, SAMUEL**, was born at Haddington, Scotland, about the year 1816. He practised as a surgeon for some time at Leeds; but abandoned the medical profession in order to take the editorship of the 'Leeds Times.' In 1845 he again changed his profession, and became secretary of the Leeds and Thirsk Railway Company; he resigned this in 1852 for the secretaryship of the South-Eastern Railway Company, which some years later he exchanged for a similar post in the National Provident Assurance Company.

Mr. Smiles's publications are numerous, and many of them have had a large sale. They comprise the following:—'Physical Education,' Edinburgh, 8vo, 1837; 'History of Ireland and the Irish People, under the Government of England,' 8vo, 1844; 'Railway Property, its Condition and Prospects,' 8vo, 1849; 'Life of George Stephenson, Railway Engineer,' 8vo, London, 1857, Dutch translation by A. Winckler-Prins, Amsterdam, 1864; 'Story of the Life of George Stephenson' (an abridgment of the above), 8vo, London, 1859; Biographical Sketch prefixed to 'Poetical Works of George Massey,' 8vo, London, 1860; 'Self-Help, with Illustrations of Character and Conduct,' 8vo, London, 1859, French translation by Talandier, 1865, Russian translation, 1868; 'Lives of the Engineers, with an Account of their Principal Works, including also a History of Inland Communication in Britain,' 3 vols. 8vo, 1861—62; 'Workmen's Earnings, Strikes, and Savings' (reprinted from the 'Quarterly Review'), 8vo, 1861; 'Industrial Biography: Iron-workers and Tool-makers,' 8vo, 1863, translated partially into Italian, by G. Strafforello, 'Storia di Cinque Lavoranti e Inventori,' 8vo, Leghorn, 1868; 'The Huguenots: their Settlement and Industries in England and Ireland,' 8vo, London, 1867, American edition, with an Appendix relating to the Huguenots in America, by the Hon. G. P. Disoway, 8vo, New York, 1868; 'Lives of George Stephenson and of his son Robert Stephenson' (a revised and enlarged edition of vol. iii. of 'Lives of the Engineers'), 8vo, London, 1868; 'Lives of Boulton and Watt: principally from the original Soho MSS., comprising also a History of the Invention and Introduction of the Steam Engine,' 8vo, 1865; 'Character,' 8vo, 1872.

SMIRKE, SIR ROBERT, R.A. [E. C. vol. v. col. 540.] Having for some time withdrawn from professional practice, Sir Robert Smirke in 1859 resigned his position as R.A., retiring

into the ranks of the honorary academicians. He died at his residence, Cheltenham, on the 18th of April, 1867, aged 86, and was interred in Leckhampton churchyard.

SMITH, ALBERT [E. C. vol. v. col. 543]. This popular writer and diverting lecturer died, after a brief illness, on the 23rd of May, 1860, aged 44.

SMITH, ALEXANDER, a poet and essayist, was born on the 31st of December, 1829, at Kilmarnock, in Ayrshire, from which town, some few years after, he removed with his family successively to Paisley and Glasgow. Circumstances combined to determine him to the profession of his father, who was a designer of patterns; and it was whilst he was engaged in this occupation that much of his earlier verse was composed. For some time he contributed fugitive poetry to the 'Glasgow Citizen,' but at length sent in 1851 a selection of his poems to the Rev. George Gilfillan, of Dundee, who introduced his name and his efforts to the world of letters in the 'Critic' and the 'Eclectic Review.' The 'Life Drama' was published by instalments in 1852, and attracted attention as the occasion of a controversy, at one pole of which was admiration for its power, and at the other reprobation for its assumed plagiarism. Being reproduced with other pieces in a volume entitled 'Poems,' 12mo, London, 1853, of which ten thousand copies were sold in a few months, it was proved to be popular, if it had to be conceded that it was spasmodic. In 1854 Mr. Smith, who was then engaged in editing the 'Glasgow Sentinel,' a weekly literary serial, was appointed secretary to the University of Edinburgh; and, removing to the capital, made the acquaintance of Mr. Dobell, with whom he afterwards became the joint author of a volume entitled 'Sonnets on the War,' 12mo, London, 1855. In the spring of 1857, he married Miss Flora Macdonald, from Skye, eldest daughter of Mr. Macdonald of Ord, and nearly akin by blood to the historic heroine of that name. From this time his biography resolves itself pretty much into a record of literary intercourse and literary production, scarcely broken by the annual recurrence of the summer vacation which was generally spent in Skye, the scenery of which inspired him with the theme he has treated in 'A Summer in Skye,' 2 vols. 8vo, London and Edinburgh, 1865, &c., American edition, 12mo, Boston, 1865. In the summer of 1866, Mr. Smith felt the effects of overwork of the brain, and the August holiday which should have restored him was interrupted by the cares and distractions incidental to publication. He returned to Edinburgh but little benefited by his nominal vacation; and dating his formal illness from the 20th of November of the same year, he died on the 5th of January, 1867, and was buried in Warriston cemetery.

The works of Mr. Smith, besides those already mentioned comprise 'City Poems,' 8vo, Cambridge and London, 1857, American edition, 16mo, Boston, 1857—a volume which contained six pieces, and met with only a very modified success; 'Edwin of Deira,' 8vo, Cambridge and London, first two editions, 1861, American edition, 16mo, Boston, 1861, and also republished in 'Harper's [New York] Monthly,' October 1861, and which was on the whole well received, notwithstanding that, already more than half written before the issue of the 'Idylls of the King,' it had the misfortune to be published after them, and hence provoked the charge of imitation; 'Dreamthorp. A Book of Essays written in the Country,' 8vo, London and Edinburgh, 1863, &c., American edition, 16mo, Boston, first two editions, 1864, a work in which the friends of the author detected most of his idiosyncrasy; and 'Alfred Hagart's Household. A Tale,' 2 vols. 8vo, London and Edinburgh, 1866, &c., American edition, 12mo, Boston, 1865, which the author contributed to 'Good Words,' and which he regarded as a tentative of what he might accomplish in fiction. Mr. Smith contributed to various magazines and newspapers, making his first serious attempt in prose in an article entitled 'Scottish Ballad Poetry,' which appeared in the volume of 'Edinburgh Essays,' 1857. Some of his fugitive productions had a posthumous publication as 'Last Leaves. Sketches, and Criticisms by Alexander Smith.' Edited, with a Memoir, by Patrick Proctor Alexander, M.A., 8vo, Edinburgh, 1868, third edition, 1869. Amongst other works of a biographical nature may be mentioned, 'The Early Years of Alexander Smith, Poet and Essayist. A Study for Young Men. Chiefly Reminiscences of Ten Years' Companionship. By the Rev. T. Brisbane,' 12mo, London and Frome, 1869. Mr. Smith edited 'The Poetical Works of Robert Burns. With a Memoir,' &c., 2 vols. 8vo, London and Cambridge, 1865, forming part of the 'Golden Treasury Series,' and 'Poems, Songs, and Letters, being the complete Works of Robert Burns,' &c., 8vo, London, 1866, forming the 'Globe' edition; Bunyan's 'Divine Emblems, &c.,

With Preface,' &c., 12mo, 1864; and J. W. S. Hows's 'Golden Leaves from the American Poets. With an Introductory Essay,' &c., 8vo, London and Edinburgh, 1866.

SMITH, LIEUTENANT-COLONEL CHARLES HAMILTON [E. C. vol. v. col. 544], was born in West Flanders, December 26, 1776. He entered the British army in the Netherlands as a volunteer, and in 1797 joined a regiment which was going to the West Indies. He served there for twelve years, then returned to Europe, and accompanied the Walcheren expedition as deputy quartermaster-general. From 1813 to 1816 he was in active service in the Netherlands; next he went on a mission for the Foreign Office to the United States and Canada; and in 1820 he retired. He gave considerable attention to history, archaeology, and zoology. He wrote the article 'War' in the 'Encyclopædia Britannica'; drew most of the original figures in Sir S. Meyrick's 'Critical Inquiry into the History of Ancient Armour'; and he left many volumes of manuscript notes, most of which had not been published. He was a fellow of the Royal and Linnæan Societies, and the first president of the Devon and Cornwall Natural History Society. During his later years he lived at Plymouth, and there he died, September 21, 1859.

* **SMITH, FRANCIS PETTIT**, inventor, or one of the inventors, of the screw-propeller, was born at Hythe, in Kent, February 9th, 1808. As a boy he showed a fondness for amateur boat-building; nor did his later avocations as a grazing-farmer deter him from making experiments in that direction. About 1834 he constructed a model boat, in which an Archimedean screw was made to revolve by means of a spring; and he formed an opinion that, with the number and pitch of the threads determined by experiment, such a screw, if rotated by steam-power, would form a useful substitute for the paddle-wheels of a steam-boat. A banker aiding him with a little capital, and an engineer with a few practical hints, he spent two or three years in developing his idea, experimenting with larger boats and improved forms of screw. He tried his apparatus at Dover and Folkestone in 1837. In the following year he was enabled to bring the subject to the attention of the Government; and the Admiralty, as a means of testing the invention, ordered a steamer to be constructed, to bear the name of the 'Archimedes,' and to have a screw-propeller instead of paddle-wheels. There was another screw-propeller—Ericsson's—competing for favour about the same time; and Mr. Smith had many struggles in the endeavour to make profitable use of the patent he obtained for his invention. Screw-propellers began to be adopted for merchant steamers in 1840; in 1841 the Admiralty ordered the building of the first screw war-vessel, the 'Rattler'; and by the year 1845 the progress made had been so rapid that there were 23 such ships in the royal navy. In 1848 the Admiralty, and in the following year the merchant service, verified the usefulness of the "auxiliary" screw—a screw-propeller to render occasional aid in a ship mainly moved by sails. In 1848 the government screw-ships, building and built, were 45 in number; and the screw every year more and more superseded the paddle, as in the cases of the 'Duke of Wellington,' the 'Great Eastern,' and the 'Agamemnon.' In 1856, when Mr. Smith's patent expired, there were 78 screw war-steamers in the British navy, besides a much larger number of smaller vessels, and whole fleets of merchant steamers. His own profit derived from the invention was, from various causes, inadequate: to make up in some degree the deficiency, the Queen granted him a pension of £200 a year, while the chief marine engineers and shipbuilders subscribed for him £2000 and a service of plate. In 1860 Mr. Smith received the appointment of curator of the Patent Office Museum, South Kensington. The controversy respecting the screw-propeller forms almost a body of literature in itself; and it is only in practical works on the subject that the relative priority and merits of different inventions can be sufficiently discussed.

SMITH, GEORGE, a celebrated landscape painter, known as **SMITH OF CHICHESTER**, was born in 1714, and appears to have learned his art by close study of the scenery around the city where he passed his life. His pictures have no claim to a high place in English landscape art, though they sold for higher prices than those of his great contemporary, Wilson. They are mostly quiet country scenes, such as are common in the Sussex valleys, and bordering the South Downs. But several of them were admirably engraved by Woollet, and will thus be preserved, proofs of the prints being now often of more value than the pictures. George Smith died in 1766.—His elder brother, **WILLIAM SMITH**, born 1707, died 1764, was a portrait-painter, but occasionally painted fruit, flowers, and landscapes.—**JOHN SMITH**, a younger brother, born 1717, died 1764, painted land-

scapes in the manner of George, and with nearly equal skill. All the brothers resided at Chichester. John and George Smith etched a set of 53 landscapes from their own designs, and some after Rembrandt. A series of 'Select Views in England and Wales,' by the Smiths, was engraved by Vivares and others. William Pether engraved the likenesses of the three brothers in one print.

* **SMITH, GOLDWIN**, a writer on historical, academical, and political subjects, the son of a physician at Reading, was born in that town in the year 1823; and, having received his earlier education at Eton, was entered at Christ Church, Oxford, from which he migrated shortly afterwards, on his election to a demyship at Magdalen College in the same university. He obtained the Hertford scholarship, "for the promotion of the study of Latin," in 1842; carried off the prize for Latin verse, and Dean Ireland's scholarship, in 1845; and on the 10th of May in the last-named year took his B.A. degree, being first class in *literis humanioribus*, and proceeded M.A. in due course. In 1846 he was the winner of the Chancellor's prize for a Latin essay, and for an English essay in 1847; and, having become a fellow and tutor of University College, was elected several years afterwards to an honorary fellowship of Oriel. He was called to the bar by the Society of Lincoln's Inn, on the 11th of June, 1850, but did not seek to establish a practice; and he served respectively as assistant secretary and secretary to two successive university commissions. On the 9th of April, 1858, he was appointed regius professor of modern history, and published several of the lectures which he delivered in that capacity:—'An Inaugural Lecture,' &c., 8vo, Oxford and London, 1859, second edition, 1864; 'On the Foundation of the American Colonies,' &c., 8vo, 1861; 'On the Study of History. Two Lectures,' &c., 8vo, 1861; 'On some supposed Consequences of the Doctrine of Historical Progress,' &c., 8vo, 1861; which were all collected in a volume, entitled 'Lectures on Modern History delivered at Oxford, 1859—1861,' 8vo, first two editions, 1861, another edition, 12mo, New York, 1866. An ardent liberal, whether in social, political, or academical affairs, and an admiring apologist of the institutions of America, he paid a visit to the United States in 1864; where, his arrival having been anticipated by his reputation as an advocate of Northern interests in the war against the South, he was enthusiastically received. America "welcomed him," to use the words of the 'North American Review' for October, 1864, "not as a stranger, but as a son." During his stay on this occasion he received, on the 7th of September, the degree of LL.D. from Brown University, Providence, Rhode Island; and, amongst other public appearances, delivered a lecture on 'England and America,' 8vo, Boston (U.S.), 1865, the several publications of which are traced in the title of an English one, 'England and America. A Lecture delivered by Goldwin Smith, before the Boston Fraternity, during his recent Visit to the United States. Reprinted from the 'Atlantic Monthly' (December, 1864). With an Introduction addressed by the Author to the President of the Union and Emancipation Society, Manchester,' 8vo, Manchester, 1865; before which society Mr. Smith afterwards delivered an address on 'The Civil War in America,' 8vo, London and Manchester, 1866. Professor Goldwin Smith resigned his chair of modern history at Oxford, in July, 1866; and, having devoted some months to the delivery of lectures on political reform, accepted, in July, 1868, the professorship of English and general constitutional history in Cornell University, Ithaca, New York, where he delivered his inaugural lecture on the 17th of November following. Since his emigration to America, the event of his life most saliently interesting to the English people has been a passage at arms between him and Mr. Disraeli, who had offensively described him, although without naming him, in his novel of 'Lothair,' as "quite a young man of advanced opinions on all subjects, religious, social, and political; gifted with a great command of words, which took the form of endless exposition, varied by sarcasm and passages of ornate jargon—the last person one would have expected to recognise in an Oxford professor."

Besides producing the works already mentioned, Mr. Goldwin Smith has been a contributor to 'Anthologia Oxoniensis'; to the 'Oxford Essays' for 1856 and 1858; and to 'Essays on Reform,' 8vo, London, 1867, to which he supplied an article on 'The Experience of the American Commonwealth'; and he has also been an extensive writer in periodicals and journals, especially in 'Macmillan's Magazine' and the 'Daily News.' His substantive publications, some of which have had a previous circulation in a fugitive form, include 'The Empire. A Series of Letters published in the 'Daily News,' 1862—1863,' 8vo,

Oxford and London, 1863; and three 'Letters' on 'The Irish Question,' 8vo, London, 1868, originally addressed to the editor of the 'Daily News'; 'Irish History and Irish Character,' 8vo, Oxford and London, 1861, second edition, 1862, cheap edition, 1868; 'Rational Religion and the Rationalistic Objections of the Bampton Lectures [Mansel's] for 1858,' 8vo, Oxford, 1861; 'Does the Bible sanction American Slavery?' 8vo, Oxford and London, and 12mo, Cambridge (Massachusetts), 1863; 'A Plea for the Abolition of Tests in the University of Oxford,' 8vo, Oxford, first two editions, 1864; a collection of 'Speeches and Letters, from January, 1863, to January, 1865, on the Rebellion,' 2 vols. 8vo, New York, 1865; 'Three English Statesmen (Pym, Cromwell, and Pitt). A Course of Lectures on the Political History of England,' 8vo, London and Oxford, 1867, 8vo, New York, 1867, and 8vo, Cambridge and London, 1868; and a pamphlet on 'The Reorganisation of the University of Oxford,' 8vo, Oxford and London, 1868.

SMITH, LIEUT.-GENERAL SIR HENRY GEORGE WAKELYN, BART., G.C.B. [E. C. vol. v. col. 545.] Sir Harry Smith received the grand-cross of the Order of the Bath for his distinguished services, and was appointed to the command of the Western district, but did not advance to a higher grade in military rank. He died in 1860.

SMITH, JAMES, geologist and Biblical critic, was born at Glasgow, August 15, 1782, and was educated in that city. In 1806 he bought a yacht, and occupied much of his time in sailing along the west coast of Scotland, with a view to studying archaeology and natural history. It was during these voyages, which sometimes lasted for weeks at a time, that he discovered the vitrified fort on Burnt Island, in Bute-shire, and made those researches on the later geological events and form of the country, which have won for him the distinguished title of the father of post-pliocene geology. He wrote several papers on the subject, such as those relating to the evidence of recent change in the level of the land, on the arctic climate of the post-pliocene period, and on the scratched boulders of Scotland. These and other kindred papers have been collected in his 'Researches in Newer Pliocene Geology,' 8vo, Glasgow, 1862. He spent many years in the south of Europe, and was thus led to investigate the geology of Gibraltar, and to trace out the numerous fluctuations of level which that peninsula has undergone. He also studied the kindred phenomena manifested by the temple of Serapis and on the north coast of France. His most important literary work was, 'The Voyage and Shipwreck of St. Paul,' 8vo, London, 1842, third edition, 1866, for which he had special qualifications in his classical knowledge, in acquaintance with natural history, and the experience he acquired by yachting and travelling. He contributed greatly to the prosperity of the Andersonian Institution at Glasgow by his exertions as president from 1830 onwards, and by his founding and supporting the museum of natural history connected therewith. The fine collection of Scotch coins in that museum was presented by him. He died at his residence, Jordan Hill, near Glasgow, January 17, 1867.

SMITH, ADMIRAL SIR SIDNEY. [E. C. vol. vi. col. 1023].

SMITH, THOMAS, landscape-painter, usually called SMITH of DERBY, to distinguish him from his contemporary, Smith of Chichester, was, in the words of Edwards ('Anecdotes of Painting,' p. 30), "one of the first artists who explored and displayed the beautiful scenes of his native country." He was born early in the 18th century; was a contributor to the first exhibitions of the Royal Academy, and painted many views in the Peak of Derbyshire, a series of forty of which were engraved by Vivares, and published by Boydell in 1760. Engravings from his pictures were also executed by Elliot, Mason, and others. Smith died at Bristol Hot Wells, in 1769. J. Raphael Smith, the celebrated mezzotint engraver, was his son and pupil. [SMITH, JOHN RAPHAEL, E. C. vol. v. col. 549.]

SMITH, THOMAS SOUTHWOOD, M.D. [E. C. vol. v. col. 559.] This distinguished physician and earnest advocate and promoter of measures for the improvement of the public health, died December 10, 1861.

SMITHSON, JAMES LEWIS, was a natural son of Hugh, third duke of Northumberland. At first he assumed the name of MACIE, but afterwards exchanged it for his father's family name, Smithson. He was educated at Oxford, and whilst there became known as a skilful chemist. After leaving the University he associated with the most eminent scientific men of the day, such as Wollaston, Banks, and others. In 1790 he became a Fellow of the Royal Society, and contributed several papers on chemical analysis to the 'Philosophical Transactions.' He also

contributed papers to the 'Annals of Philosophy.' He was considered to be one of the most skilful chemists of the time in analysing small quantities; and as an illustration of his dexterity, he once analysed the half of a tear-drop from a lady's cheek, and detected four or five different substances held in solution by it. He is, however, best known as the founder of the Smithsonian Institution, Washington, U.S., for the establishment of which he left all his property, valued at nearly 130,000*l.* He died at Genoa, on the 27th of June, 1829.

* SMYTH, CHARLES PIAZZI [E. C. vol. vi. col. 1026]. Of late years Mr. Smyth has devoted much time to the study of the metrical and astronomical value of the Egyptian pyramids: the results of his investigations are set forth in 'Life and Work at the Great Pyramids during the Months of February, March, and April, A.D. 1865, with a Discussion of the Facts ascertained,' 3 vols. 8vo. Edinburgh and London, 1867.

SMYTH, REAR-ADMIRAL WILLIAM HENRY [E. C. vol. vi. col. 1024], died September 9, 1865.

SOUTH, SIR JAMES, F.R.S., &c. [E. C. vol. v. col. 607], died at his residence, Campden Hill, Kensington, on the 19th of October, 1867, aged 82.

SOWERBY, JAMES DE CARLE [E. C. vol. vi. col. 1026], botanist and draughtsman, died August 26, 1871.

SPAGNA I.O. GIOVANNI DI PIETRO, called Lo SPAGNO and Lo SPAGNOLO, was, next to Raffaele, the ablest of the scholars of Pietro Perugino, retaining, according to Vasari, more of the master's colour, whilst he excelled in purity of design and beauty of form. Later, however, carried away, like many of his contemporaries, by the brilliancy and success of Raffaele, he became an imitator of that great painter, to the entire loss of the freshness and severe simplicity of his own manner. All that is known of his life is that he was working as a painter in 1503; that he married and was admitted a citizen of Spoleto in 1516, and was alive in 1530. His most celebrated picture is a representation of the 'Madonna enthroned,' in the chapel of San Stefano, in the church of San Francesco at Assisi, painted in 1516. A series of frescoes of 'The Brotherhood of San Francesco,' in the choir of the church Degli Angeli, and the 'Acts of St. James,' in the church of San Jacopo, near Spoleto, are also greatly admired. His works are rare in galleries: the National Gallery possesses a fine example, 'The Glorification of the Virgin,' No. 282, and a small 'Ecce Homo,' No. 691. A 'Virgin and Infant Christ with St. John,' in the same collection (No. 181), and there ascribed to Perugino, is said by Sir Charles Eastlake (note to Kugler's 'Handbook of Painting: the Italian Schools,' part i., p. 260) to be "more probably the work of this painter;" but it is certainly in the manner of Perugino, has Petrus Peruginus inscribed in gold on the hem of the Virgin's mantle, and there can be little doubt is rightly ascribed to him.

SPARKS, JARED. [E. C. vol. v. col. 625.] This distinguished American historian retained a nominal connection with Harvard University till his death, though, owing to the infirmities of age, he was not of late able to participate actively in its management. He died on the 15th of March, 1866, in the 77th year of his age, he having been born on the 10th of May, 1789.

SPEKE, JOHN HANNING, traveller in Africa, was born at Orleigh Court, near Bideford, Devonshire, May 4, 1827, and educated at the grammar school at Barnstaple. In 1844 being then only seventeen years of age, he obtained a commission in the 46th Regiment of Bengal Native Infantry. He took an active share in the war of the Punjab, and, during leaves of absence, employed himself in investigating the geography and zoology of India. Wherever he went—and he traversed several tracts previously unvisited by Europeans—he made rough sketch-maps, so that his mere sporting adventures contributed to a knowledge of the country. He then made one of the finest collections of the fauna of northern India brought together by one individual. The museums of India and England were greatly enriched by his contributions. In 1854 he commenced his explorations in eastern Africa. He joined Captain Burton in an expedition to the Somalis. In 1856 he again joined Captain Burton in a more extensive enterprise, the object of which was to ascertain the position of the great lakes of the interior, of which confused accounts had been received from the Arabs; the relation which they have to the Nile basin, and the nature of the surrounding country. The expedition started from Zanzibar, in June, 1857, and details respecting it are given under NILE, E. C. S., GEOG. DIV. In February, 1858, Lake Tanganyika was discovered, and was partially explored in the following month. In July, Captain Speke traversed the route running north from Kazeh, and in August

discovered the south end of the Victoria Nyanza lake. Zanzibar was reached on the return, in March, 1859. For his discovery of the Victoria Nyanza lake, the Royal Geographical Society awarded him their gold medal in 1860. He considered that this great lake was the source of the Nile, in which opinion he differed from Captain Burton and other geographers. In order to settle the question, another expedition was organised under Captain Speke's leadership. He had Captain Grant for an associate. The start from Zanzibar was made on August 17, 1860, and the former route was followed as far as Kazeh. Then the expedition traversed the country to the west of the Victoria Nyanza, and nothing was seen of the lake until nearly 2° to the north of the spot which Captain Speke first visited in 1858. At two other places lake waters were seen, which were assumed to be the northern portion of one and the same lake. It was not proved that only one lake was seen; and the testimony of the natives and Arabs indicate that the supposed site of the Victoria Nyanza is really a lake district, containing many lakes. From the north end of this lake, or lake district, a river flowing north, and out of the lake, was discovered, which he claimed to be the White Nile. This river was followed for a short distance, then left, and struck again about a degree farther north. The river was then followed to the Karuma Falls, after which the party went overland, and did not reach the Nile before arriving at Gondokoro. Sir S. W. Baker immediately after followed the Nile up into the Albert Nyanza Lake, and traced its connection with the river seen by Captains Speke and Grant at Karuma Falls. But it remains doubtful whether the river seen to flow from the Victoria Nyanza is the head of the Nile, owing, in part, to its whole course not having been followed, and in part to uncertainties as to the extent and relative levels of the large lakes. Captain Speke was to have discussed the subject at a meeting of the British Association at Bath, but was prevented in consequence of his sudden death from an accidental shot, on September 15, 1864. A monument has been erected to his memory in Kensington Gardens. His discoveries and adventures were described by him in a 'Journal of the Discovery of the Source of the Nile,' 8vo, Edinburgh and London, 1863; and in 'What Led to the Discovery of the Source of the Nile,' 8vo, Edinburgh, 1864.

SPENCE, WILLIAM [E. C. vol. v. col. 630], entomologist, died January 6, 1860.

* SPENCER, HERBERT, biologist and sociologist, was born at Derby, in 1820, and received his education from his father, who was a teacher in that town. At the age of 17 he was placed with a civil engineer, but he afterwards abandoned this profession for literature. He contributed articles to the 'Civil Engineer's and Architect's Journal' and to the 'Nonconformist'; but his first work of importance was 'Social Statics,' 8vo, London, 1851, in which he analysed the principles regulating societies. This was followed in 1855 by 'The Principles of Psychology,' 8vo, London, which passed through a second edition in 1870. He has also contributed numerous articles to the scientific and ordinary periodical publications, in which he has applied the idea of evolution to various subjects. Some of these have been republished in a collected form as 'Essays; Scientific, Political, and Speculative,' 2 vols. 8vo, London, 1858—1863. His most important publication is a work on biology, which has appeared in sections. It is entitled 'First Principles,' 8vo, London, 1862, second edition, 1867; 'The Principles of Biology,' 8vo, London, 1864, &c. 'The Principles of Psychology' will form part of this work, which is not completed. He is one of the foremost thinkers of his time on biological subjects, and more particularly the doctrine of evolution.

SPINDLER, KARL [E. C. vol. v. col. 637.] This prolific German novelist died at Baden Baden, where he had resided since 1832, on the 12th of July, 1855. He was born at Breslau on the 16th of October, 1792. His complete works, 'Sämmtliche Werke,' Stuttgart, 1831—54, are in 102 volumes.

SPINELLO DI LUCA SPINELLI, commonly called Spinello Aretino. [ARETINO, SPINELLO, E. C. vol. i. col. 302.] There is now in the National Gallery a large painting, in three compartments, by this artist, (No. 581) 'St. John the Baptist with St. John the Evangelist and St. James the Greater.' It was formerly in the Hospital Church of SS. Giovanni e Niccolo, near Florence, and was purchased from the Lombardi-Baldi Collection in 1857.

SPOHR, LUDWIG. [E. C. vol. v. col. 645.] During his last years the great musician had to endure many mortifications, on account of the free expression of his liberal political opinions; but he retained his post as capellmeister to the Duke of Hesse Cassel till 1857, when he retired upon a pension. Though

broken down in health and spirits, he was induced to take part in a grand festival of the Conservatorium at Prague, in July, 1858, where he conducted his Jessoada, and also at a concert given in his honour at Meiningen in April, 1859, at which only his music was played. In the previous January he had broken his arm by a fall on the ice, and he died at Cassel on the 22nd of October, 1859. He was born at Brunswick on the 5th of April, 1784.

SPRENGER, ALOYS, M.D., a learned German orientalist, was born September 3rd, 1813, at Nasseureut, in the Tyrol. He received his early education in the Innsbruck Gymnasium, and thence, 1832, passed to the University of Nasseureut, where he studied medicine (in which he took his doctorate), science, but especially the oriental languages. In 1836 he came to London to assist the Earl of Munster in the preparation of his work on the military art of the Mohammedans, and, on the earl's death in 1842, obtained employment in the East India Company's civil service. He had already displayed his scholarship by an essay 'De Originibus Medicinæ Arabicæ sub Khalifatu,' 8vo, 1840, and the translation from the Arabic of El Masudi's historical encyclopædia, entitled 'Meadows of Gold and Mines of Gems,' of which the first volume was printed by the Oriental Translation Fund in 1841. He served at first in 1843 as a physician in Calcutta, but was shortly after engaged in improving the systems of education adopted in the native schools, and in 1845 went to Delhi as director of the College. He remodelled the course of studies, established a lithographic press, at which he printed 'Selections from Arabic Authors,' 1845; Othby's 'History of Mahmud of Ghazna,' 1847; and a journal for the natives, 'Kiran Alsadain,' on the model of the 'Penny Magazine.' In 1848 he went to Lucknow, with the rank of assistant-resident, and made a catalogue of the library of the king of Delhi, of which the first volume was printed at Calcutta, in 1854. In 1850, Dr. Sprenger was appointed examiner at the College of Fort William, director of the Mohammedan College at Calcutta, and secretary of the Asiatic Society at Bengal. He had travelled through a considerable portion of India, over the Himalayas and into Tibet, and in 1854 he visited Ceylon, Syria, Egypt, and Turkey. In 1856 he quitted India with a pension; and after a tour in Europe accepted the office of professor of the oriental languages at Bonn. Besides the works already mentioned, Dr. Sprenger has published among others, Isaba's 'Arabic Bibliography,' edited in Arabic by Dr. A. Sprenger; 'Dictionary of the Technical Terms used in the Sciences of the Mussulmans,' edited in Arabic by Mawlawy Mohammad Wajih, Mawlawies Abd Al-Haqq and Gholam Kadir, and Dr. Sprenger; 'Risalah Shamsyiah, the Logic of the Arabians,' in Arabic and English; Ibn Hajar's 'Biographical Dictionary of Persons who knew Mohammad'; 'Tusy's List of Shy'ah Books and Alam Al-Hoda's Notes on Shy'ah Biography,' edited in Arabic by Dr. A. Sprenger and Mawlawy Abd Al-Haqq; 'Sayuti's Itqan on the exegetic Sciences of the Quran in Arabic'; 'Khirad-Namahe Iskandary (the Sikandar-Namahe Bahry) by Netzamy'; 'Abdu-R-Razzag's Dictionary of the Technical Terms of the Sufies.' But his most important original work is his 'Life of Mohammad,' 8vo, Allahabad, 1851, which in its revised and expanded form 'Das Leben und die Lehre des Mohammad,' 3 vols. 8vo, Berlin, 1861, &c., though still unfinished, is by far the most complete and comprehensive life of Mohammad that has yet been written.

* SPURGEON, CHARLES HADDON, one of the most remarkable preachers of the day—son of Mr. John Spurgeon, who, occupied as a layman during the week, was the pastor of a small Independent congregation at Tollesbury, Essex, and grandson of the Rev. James Spurgeon, an Independent minister at Stambourne, near Halstead, who died on the 12th of February, 1864, at the age of 87—was born at Kelvedon, in Essex, on the 19th of June, 1834. After spending most of his childhood at his grandfather's house, he returned to the care of his father, then resident at Colchester, at a school in which town he was educated for several years. About the age of 15 he was sent to an agricultural college at Maidstone; and in 1849 was engaged as usher in a school at Newmarket, where he devoted his leisure to the study of Greek and French. His life at Newmarket was characterised by considerable mental and spiritual disquiet; and as he was led to the adoption of Baptist principles, he was baptised on the 3rd of May, 1850, at Isleham. He now became an active tract-distributor and Sunday-school teacher, and a zealous advocate of Christian missions; and having spent a year at Newmarket, left that town for Cambridge, where, still following his avocation as a school-teacher, he connected himself with the congregation formerly under the pastoral care of the Rev. Robert

Hall, and joined the Lay Preachers' Association, one of the benevolent agencies of that society. He preached his first sermon in a cottage in the village of Teversham, about four miles from Cambridge, after which he laid himself out to preach every evening at one or other of the thirteen village stations within the sphere of the association, officiating sometimes in a cottage, sometimes in a chapel, and sometimes in the open air. His popularity was almost immediately established; and crowds flocked to the ministrations of the "boy-preacher." He was soon invited to become the pastor of a congregation at Water-beach, where what was formerly a barn had been improved into a chapel; and at the age of eighteen he undertook this charge, his flock being so small and so poor that he was still obliged to continue his duties of usher at Cambridge. Here he laboured for upwards of two years, in the course of which he doubled the number of church members, and effected a reformation throughout the entire parish, a straggling agricultural community of about 1300 souls. In the autumn of 1853, being then a little more than 19 years of age, he accepted an invitation to London for the purpose of preaching before the congregation of New Park Street Chapel, the affairs of which from having been at one time flourishing, had reached almost the extreme of disaster. In January, 1854, he entered upon the pastorate of this church, and the result of his preaching was soon apparent in constantly overflowing congregations; for the better accommodation of which the services were removed first to Exeter Hall, where he preached for the first time on Sunday morning, February 11th, 1855, and afterwards, when it was found that New Park Street Chapel, which had been enlarged, was still insufficient, to the Surrey Music Hall, where, on the 19th of October, 1856, a deplorable accident, consequent upon a false alarm of fire, resulted in the death of seven persons, and in serious injuries to several others. On Wednesday, October 7th, 1857, Mr. Spurgeon addressed the largest audience of modern times at the Crystal Palace, where he preached a sermon on the occasion of the national fast, directed to be held on account of the Indian mutiny, to a congregation of nearly 24,000 persons. The foundation-stone of his new Tabernacle, known as the Metropolitan Tabernacle, was laid at Newington Butts, on the 16th of August, 1859; and after the opening of this immense building in 1861, it became the centre of all the pastoral and congregational activity which radiated from it in various forms and directions in town and country. The evangelistic and philanthropic agencies connected with it include a Pastors' College—first instituted at Camberwell, in 1856—where a large number of students are trained under Mr. Spurgeon's superintendence, as president, for the Christian ministry; the Stockwell Orphanage, for Fatherless Boys, Clapham Road, of which Mr. Spurgeon is president, and the foundation-stone of which he laid in September, 1867; the Golden Lane Mission; and the Colportage Association. It was to serve, *inter alia*, as a monthly report of the "efforts of those churches and associations which are more or less intimately connected with the Lord's work at the Metropolitan Tabernacle," that Mr. Spurgeon began, on the 1st of January, 1865, to edit a magazine, entitled 'The Sword and the Trowel: a Record of Combat with Sin and Labour for the Lord,' which he still continues to conduct. He is said for many years to have delivered on the average one sermon a day, and he has carried his ministrations to many towns and districts of England and Scotland, as well as to some parts of the Continent, to which he has paid more than one visit, the last of which, made to Italy, and especially to Rome, took place in December, 1871. He has delivered many lectures on various subjects, as well as addresses to the Young Men's Christian Association. His claims to the honours of authorship rest mainly upon his 'Sermons,' the regular weekly publication of which, under the title of the 'New Park Street Pulpit,' was commenced in the autumn of 1854; and the 'Sermons,' thus issued in detail, have been collected into yearly volumes, the issue of which commenced in 1856, and still continues. They have been republished in America, where their aggregate sale has reached to about 400,000 volumes; and several groups of them have been translated into German, as 'Predigten,' 3 vols. 8vo, Hamburg, 1860–64, and 'Ausgewählte Predigten,' 2 vols. 8vo, Basel, 1862–63, and into French, as 'Choix de Sermons,' 2 vols. 12mo, Paris, 1860, and several single sermons have been translated into French, German, and other languages. Selections of another kind have been made from his writings, with the titles of 'Gems from Spurgeon: or, Extracts from the Note-Book of a non-professional Reporter,' 16mo, London, 1857; and 'Spurgeon's Gems: being brilliant Passages from the Discourses,' &c., 8vo,

1859, American edition, 12mo, New York, 1858. Mr. Spurgeon has likewise written or edited two devotional works, entitled 'Morning by Morning: or, Daily Readings,' 8vo, London, 1866, &c., American editions, 12mo, New York, 1867, &c.; and 'Evening by Evening: or, Readings at Eventide,' 8vo, London, 1868, &c., and 12mo, New York, 1869, both of which have been immensely popular in England and America; 'Feathers for Arrows: or, Illustrations for Preachers and Teachers. From my Note-Book,' 8vo, 1870; and 'John Ploughman's Talk: or, Plain Advice for Plain People,' 8vo, London, 1868, &c. and 16mo, New York, 1869, &c. The real and reputed peculiarities which marked especially the early period of Mr. Spurgeon's London experience, and the great influence which he has won and exercised by his zeal and eloquence, have attracted much criticism, both of a friendly and a hostile kind; and the biographical and other literature conversant about his career may be here represented by a 'Sketch of the Life and Ministry, &c., from original Documents,' 12mo, London, 1857, and New York, 1857; 'Life,' &c. London, 1857; 'Mr. Spurgeon's Critics Criticised. By a Churchman,' 8vo, London, 1857; and 'Anecdotes and Stories of the Rev. C. H. Spurgeon. Collected by O. Creyton,' 12mo, 1866.

* SQUIER, EPHRAIM GEORGE, an American archaeologist and geographer, was born at Bethlehem, State of New York, June 17th, 1821. After a few years of school-teaching and engineering, he removed to Albany in 1840, and began to write for the press as editor of the 'Mechanic.' In 1843 he edited the 'Hartford Journal,' and in the following year the 'Scioto Gazette' at Chillicothe, Ohio. Soon afterwards he commenced exploratory journeys into various parts of America, to investigate such ancient monuments as still remained. Some of these researches in Central America were greatly facilitated by the position which he held in 1849 and 1850 as *chargé d'affaires* to Guatemala and the neighbouring States. The years 1851 to 1853 he spent mostly in Europe, where he was elected member of several learned societies in England, France, and Denmark, and received the gold medal of the Geographical Society of France. Returning to America, he conceived the idea of a railway across Central America from the Atlantic to the Pacific, surveyed the route, obtained a concession from the Honduras government, and formed a company among the capitalists of New York. He next made a second visit to Europe, obtained support from English and French capitalists, and guarantees of neutrality from the governments of the two countries. He was instrumental also in drawing up a treaty between Great Britain and Honduras, which paved the way for the settlement of some disputed points. Notwithstanding all his exertions, however, his great scheme fell to nothing; Central America is still without its railway or canal. The chief works published by Mr. Squier are the following:—'Notes and Illustrations' to G. T. Lay's 'The Chinese as they Are,' edit. of 1843; 'Observations on the Mounds of the West, with an Attempt at their Classification,' Newhaven, 1847; 'Ancient Monuments of the Mississippi Valley, comprising the Results of extensive original Surveys and Expeditions,' by E. G. Squier and E. H. Davis, a work of great labour and value, forming volume i. of the 'Smithsonian Contributions to Knowledge,' published by the Smithsonian Institution, 4to, Washington, 1848; 'Aboriginal Monuments of the State of New York,' forming volume ii. of the same collection, 1848, new edition, with "Supplement on the Antiquities of the West," 12mo, Buffalo, 1853; 'The Serpent Symbol and the Worship of the reciprocal Symbols of Nature in America,' New York, 1851, Spanish translation by Don José de Garcia, Havana, 1855; 'Nicaragua: its People, Scenery, Monuments, and the proposed Inter-oceanic Canal,' 2 vols. 8vo, 1852, German translation by E. Höpfer, Leipzig, 1854; 'Honduras Inter-oceanic Railway,' New York, 1854, French translation, Paris, 1855; 'Notes on Central America, particularly the States of Honduras and San Salvador,' New York, 1855, Spanish translation by Don Leon Alvarado, Paris, 1856, German translation by Karl Andree, Leipzig, 1856; 'The States of Central America: their Geography, Topography, Climate, &c.' 8vo, New York, 1858 (a much enlarged edition of the 'Notes'); 'Collection of rare and original Documents and Relations concerning the Conquest of America, chiefly from the Spanish Archives: published in the original, with Translations, illustrative Notes, Maps, and Biographical Sketches,' 4to, New York, 1860, &c.; 'Is Cotton King?' (reprinted from the 'Providence Journal'), New York, 1861; 'Monograph of Authors who have written on the Languages of Central America, and collected Vocabularies or written Works on the Native Dialects of that Country,' 4to,

New York, 1861; 'Tropical Fibres, their Production and Economic Extraction,' 8vo, 1863.

STANDISH, MILES, popularly known through Longfellow's poem as the "Puritan Captain," a member of the family of the Standishes of Duxbury, near Chorley, Lancashire, whose ancestor, Hugh Standish, was a cadet of the ancient house of Standish of Standish, in the same county, was born in Lancashire about the year 1584. Notwithstanding that he is set down in the genealogical records as a younger son, he is described by Longfellow as having been the "heir unto vast estates, of which he was basely defrauded." After serving in the Protestant interests against the Spaniards in the Low Countries, he joined the first emigration of the Pilgrim Fathers, and landed from the 'Mayflower' at Plymouth, in New England, on the 11th of November, 1620. He was a man of short stature, but strongly built, and athletic, "broad in the shoulders, deep-chested, with muscles and sinews of iron;" and being of great courage, energy, and determination, and having the reputation of being the bravest soldier and the best linguist of the colony, became the leader or captain of a band of sixteen men who were fitted out for the purpose of exploration, before a decision should be come to as to the site of a settlement. The tract of country traversed by the pioneers is embraced within the present limits of Provincetown and Truro; and their excursion, although not a long one, was yet one of tediousness, danger, and difficulty. Every man carried "his musket, sword, and corslet;" and at times their march, according to Bradford, one of their number, who was afterwards their historian, lay through coppices so dense, tangled, and all but impassable, that they "tore our very armour in pieces." The advance terminated at a spot known to the present inhabitants of the district as Hopkins' Cliff, near the mouth of the Little Pamet river at Truro Centre, from which point may be seen Pamet Harbour, into which the "Great Pamet discharges its waters." The expedition was successful; and Captain Standish, through a series of subsequent years, rendered important services to his fellow-colonists, whose interests he protected against the savages who annoyed or threatened the settlement, and who, from the courage and skill of his attacks upon them, conceived a great admiration and awe for his military prowess. In 1625 he paid a visit to England as an agent for the colony; and after his return settled at Duxbury, which he had named in memory of the seat of his family in Lancashire, and where, for the remainder of his life, he held a magisterial office. He died at Duxbury, on the 3rd of October, 1656. A romantic episode of his life has inspired the poem of Longfellow, entitled 'The Courtship of Miles Standish;' and the Rev. B. F. De Costa, of the Protestant Episcopal Church, diocese of Massachusetts, has more recently illustrated his career, and especially his primary exploring expedition, in a small work which bears the title of 'Footprints of Miles Standish,' 8vo, Charlestown (Mass.), 1864, which, originally a contribution to the 'Church Monthly,' was reprinted for private circulation.

STANFIELD, CLARKSON, R.A. [E. C. vol. v. col. 662.] Mr. Stanfield continued to paint as long as he could control his pencil, but, after the date of the memoir above cited, he produced no pictures of importance. His powers gradually yielded before the advances of age, and, after a lingering illness, he died at his residence, Hampstead, May 18, 1867, aged 73, and was interred in the Roman Catholic Cemetery, Kensal Green.

* STANLEY, VERY REVEREND ARTHUR PENRHYN, D.D., Dean of Westminster. [E. C. vol. v. col. 671.] The more recent career of Dr. Stanley has been characterised by the same unintermitting literary and professional activity, and by the same bold and decided liberality in theology, politics, and academical and ecclesiastical affairs, which had been already indicated at the period of our earlier notice, and by a succession of honourable appointments and preferments. The three inaugural lectures of his professorial course were delivered in the Lent term of 1857; and they were respectively conversant about the province, the study, and the advantages of ecclesiastical history. They were published with the title of 'Three Introductory Lectures on the Study of Ecclesiastical History; the commencement of which he traced to the call of Abraham. His professorial teaching is embodied in various works, which may be thus enumerated:—'Lectures on the History of the Eastern Church,' 8vo, London, 1861, fourth edition, 1869, American issue, 8vo, New York, 1862, &c., new edition, 1870, a Review of which, reprinted from the 'Record,' was published with the title of 'Anglican Neology,' &c. 16mo, London, 1862; 'Lectures on the History of the Jewish Church,' Part I., 'Abraham to Samuel,' 8vo, London, 1862, fourth edition, 1866, and 8vo, New York,

1863, new edition, 1870: Part II., 'Samuel to the Captivity,' 8vo, London, 1865, &c., and 8vo, New York, 1866, new edition, 1870; Contributions to Dr. William Smith's 'Dictionary of the Bible,' of which the article 'David' is the most complete and remarkable; to which may be added the 'Lectures on Solomon,' delivered on two evenings before the Edinburgh Philosophical Institution. In January, 1872, he addressed the members of the same society in a series of Lectures on the History of the Church of Scotland. Canon Stanley took the degrees of B.D. and D.D. in 1858, in which year, March 13th, he became a canon of Christ Church; and in the early part of 1862 accompanied the Prince of Wales on his Eastern tour, one of the memorials of which is a volume of 'Sermons preached before H.R.H. the Prince of Wales during his Tour in the East in the Spring of 1862: with Notices of some of the Localities visited,' 8vo, London, first two editions, 1863, &c., and 12mo, New York, 1863. On the 28th of March, 1862, he became honorary chaplain to the Queen, to whom he was appointed one of the deputy clerks of the closet, on the 23rd of January, 1863; and on the 16th of February following he was appointed one of four honorary chaplains to the Prince of Wales. Later in the same year he was promoted to be dean of Westminster; and on the 22nd of December, the same day on which his appointment was gazetted to the deanery, married Lady Augusta Bruce, daughter of the late Earl of Elgin, and an extra woman of the bedchamber to her Majesty. On Advent Sunday, 1863, Canon Stanley, on the eve of laying down that title, preached his farewell sermon, 'Great Opportunities,' 8vo, Oxford and London, 1863, in Christ Church Cathedral; and on the 10th of January, 1864, being the day following his installation, preached in Westminster Abbey a sermon afterwards published with the title of 'A reasonable, holy, and living Sacrifice,' 12mo, Oxford and London, 1864, many parts of which are constructed with a careful and generous reference to Canon Wordsworth, at present (March, 1872) bishop of Lincoln, who had felt it his duty to make a determined protest against Dr. Stanley's appointment. In his position as dean of Westminster, Dr. Stanley has kept up those extraordinary services which were initiated by his predecessor, the present archbishop of Dublin, and has always been ready to give his pulpit and his powers to the advocacy of every philanthropic and Christian institution; and as custodian of the Abbey, the "very heart of England's heart," he has made its treasures and monuments more readily accessible, whilst he has added to their popular intelligibility by acting as *cicerone* to proletarian visitors. The literary evidences of his enthusiastic interest in the "collegiate church of St. Peter" are contained in a discourse, entitled 'Dedication of Westminster Abbey. A Sermon preached December 28th, 1865, being the 800th Anniversary of the Foundation of the Abbey,' &c., 8vo, Oxford and London, 1866; and a volume devoted to the exposition of the 'Historical Monuments of Westminster Abbey,' 8vo, London, 1868, third edition, revised and illustrated, 1869. He has been a prominent and effective advocate of the purposes of the Palestine Exploration Fund, and a contributor to the 'Transactions' of the Archaeological Institute, as well as to the 'Classical Museum,' the 'Edinburgh' and 'Quarterly' Reviews, the 'Contemporary Review,' 'Good Words,' and 'Fraser's' and 'Macmillan's' Magazines. As intolerant only of intolerance, he has been the apologist, in Convocation and elsewhere, of the authors of 'Essays and Reviews,' and especially of his friend Dr. Temple, now bishop of Exeter; and has endeavoured to mitigate the violence of the attacks directed against Bishop Colenso. Dr. Stanley has been not unfittingly described as "the modern apostle of the doctrines of toleration."

A few of Dr. Stanley's more remarkable works and discourses remain to be mentioned. They include 'The Epistles of St. Paul to the Corinthians. With critical Notes and Dissertations,' 8vo, London, 1858, third edition, 1865; a 'Preface' to Miss Winkworth's translation of Baron Bunsen's 'God in History,' 3 vols. 8vo, London, 1868; 'The Unity of Evangelical and Apostolical Teaching. Sermons preached mostly at Canterbury Cathedral,' 8vo, London, 1859; 'Freedom and Labour. Two Sermons,' &c., 8vo, Oxford and London, 1860; 'The Grieving of the Spirit. A Sermon,' 8vo, Oxford and London, 1863, forming No. 5 of the 'Oxford Lenten Sermons;' 'The Bible: its Form and its Substance. Three Sermons,' 8vo, Oxford and London, 1863; 'Letter to the Lord Bishop of London on Subscription,' 8vo, Oxford and London, 1863; 'The Encouragement of Ordination. A Sermon,' 8vo, Oxford and London, 1864; 'The Creation of Man. A Sermon preached in Behalf of the Royal Society for the Prevention of Cruelty to Animals,' &c., 8vo, Oxford and London, 1865; 'The Crusade of Charity. A

Sermon,' 8vo, Oxford and London, 1866; 'The Coronation of William the Conqueror and its Consequences. A Sermon preached in Westminster Abbey on Christmas Day, 1866,' 8vo, Oxford and London, 1867; 'Scripture Portraits, and other Miscellanies. Collected from the published Works of Dean Stanley,' &c., 8vo, London, 1867, second edition, 1869; 'The Three Irish Churches. An historical Address delivered at Sion College, on January 28th, 1869,' 8vo, London, 1869; 'An Address on the Connection of Church and State, delivered at Sion College on February 15th, 1868,' 8vo, London, first two editions, 1868; 'Sermon [on Luke xv. 3, xvi. 19—21] preached in Westminster Abbey on the Sunday following the Funeral of Charles Dickens,' 8vo, London, 1870; and 'Essays on Questions of Church and State, from 1850 to 1870,' 8vo, London, 1870.

* STANTON, EDWIN, American statesman, was born at Steubenville, Ohio, in 1815. His father, a physician, gave him a good education, and then placed him under a barrister who was also a member of the Senate, and who took him into partnership. While practising at the bar, he published two volumes of 'Condensed Reports of Decisions in the Supreme Court of Ohio,' 1842. In and after 1847, at Pittsburg, he was engaged in many important cases, some of which brought him under the notice of Abraham Lincoln. In 1857 he was entrusted by President Buchanan with the management of an important Mexican case, which he conducted skilfully; and in the following year removed to Washington. He steadily held aloof from politics until the commencement of the troubles at the close of 1860, when, at the solicitation of Buchanan, he accepted the office of Attorney-General. During 1861 his advice, when solicited, was always in favour of a vigorous prosecution of the war against the Confederates. In January, 1862, when Mr. Cameron resigned the post of Secretary of State for War, President Lincoln offered it to Mr. Stanton; the offer was accepted. Much of the success with which vast armies were raised, equipped, and brought into the field during the subsequent three years was due to the skill and indomitable energy of the War Minister. The responsibilities and labours connected with the raising of three successive armies of 300,000, 300,000, and 500,000 men, however, were very great. Mr. Stanton was frequently in collision with Federal generals and statesmen on matters of policy, and was not generally popular. He continued at the head of the war department after the assassination of President Lincoln, in 1865; but there were unseemly struggles between him and President Johnson, which continued till the latter was succeeded by General Grant in 1869. Many of Mr. Stanton's Official Reports are printed in the Washington Blue-books.

STAUNTON, SIR GEORGE THOMAS, BART., D.C.L., was the only son of Sir George Leonard Staunton, who accompanied Lord Macartney as secretary to the first embassy to China in 1792. He was born in May, 1781, and died August, 10, 1859. He succeeded his father to the baronetcy in 1801. He was educated under his father's eye, and studied languages, mathematics, and the natural sciences. He accompanied his father to China as page to the Ambassador, having prepared himself by studying Chinese at Naples, under two native Chinese missionaries from the Propaganda College. He excited great surprise in China by his skill in the language, and had the honour of conversing with the Emperor, who referred to him as "the little boy who could speak Chinese." On leaving China his father engaged a Chinese servant in order to keep up his knowledge of the language.

In 1799 he obtained the appointment of writer in the factory of the East India Company, and proceeded a second time to China. He remained at Canton (with occasional visits to Europe) until 1817, having become chief of the factory. He was the first among the members of the factory who had a command of the language, and he succeeded in getting rid of the native interpreters, who, from fear of the local authorities, were not to be trusted. He translated several Chinese works into English, one of which, the Chinese penal code, was published in 1810; others have since appeared. In 1816 Sir George was one of the commissioners in the second embassy, an account of which, in the form of a private journal, was printed for distribution among his friends. On his return to England, Sir George settled in Hampshire and represented South Hants, and afterwards Portsmouth, in Parliament. His habits were somewhat shy and retiring; his chief amusement was in his numerous hothouses and conservatories, filled with rare trees and plants. Although his health was delicate, he attained his 79th year.

* STEENSTRUP, JOHAN JAPETUS SMITH, Danish

naturalist, was born at Vang, March 8, 1813. From 1836 to 1841 he made a series of expeditions to various parts of North Europe for the purpose mainly of investigating the phenomena of marshes. His paper on the marshes of Denmark received a prize from the Danish Academy of Science; in 1845 he was appointed the professor of zoology at Copenhagen, and in 1848 one of the directors of the Royal Museum of Natural History. He has contributed numerous papers on zoology to scientific works, but is principally celebrated on account of his researches in the development of the lower animals, and as the discoverer of what is known as the alternation of generation. His chief works are 'Om Forplantning og Udvikling gjennem vexlende Generations rækker, etc.' 4to, Kjöbenhavn, 1842, of which an English translation by Professor G. Busk was published by the Ray Society; and 'Undersøgelser ver Hermaphroditismus tilværelse i Naturen,' 4to, Kjöbenhavn, 1845, German translation, Greifswald, 1846.

STEINBACH, ERWIN VON. [ERWIN VON STEINBACH, E. C. S. col. 505].

STEINLA, MORITZ, an eminent German line engraver, was born in 1791. The son of a clergyman at Steinla, named Müller, he assumed the name of his birthplace in order to distinguish himself from several other engravers of the name of Müller. He studied art in the Dresden Art Academy, and engraving of Böhn, and for a time was in business with a general engraver, named Bertuch. He then went to Italy, and at Milan worked under Longhi, and at Florence under Raphael Morghen. Here he distinguished himself by an engraving of the 'Cristo della Moneta' of Titian, and still more by the Pieta of Fra Bartolomeo in the Pitti palace. On his return to Dresden in 1831 he was appointed professor in the academy, and soon after engraved Raffaele's drawing of the 'Massacre of the Innocents.' His next, and most famous prints were Holbein's 'Madonna,' and the 'Madonna di San Sisto' of Raffaele, both in the Dresden Gallery. He also engraved Raffaele's portrait of Pope Julius II., and his 'Madonna del Pesce,' to study which he visited Madrid. Shortly after he had finished this plate his health gave way. He died September 21st, 1858. Steinla was one of the best engravers of our time. Always scrupulously faithful to his original, and true in expression, he displayed also great precision of drawing, firmness of line, and general mastery over his graver, with largeness and refinement of style.

STEPHEN, THE RIGHT HON. SIR JAMES, K.C.B., LL.D. [E. C. vol. v. col. 697.] Sir James Stephen died on the 14th of September, 1859, at Coblenz, where he had gone for the benefit of his health. He was born at Lambeth, Surrey, January 3rd, 1789. A memoir of Sir James Stephen, by his son, Fitz-james Stephen, barrister-at-law, was prefixed to a new edition of the 'Essays in Ecclesiastical Biography,' 8vo, 1860.

STEPHENSON, ROBERT. [E. C. vol. v. col. 710.] This celebrated engineer finished, in 1859, the Great Victoria Railway Bridge over the River St. Lawrence, near Montreal, which he had commenced five years before; but he did not live to witness the formal opening of the work in the early part of 1860. He applied a similar tubular principle to the construction of a railway bridge over the Nile at Damietta. As a proof that even the greatest engineers sometimes venture on rash predictions concerning schemes which they do not approve, it may be mentioned that in his last speech in the House of Commons, Mr. Stephenson spoke of the Suez Canal in the following terms:—"I have surveyed the line; I have travelled the whole distance on foot; and I declare there is no fall between the two seas. Honourable members talk about a canal! A canal is impossible; the thing would be only a ditch." Mr. Stephenson went in his steam yacht to Norway in the summer of 1859; he was ailing in health at the time, and came home with congestion of the liver, jaundice, and dropsy; he sank under these accumulated maladies, and died on the 12th of October. Like his father, Robert Stephenson was offered knighthood, and, like him, declined it. He was buried in Westminster Abbey, by the side of Telford. A bronze statue of him was placed, in 1871, in the new opening at Euston Square to the London and North-Western Railway Terminus. 'Stephenson Memorial Schools' have been erected on the site of the old cottage at Willington Quay. He was a fellow or member of many scientific societies, including the Royal Society and the Institution of Civil Engineers; the degree of D.C.L. was conferred upon him by the University of Oxford, and the Emperor of the French decorated him with the Legion of Honour. The life of Robert Stephenson has been published in various forms by Mr. Samuel Smiles. Also by Mr. J. C. Jeaffreson—'The

Life of Robert Stephenson ; with Descriptive Chapters on some of his most important Professional Works,' 8vo, London, 1864.

* STEVENS, ALFRED, celebrated Belgian painter, was born at Brussels in 1828, and studied under M. Navez at Brussels, and M. C. Roqueplan at Paris. He made a successful début in 1849, and has ever since been among the more conspicuous exhibitors in the salons of Paris and Brussels. He has been long settled in Paris, but his works are still eagerly sought after by his countrymen. His speciality is in depicting circumstances of social life in the higher circles, and he treats his subjects with much elegance and refinement, and with great technical knowledge and skill. 'Absence,' 'Consolation,' 'Meditation,' 'The Widow,' 'At Home,' 'Uncertainty,' 'A Painter,' and similar titles tell little, but they indicate the kind of simple suggestive incident he usually treats. Many of his pictures are in English collections. M. Alfred Stevens is a commander of the Order of Leopold, Belgium ; an officer of the Legion of Honour, France ; and an officer of the Order of Merit, Bavaria.

* STEVENS, JOSEPH, elder brother of the preceding, was born at Brussels about 1819, and began at an early age to paint animals from nature. He has ever since continued the practice, and has long held the first place in his native city as a painter of animals, and especially of dogs, which he represents with singular truth, spirit, and artistic effect. The incidents he represents are indicated by such titles as 'Les Mendians, ou Bruxelles le Matin ;' 'Le Chien qui porte à son cou le Dîner de son Maître ;' 'Le Philosophe sans le savoir ;' 'Une pauvre bête ;' 'Un heureux Moment ;' 'Un Métier de Chien ;' 'Intérieur de Saltinbanques ;'—the last two, it may be remembered were in the International Exhibition of 1871. M. Joseph Stevens is an officer of the Order of Leopold and a knight of the Legion of Honour.

STEVENS, THADDEUS, American politician, and one of the leaders of the abolitionist party, was born at Peacham, Caledonia county, Vermont, April 4th, 1793. He was of humble origin, but found means to enter Dartmouth College, where he graduated in 1814. He then went to York in Pennsylvania, where he kept a school, and studied the law. Admitted to the bar, he entered upon practice at Lancaster, in Pennsylvania. He began to take part in politics in 1828, and in 1833 became a member of the State legislature of Pennsylvania, joining what was then known as the Whig party. His vehement speeches and determined policy gradually placed him at the head of the party. In 1848 he was elected to Congress. It was about 1856 that he became a self-appointed, rather than acknowledged, leader of the Republican or extreme Abolitionist party ; this position he held to his death ; for his implacable hatred of slavery and slave-owners impelled him to a fierce rejection of all compromise, and therefore to an ultra-partisanship. He easily obtained re-election to the House of Representatives at every quadrennial election ; but he never succeeded in obtaining office, nor admission into the Senate. Always demanding to be the leader of his party, whatever it might be ; relentlessly pursuing any plan that he had formed ; ready, witty, and sarcastic in debate—he was formidable to his opponents, and secretly disliked even by those who voted with him. When in his prime, he was regarded as the best debater in Congress ; there was always an influx of members whenever he was expected to speak. Throughout the civil war, 1860-65, he never deviated from the most extreme Abolitionist policy ; holding himself ready to vote even against his own party if they did not go fast or far enough to please him. The war was commenced by the North to preserve the Union ; but it was by Stevens' indomitable persistence that the extinction of slavery itself became a settled part of the plan. It was he, too, that compelled a half-reluctant Congress to impeach President Johnson. His love of equality between man and man led him into resolute hostility against the Freemasons, whose exclusive pretensions were hateful to him, and whom he vainly tried to suppress by legislative enactment. He was never married ; but his peculiar notions led him into relations with a mulatto female, which had the effect of shutting him out from the society of most American ladies. His opinion concerning the equality of whites and blacks was otherwise practically asserted by his arrangements in his domestic household. Equality, too, had something to do with his strange repudiation of national honour, in advocating the payment of the public debt in depreciated paper money, notwithstanding the national pledge that it would be paid in gold ; he contended that as the government officers and the army contractors were paid in notes, equality demanded that the public creditors should be paid in like manner, irrespective of pledges given. He attended Con-

gress almost to his last hour ; gaunt, hollow-eyed, feeble, he was kept alive by the intense volition of a resolute will, and poured forth his fierce invectives even though he could speak but a few minutes at a time. He died August the 12th, 1868, in his 76th year.

STIFTER, ADALBERT, a popular novelist of Germany, celebrated especially for his delineations of country life and character, was born on the 23rd of October, 1806, at Oberplan, in Southern Bohemia, where his father was a weaver in poor circumstances. His talent attracted the attention of the priest of the village, from whom he received his earlier education. At twelve years old he entered upon his philosophical and philological studies at an educational institution at Kremsmünster, which he left in 1826 for the purpose of devoting himself to the faculty of law at the University of Vienna. Here, in addition to his acquirements in political economy, history, mathematics, and natural science, he became a proficient in the art of landscape-painting, to which he was determined by the same poetic love of the phenomena of nature which he afterwards exhibited to so great a degree in his tales and novels. He was twenty-seven years of age before he published, in Witthauer's 'Zeitschrift,' the first fruits of his literary talent in the shape of a series of tales, entitled 'Feldblumen,' 'Der Condor,' and 'Das Heidedorf,' of the last of which an English version, by C. C. Mackley, was produced with the title of 'The Heather Village. A study from the German,' &c., 8vo, London, 1868. These stories at once became popular, not only in Austria, but all over Germany ; and the reputation of the author increased as the number of his works multiplied. He was selected by Prince Metternich, about 1840, to act as tutor, especially in mathematics and the natural sciences, to his son Richard, afterwards Austrian ambassador at the Court of the Tuileries ; and, a few years later, contributed, with several other writers, to the production of a volume on Vienna, &c., entitled 'Wien und die Wiener, in Bildern aus dem Leben. Mit Beiträgen,' &c., 8vo, Pesth, 1844. In the last-named year he commenced the issue of his collections of tales, entitled 'Studien,' 6 vols., 12mo, Pesth and Leipzig, 1844-50, sixth edition, illustrated, 2 vols., 8vo, Pesth, 1864, two of the finest stories of which were separately published as 'Abdias,' 16mo, Pesth and Leipzig, 1853, and, with illustrations by G. J. M. Kaiser, 4to, 1866 ; and 'Der Hochwald,' 16mo, Pesth and Leipzig, 1852. Another of his stories, the Old Bachelor, 'Der Hagestolz,' 16mo, Pesth and Leipzig, 1852, was translated into French, with the title of 'Le Vieux Garçon,' 16mo, Brussels, 1858. In 1849 Stifter was appointed a councillor of public instruction, in which capacity he removed from Vienna to Linz, on the Danube, where he died on the 28th of January, 1868.

Besides the 'Studien,' Stifter published another collection of tales with the title of 'Variegated Stones,' 'Bunte Steine,' &c., 2 vols., 8vo, Pesth, 1853, in which occurred a story called 'Bergkrystall,' afterwards separately published in an illustrated edition, as Christmas Eve, 'Der Weihnachtsabend,' 4to, Pesth, 1864 ; a novel entitled 'Der Nachsommer,' 3 vols., 8vo, Pesth and Leipzig, 1857, and another entitled 'Witiko,' 3 vols., 8vo, Pesth, 1865, &c. ; and he was also concerned in the production or the conduct of one or two works for the furthering of education. Several of Stifter's stories or groups of stories have been published in England, with the titles respectively of 'Pictures of Life,' &c., translated by Mary Howitt, and forming vol. 75 of the 'Parlour Library,' 8vo, London, 1847, &c. ; 'Mount Gars : or Marie's Christmas Eve, adapted from the German,' &c., 12mo, Oxford, 1857 ; and 'Pictures of Rural Life in Austria and Hungary,' 3 vols., 12mo, London, 1850, translated by Mary Norman. Amongst the works conversant about the career or the genius of Stifter, may be mentioned a biographical and critical Notice, with selections from his works, entitled 'Adalbert Stifter,' forming vol. 39 of 'Klassiker moderne. Deutsche Literaturgeschichte der neueren Zeit in Biographien, Kritiken, und Proben. Mit Portraits,' 60 vols., 16mo, Cassel, 1852-54 ; and 'Adalbert Stifter,' 8vo, Vienna, 1868, which is a critical estimate of his writings, by Emil Kuh.

STILKE, HERMANN, a celebrated German painter, was born at Berlin in 1803. He studied in the Berlin Academy, and afterwards in that of Düsseldorf under Cornelius, whom he accompanied to Munich, and assisted in his great works there. After a brief sojourn in Italy he returned to Düsseldorf, 1833, where he became known as a permanent member of what is called the Düsseldorf school of religious art. Whilst at Düsseldorf, Stilke painted a large number of religious pictures, and a few of secular subjects, as 'Pilgrims in the Desert,' and 'John,

the blind King of Bavaria, led into Battle.' The late king of Prussia invited him to paint the Rittersaal in the castle of Stolzenfels, and he subsequently painted a series of frescoes in the court theatre. His later works were mostly easel pictures in oil, the most important being 'Judith and Holofernes,' 'Tristan and Isolde,' and an Amazon: he also painted many portraits and subject pieces. He died, September 22nd, 1860.

* STOCKS, LUMB, R.A., line engraver, was born at Lightcliffe, near Halifax, Yorkshire, November 30th, 1812; and learned engraving of Mr. Charles Rolls. At first Mr. Stocks was chiefly engaged on prints for the annuals and other books. He afterwards engraved several plates for Finden's Gallery, and many of the best plates in the 'Art Journal.' But he has also engraved many separate prints for the Art-Unions of London and Glasgow, the association for promoting the Fine Arts in Scotland, &c. Two of his largest and best prints were Frith's 'Many Happy Returns of the Day,' engraved for the Glasgow Art-Union, and 'Claude Duval.' His prints of Webster's 'Dame School'; the series of the 'Dowie Dens of Yarrow,' after Sir J. N. Paton; the 'Gentle Shepherd,' after Wilkie; 'O Nannie, wilt thou gang wi' me,' after T. Faed, R.A.; and 'Marie Antoinette listening to the act of accusation the day before her trial,' after E. M. Ward, R.A., are also much admired. Mr. Stocks was elected associate engraver of the Royal Academy in 1853, associate of the new class in 1855, and R.A. on December 20th, 1871.

STONE, FRANK, A.R.A. [E. C. vol. v. col. 739.] After suffering long from delicate health, Mr. Stone died suddenly of heart disease, on the 18th of November, 1859, aged 59. The picture which was on his easel at the time of his death, 'The Merry and Sad Heart,' was exhibited at the Royal Academy in 1860. His son, *MARCUS STONE, is also winning reputation as a painter. His earlier works were very much in the manner of his father; but of late he has more commonly painted historical and biographical incidents, such as 'The Princess Elizabeth obliged to attend Mass by her sister Mary,' 1869; 'Henry VIII. and Anne Boleyn observed by Queen Katharine,' 1870; 'The Royal Nursery, 1536,' 1871.

STOSS, VEIT, a celebrated early sculptor and engraver, was by birth a Pole, having been born in 1447 at Cracow, where his father, a German, was settled. Stoss seems to have practised with success as a sculptor in his native city up to 1495, when he removed to Nürnberg. There he carved numerous works in wood; painted several pictures, and engraved on copper various scriptural subjects designed by himself. He became blind in his later years, and died in 1542 at the age of ninety-five. Stoss was the contemporary of Martin Schön and Albert Dürer, both of whom are supposed to have studied and profited by his works. He has, though less strongly marked, the distinctive characteristics of those masters, his amplitude of drapery especially recalling that of Albert Dürer. Among the most admired of his productions are the 'Rosenkranztafel,' two reliefs in wood, of the 'Coronation of the Virgin,' and the 'Last Judgment' in the Kaiserkapelle of Nürnberg Castle; the 'Crucifixion' over the high altar at St. Sebald; and the 'Entombment' sculptured in wood at the high altar of the Church of the Holy Cross. Outside Nürnberg his works are extremely rare; of his prints only twelve are known to collectors; Bartsch had only met with three, but Passavant describes nine others, two of which are in the British Museum.

* STOWE, HARRIET ELIZABETH BEECHER. [E. C. vol. v. col. 749.] In 1859, Mrs. Stowe published a novel, 'The Minister's Wooing,' and in 1862, 'Agnes of Sorrento,' a tale which had previously appeared in the 'Cornhill Magazine' and the 'Atlantic Monthly,' to which last periodical she has been a somewhat frequent contributor. Her next separate work was, we believe, 'Little Foxes,' published in 1865; and this was followed in 1867 by 'Light after Darkness: Religious Poems.' Another novel, 'Old Town Folks,' appeared in 1869; and 'Little Pussy Willow,' 'Pink and White Tyranny,' and 'My Wife and I,' in 1871.

If these stories excited little interest, the same cannot be said of one which she put forth before the latest of those just named. This was entitled 'The True Story of Lady Byron's Life,' and was printed in the 'Atlantic Monthly' and in 'Macmillan's Magazine' (September 1869). Written in an elaborately melodramatic style, it produced a profound sensation wherever the English language was read—a sensation due, however, not to the style, but to the "terrible secret" it disclosed. This secret, confided to her, as she stated, thirteen years before by Lady Byron, was that Lord Byron was guilty of incest with his sister, Mrs. Leigh, and that it was the discovery of this fact that caused the

separation. During "two years of convulsive struggle," after Lord Byron had himself revealed the truth, and "argued his case with all the sophistries of his powerful mind," Lady Byron remained with him—she "would neither leave him nor betray him;" but do her best to reclaim him, and it was only after "the anguish and conflict of these two years," the failure of all her efforts, and the birth of their child, that she brought her mind to resolve on a separation.

This is not the place to go over the details of the revolting narrative; but as reference was made in our memoir of Lady Byron [E. C. S. col. 342] to the notice of the lady who first gave publicity to the story for such particulars as it seemed requisite to give, we must proceed a little further. Mrs. Stowe's statement was soon shown to be inaccurate in the dates, and in its leading features. Lady Byron could not have maintained "two years of convulsive struggle" before leaving her husband, for she left him within thirteen months of their marriage—they were married January 2, 1815, and she left him January 15, 1816. Her letters of that date and long after give no hint of that or anything like it as the cause of separation; indeed, as late as 1818 she writes to her most intimate friend, Lady Anne Barnard, that her wishes "never were to injure Lord Byron in any way; for though he would not suffer me to remain his wife, he cannot prevent me from continuing his friend," which a wife so injured would hardly desire. But further, as was pointed out, Lady Byron up to and some time beyond the separation, wrote frequently to Mrs. Leigh herself in terms of the warmest affection: in one letter assuring her that "in this at least I am *truth itself* when I say that, whatever the situation may be, there is no one whose society is dearer to me, or can contribute more to my happiness;" in another that it is her "great comfort" under the separation, that his sister remains with her husband. She even has her child named after the woman who has done her such grievous wrong. Sentiments and conduct like this were, it is needless to say, not merely incompatible with Mrs. Stowe's story, but render so much of the story impossible.

So far, then, it was plain that Mrs. Stowe's story had little truth in it. Her assertion that her narrative was substantially that contained in a written statement which Lady Byron had prepared with a view to publication after her death, was met by a formal contradiction on the part of the solicitors of Lady Byron's descendants and representatives, who stated authoritatively that Mrs. Stowe's "article is not 'a complete' or 'authentic' statement of the facts connected with the separation, that it cannot be regarded as Lady Byron's own statement, and that it does not involve any direct evidence on Lady Byron's history." Still more emphatically did Lord Wentworth, Lady Byron's grandson, repudiate the whole narrative. "About three years ago," he wrote "a manuscript in Lady Noel Byron's handwriting was found among her papers, giving an account of some circumstances connected with her marriage, and apparently intended for publication after her death; but as this seemed not quite certain, no decision as to its publication was come to. . . . This statement in Lady Byron's own handwriting does not contain any accusation of so grave a nature as that which Mrs. Stowe asserts was told her, and Mrs. Stowe's story of the separation is inconsistent with what I have seen in various letters, &c., of Lady Byron's."

Mrs. Stowe returned to the charge in 1870, in a volume entitled 'Lady Byron Vindicated. A History of the Byron Controversy;' but which was rather an attack on the whole character of Lord Byron, than a vindication of Lady Byron, or a confirmation of her previous statements. Everything that could be found in disparagement of Lord Byron's morals—and there matter was not far to seek—to tarnish his fame, and to sully his memory, was set forth in language happily almost without parallel in recent English literature for virulence, malignity, and prurience. His writings were ransacked for obscene passages; the sentiments expressed by his dramatic personages having reference to a like crime were cited as his own sentiments; and a farrago of equally baseless assertion, asseveration, and irrelevant and disingenuous criticism added, but not an atom of additional evidence. As left by her, the story rests wholly on her assertion. Still, taking into account all that has been published on the subject, it appears certain that Lady Byron did in her later years hold, in some shape, the opinion attributed to her, and repeat it to various persons. But that it was therefore true by no means follows. She had a habit of reasoning out conclusions, and, once arrived at, she adhered to them with undeviating tenacity: that she could be wrong hardly seems to have entered into her imagination. Lord Byron's warm affection for his

sister was never disguised; and some unusual expression of it, contrasted with, it may be, a harsh or untimely expression of indifference for herself, ranking in her memory, may have formed the nucleus about which other suspicious fancies, and perhaps words of "whispering tongues that poison truth," gathered till it assumed the hideous shape in which it startled the world. She had illusions, we know, the fruit of her strong, and not unnatural, jealousy, and this was probably one of them.

At any rate, after having for the purpose of this article gone again, carefully and consecutively, through all that has been published bearing on this repulsive subject, down to Karl Elze's 'Lord Byron: a Biography' (8vo, 1872) with the translator's preface and notes, we must record it as our deliberate conclusion that there is an entire absence of direct, positive, and trustworthy testimony for the charge; that it is not merely unproved, but that it is untrue. Lady Byron, we have no doubt, believed the story, or something like the story, but her belief is not evidence, and there is absolutely nothing to show that it was not a slow and morbid growth of her diseased imagination. Her reception of the belief, and dwelling on and nursing of it as she appears to have done during her later years, are matters for sorrow and silence rather than wonder; Mrs. Stowe's revelation of it—remembering the circumstances under which she states that it was confided to her, and that, although Lord and Lady Byron and Mrs. Leigh were dead, their descendants were living—was alike gratuitous and indefensible; the manner in which she set it forth and defended it, was even worse.

* **STRATHNAIRN, HUGH HENRY ROSE, GENERAL LORD**, a distinguished military commander, was born in 1803. He was a son of Sir G. Hugh Rose, many years English representative at the court of Prussia, and a grandson of the statesman, the Right Honourable Sir George Rose. Receiving his education at Berlin, where his father then resided, he entered the British army in 1820 as ensign, was promoted to be lieutenant in 1821, captain in 1824, major in 1826, and lieutenant-colonel in 1830. He served in the Syrian campaign, 1840—41, and was rewarded with the rank of C.B., the Prussian Order of St. John of Jerusalem, and a sword of honour from the Sultan. He spent many years in diplomatic service, as chargé d'affaires in Syria, and then as secretary of embassy and chargé d'affaires at Constantinople. In the last-named capacity he urged the entrance of the British Mediterranean fleet into the Black Sea in 1853, as a means of restraining Russia from making those aggressions which brought on the Crimean war; but the advice was not followed. In 1855—56, with the rank of major-general (he had been promoted to colonel in 1851), he acted as British military commissioner at the head-quarters of the French army outside Sebastopol; he was wounded in the trenches. For this service he was honoured with the decorations of K.C.B., the Legion of Honour, and the Turkish Order of the Medjidie. As Major-General Sir Hugh Rose, he fought in India during the wars of the mutiny, undertaking very harassing duties in 1857—58. To curb the mutineers and hordes of rebels in the region known as Central India, southward of Agra and Cawnpore, he was placed in command of a column called the Malwah Field Force, afterwards augmented, and called the Central India Field Force. From the later months of 1857 to the summer of 1858 he was almost incessantly marching and fighting. He relieved Saugur; besieged and captured Jhansi and Calpee; took Katghur, Shahghur, and Chundergee; chased the active rebel chieftain, Tanteea Topee, from one stronghold to another; captured Gwalior; and replaced on the Mahratta throne the Maharajah Scindia (who was faithful to the British, although his native troops were not). To use the words of Lord Canning, governor-general of India, Rose's army "marched from Bombay to the Jumna and Gwalior, from success to success, without a check, under hardships heroically borne, although seldom endured even in India." This was done, as he himself expressed it, "against overwhelming numbers which cut off my base as I advanced through an unknown country, and a line of operations some 700 or 800 miles long defended by forts." By this march Sir Hugh, who fought sixteen battles, captured 150 pieces of artillery, and received no defeat, secured for himself the reputation of being one of the most consummate strategists in the British army. The wars of the mutiny being now nearly closed, he returned to Bombay to recruit his shattered health. In reward for these services, he was made lieutenant-general, commander-in-chief of the army of Bombay, G.C.B., knight of the Star of India, and received the thanks of parliament. Sir Hugh next became commander-in-chief of the whole British armies of India. It was his duty in this office to reorganise the native regiments, to

weed out the disloyal from the loyal, and to amalgamate into one body the Queen's officers and regiments with those until that time in the service and pay of the East India Company—the latter a somewhat difficult and delicate task. Resigning his command in India, Sir Hugh returned to England in 1865; was appointed commander of the forces in Ireland, and made a member of the Irish Privy Council. In July, 1866, he was raised to the peerage, with the title of Lord Strathnairn. He was promoted to the rank of general in 1867, received the colonelcy of the Royal Horse Guards in 1869, and the degree of D.C.L. (Dublin) in 1870. His lordship is unmarried. In the House of Lords, Lord Strathnairn speaks seldom, but with great effect on military questions; his speech on the defective strategical education of officers in the army, March 28, 1871, was one of the most remarkable ever delivered in that assembly on such a subject.

* **STREET, GEORGE EDMUND, R.A.**, was born about 1824, at Woodford, Essex; received his general education at Camberwell Collegiate School, and, after a preparatory training under Mr. O. Carter, F.S.A., at Winchester, became the pupil of Mr. George Gilbert Scott, with whom he remained for five years. Entering upon practice on his own account as an architect in 1850, Mr. Street received the appointment of architect for the diocese of Oxford, obtained a good ecclesiastical connection, and soon became known as a leader of the "advanced Goths," a prominent member of the Ecclesiological Society, and treasurer of the Church Union. He has steadily continued in the same course; has advocated his views with pen and pencil, and illustrated them by his buildings, and in all has turned to account a somewhat wide study of the Gothic edifices of the Continent. Mr. Street's principal publications are—'An urgent Plea for the Revival of True Principles of Architecture in the Public Buildings of the University of Oxford,' 8vo, Oxford and London, 1853; 'Brick and Marble in the Middle Ages: Notes of a Tour in the North of Italy,' 8vo, 1855; 'Some Account of Gothic Architecture in Spain' (with illustrations), 8vo, 1865; an essay on 'The Study of Foreign Gothic Architecture, and its Influence on English Art,' published in Shipley's 'Church and the World,' 8vo, 1866. He has also published a lecture, 'Architecture in the Thirteenth Century,' 8vo, 1863; 'Some Account of the Church of St. Mary Stone, near Dartford,' which originally appeared in the *Archæologia Cantiana*, vol. iii.; and contributed papers to professional and ecclesiological journals. Mr. Street erected Cuddesdon College; and Uppingham Grammar School, both Gothic buildings of considerable extent and importance, and several other secular structures of more or less magnitude; but he is chiefly known as a church builder, and his churches have largely influenced the tastes and practice of the younger church architects. Among the more noteworthy of Mr. Street's churches are those of Wantage, 1857; Whitwell, Yorkshire, 1860; St. James the Less, Garden-street, Westminster, 1861, an elaborate brick edifice, and one of the first in which a foreign element was made to predominate; St. Philip and St. James, and St. Giles, Oxford—two among the most admired and criticised of his churches; St. Peter, Bournemouth; Chalvey, by Slough; St. George, Wellington; Whelford, Gloucestershire; All Saints, Clifton; St. John, Torquay; SS. Peter and Paul, Teddington; St. Mary Magdalene, Paddington; Holy Trinity, Eltham; St. Margaret, Prince's Park, Liverpool; St. Peter, Swinton, near Manchester; St. Andrew, Kettering; Long Eaton, Derbyshire; Flyingdale, near Pickering, Yorkshire; Christ Church, Barnston, Cheshire; four or five in Yorkshire for Sir Tatton Sykes; others at Eastbourne, West Malvern, and many other places. Mr. Street has also been very extensively engaged in church restoration, and is now occupied in erecting a new nave, west front, and two western towers to Bristol Cathedral; and in the complete restoration of Christ Church Cathedral, Dublin, and adding to it a new choir, and a synod hall for the Disestablished Irish Church. In 1857, Mr. Street won one of the 100l. prizes for a design for a new Foreign Office, his design being Italian Gothic in style. He was also one of the eleven architects who competed for the National Gallery, 1867, and for the Courts of Law. In the latter his elaborate drawings were successful in obtaining, with those of Mr. E. M. Barry, the suffrages of the professional advisers, and those two gentlemen were provisionally appointed the architects of the new buildings. Subsequently the commission was given solely to Mr. Street. His original design was afterwards superseded, and now, 1872, the foundations are being constructed for another and modified structure, but which will still be next to the Houses of Parliament, the largest and costliest building of recent erec-

tion. The design has been most severely criticised, but it would be out of place here to discuss the merits or demerits of a building that at present exists only upon paper, and the details, and probably many of the leading features of which will undergo many alterations in the course of erection. Mr. Street was elected A.R.A. in 1866, and R.A. in 1871. He is a fellow of the Society of Antiquaries; a fellow and vice-president of the Royal Institute of British Architects; and an honorary fellow of the American Institute of Architects.

STRUVE, FRIEDRICH GEORG WILHELM, an eminent astronomer, was born at Altona, April 15th, 1793. He was sent for his education to the university at Dorpat, in Russia; and, being well grounded in astronomical studies, he received, in 1813, the appointment of one of the assistants at the Dorpat Observatory. He rose to be director of the observatory in 1817. During twenty-two years' occupation of this office his labours were incessant, and of a high degree of importance. His chief researches were into double and multiple stars, of which he produced entirely new catalogues; while his trigonometrical calculations, connected with the measurement of an arc of the meridian, were of still greater practical value. The results of his labours appeared in many scientific journals, especially the *Transactions of the Imperial Academy of St. Petersburg*. Among other works published separately during his residence at Dorpat, the following are the principal:—*Observationes Astronomicas institutas in specula Universitatis*, 4to, Dorpat, 1817; *Ueber die Doppelsterne*, 4to, Dorpat, 1827. An important trigonometrical survey, made in conjunction with Wrangel, is described in *'Beschreibung der unter Schutze von der Universität an Dorpat veranstalteten Breitengradmessung in den Ostseeprovinzen Russlands'*, 4to, Dorpat, 1831. Some of his double-star observations, made with the magnificent Fraunhofer equatorial (13½ feet focus, 10 inches diameter), are described in *'Stellarum duplicium et multiplicium mensuræ micrometricæ per magnum Fraunhoferi Tubum annis à 1824 ad 1837, in specula Dorpatensi Institutæ'*, folio, St. Petersburg, 1837. A mode of employing the transit instrument is treated in *'Sur l'emploi de l'instrument des passages pour la détermination des positions géographiques'*, 4to, St. Petersburg, 1838. In 1839 Struve was appointed director of the Observatory at Paulkova, near St. Petersburg, perhaps the finest and best arranged in the world. He described this establishment in *'Description de l'Observatoire Astronomique Centrale de Paulkova'*, 2 vols. folio, St. Petersburg, 1845 (forming the Introduction to *'Annales de l'Observatoire Centrale'*). During the twenty-five years of his labours at this Observatory, he continued his observations on double and multiple stars, until his catalogues noticed no less than 120,000 of them. He also assisted in those vast trigonometrical surveys which at length led to the completion of an arc of the meridian, extending from the North Cape to Turkey, covering 20° of latitude. Separate publications, descriptive of these and other researches, are the following:—*'Catalogue de 514 étoiles doubles et multiples découvertes sur l'hémisphère céleste boréal par la grande lunette de l'Observatoire Centrale de Faulkova'*, folio, St. Petersburg, 1843; *'Sur le Coefficient Constant dans l'aberration des étoiles fixes'*, 4to, St. Petersburg, 1843; *'Expédition chronométrique exécutée par ordre de Sa Majesté Nicolas I. entre Paulkova et Altona pour la détermination de la longitude géographique relative à l'Observatoire Central de Russie'*, 4to, St. Petersburg, 1844; a similar comparison between Paulkova and Greenwich, 4to, St. Petersburg, 1846; *'Librorum in bibliotheca speculæ Pulcovensi contentorum Catalogus Systematicus'*, 8vo, St. Petersburg, 1845; *'Études d'Astronomie stellaire. Sur la voie lactée, et sur la distance des étoiles fixes'*, 8vo, St. Petersburg, 1847; *'Sur la dilatation de la glace, d'après les expériences faites en 1845 et 1846'* (in conjunction with Schumacher, Pohrt, and Moritz), 4to, St. Petersburg, 1848; *'Notice sur l'instrument des passages de Repsold établi à l'Observatoire de Paulkova'*, 4to, St. Petersburg, 1852; *'Stellarum fixarum imprimis duplicium et multiplicium positiones mediæ pro epocha 1830'*, folio, St. Petersburg, 1852; *'Arc du Méridien de 25° 20', entre le Danube et le Mer Glaciale'*, 4to, St. Petersburg, 1857. Some of Struve's works were officially printed in Russian, but were afterwards reprinted in French, German, or Latin. He edited new editions of Fuss, Sawitch, Sabler, and Fedorow, on *Trigonometrical Surveys*, and a new edition of Weisse's *Star Catalogue*. He died at St. Petersburg, November 23rd, 1864.

* STRUVE, OTTO WILHELM, son of the preceding, and, like him, a distinguished astronomer, was born at Dorpat, May 7th, 1819. His whole life may be said to have been spent in connection with the Observatory in his native town. Qualifying

himself for the duties by receiving a scientific training, he became, when a young man, assistant to his father, retained that post till 1864, and then succeeded him as director. His astronomical papers, inserted in various scientific journals and transactions, are numerous. They relate to double stars; a satellite of Neptune discovered by him; Saturn's ring; the periodic motions of double stars; the motion of the solar system in space, &c. Some of his papers, after insertion in the memoirs of the Imperial Academy of St. Petersburg, have been published separately. *'Bestimmung der Constante des Präcession, mit Berücksichtigung der eigenen Bewegung des Sonnensystems'*, 4to, St. Petersburg, 1842, an important contribution to our knowledge of the motion of the solar system in space; *'Catalogue revu et corrigé des étoiles doubles et multiples découvertes à l'Observatoire Centrale de Paulkova'*, 4to, St. Petersburg, 1850; *'Détermination de la Parallaxe de l'étoile Groombridge 1830'*, 4to, St. Petersburg, 1850; *'Nouvelle détermination de la Parallaxe annuelle des étoiles α Lyræ et 61 Cygni'*, 4to, St. Petersburg, 1859; *'Observations de la grande Nébuleuse d'Orion, faites à Cazan et à Paulkova'*, 4to, St. Petersburg, 1859; *'Pulkowaer Beobachtungen des grossen Cometen von 1858'*, 4to, St. Petersburg, 1859; *'Beobachtung der totalen Sonnenfinsterniss vom 18 (6) Juli, 1860'*, 4to, St. Petersburg, 1859; a new and revised edition of his father's *Catalogue of the library at Paulkova*, 8vo, St. Petersburg, 1860; *'Tabulæ quantitatum Besselianarum quibus apparentes stellarum positiones in medias convertuntur adhibitis numeris constantibus Pulcovensibus pro annis 1840 ad 1864 computatæ'*, 4to, St. Petersburg, 1861, an important treatise on the proper motions of the stars; new edition of Weisse's *'Positiones mediæ Stellarum fixarum in Catalogum Ordinatæ'*, 4to, St. Petersburg, 1863.

STUART, JAMES E. B., Confederate general during the American civil war, was born in Patrick county, Virginia, in 1832. He received his professional training at West Point Military Academy, where he graduated in 1854. He rose through two grades in a cavalry regiment; and then, when the civil war broke out in 1860, resigned his commission in the Federal army, and threw in his lot with the Confederates. He commanded the cavalry at the first battle of Bull Run; was made brigadier-general in September, 1861; and took part in many engagements. During the winter of 1861—62 he re-organised the Confederate cavalry in Virginia. In June, 1862, a cavalry raid which he made in the rear of McClellan's army near Richmond almost severed the line of communication of the Federals, and compelled them to change their base of operations. In August, while with Lee's army, he made another raid, marching on Pope's head-quarters, and carrying off valuable papers and plans of campaigns; he approached at night, during a terrific thunderstorm, and threw the Federals into great confusion. In October, with 2,000 horse and four pieces of light artillery, he crossed the Potomac between Williamsport and Hancock, rode completely round the Federal lines, capturing some horses and a few camp supplies, and re-crossed the Potomac into Virginia, without the loss of a man. These daring manœuvres gained for General Stuart the credit of being one of the best cavalry officers of his time. In 1863 he was engaged in various services, and rendered good aid to Lee in covering the retreat of the Confederates from Gettysburg. He was desperately wounded on the 9th of June, 1864, in a cavalry engagement with the Federals under Sheridan, and died two days afterwards.

STÜLER, AUGUST, a distinguished German architect, was born at Berlin, January 28th, 1800. He was a pupil of Schinkel, and remained with him as assistant till about 1830. He first attracted notice by various architectural and ornamental designs, published in professional journals, and a work prepared in conjunction with Strack, entitled *'Vorlegeblätter für Möbeltischler'*, 1835. His earliest building of importance was the Rathhaus, Perleburg, Italian Gothic in style, 1840. The King, Frederick William IV., about this time became his warm patron. Amongst the many important buildings which he erected for the king, were the churches of St. James, St. George, St. Matthew, &c., in Berlin; the Chapel Royal; several new saloons in the palace of Potsdam; the royal porcelain manufactory, and other government works. But his most important buildings were the New Museum, a large and costly structure; and the still more magnificent Exchange, the large model of which is now in the South Kensington Museum. For private patrons he erected the mansion of the Grand Duke of Mecklenburg-Schwerin, and many other costly buildings in Berlin and its vicinity. Out of Prussia his chief works are the New Winter Palace at St. Petersburg, the Exchange at Frankfurt, &c. After holding various official

posts, he was made in 1846 chief inspector of buildings, in 1849 joint director of the Academy of Architecture, and in 1850 ministerial counsellor. He died suddenly on the 18th of March, 1865. Stüler is considered the ablest of the scholars of Schinkel. His style, like that of his master, is "classic," but it is by no means of the "severe" character of our leading English classicists. In all his works there is a great deal of ornamentation, and the ornament is not always pure. Several of his buildings are Italian in style.

SUE, MARIE JOSEPH EUGÈNE. [E. C. vol. v. col. 808.] The coup d'état of December 2nd, 1850, drove Eugène Sue from France. He continued to write, but without the old spirit, and his writings met with diminishing popularity. He died in exile, August 3rd, 1857, at Annecy, in Savoy.

SUGER, ABBÉ. Regent of France, was born towards the close of the 11th century (1082 and 1087 are the dates variously given), either at St. Denis or St. Omer. The son of a peasant, he was admitted at the age of ten as a scholar in the Abbey of St. Denis, where Prince Louis, son of Philip I. of France, was at the same time receiving his education. Admitted in due time a member of the monastery, Suger distinguished himself by the range of his studies, his keen intelligence, and business habits. His acquaintance with the abbey charters proved of great benefit to the abbey, which by his means recovered much property of which it had been deprived by the neighbouring lords; and he defended the ecclesiastical rights of the abbey against the Bishop of Paris before Pope Pascal. When Prince Louis ascended the throne of France as Louis VI. in 1108, he called Suger, with whom he had maintained friendly relations, to his side, and made him his chief guide and counsellor. Suger at once set about strengthening the royal power, and reducing that of the great vassals of the crown, over whom the king then held little more than a nominal supremacy. In furtherance of this object, he suggested the establishment of communes, and the granting of charters to the chief towns, by which the election of magistrates was conferred on the citizens—two measures which proved of vast importance to France. Suger had been created prior of Berneval, in Normandy, and in that capacity carried on the struggle with the feudal lords. He armed his vassals and himself appeared at their head with the army of the king when the Emperor Henry V. invaded France. He was intrusted on various occasions with the negotiations between the kings of France and England; and he concluded the treaty of peace in 1120. In 1122 he went on a mission to Rome, and whilst there the abbot of St. Denis having died, Suger was elected his successor. At the court, and as the king's minister, he had participated in the luxurious and splendid habits of the princes and nobles with whom he associated, but now, convinced by the appeals of St. Bernard, he began a new and stricter life, and earnestly set about the reformation of his abbey. Carrying out the policy he had recommended to the king, he emancipated the serfs on the abbey estates; at the same time, while he adopted a rigid economy in the abbey, he enforced to the utmost its rights, and encouraged in all ways the offerings of the devout. To the end of the life of Louis VI., Suger retained the king's confidence, was intrusted with the conduct of the most important missions and measures, and had the entire direction of the prince's education. From the death of Louis VI. (1137), the influence of Suger seemed to increase; the young king, Louis VII., regarding the opinions of his old tutor with reverence. But Suger in vain endeavoured to prevent the king from going himself on the crusade which he had been persuaded by St. Bernard to undertake. Suger approved of the crusade, but held that the king's first duty was to stay in his kingdom. Louis went, but appointed the abbé regent during his absence, 1147—1149. The crusade was unsuccessful, but the wise rule of the regent was said to have in a great measure compensated France for her misfortunes. The government of France was not, however, the only thing which at this time engaged his thoughts. Ever since he became abbot of St. Denis he had been accumulating wealth, and preparing his plans; and about the time he became regent of France he commenced rebuilding his abbey on a scale of magnificence and in a style till then unknown in France. At least, it is to the Abbey of St. Denis that the best recent authorities attribute the origin of the Pointed Style of architecture in France. The abbey is, indeed, rather what is called Transitional than perfect Gothic in style, but it was the first important departure from the Romanesque, and as such was the parent of the many splendid Gothic structures which were soon after erected in France, and imitated, with more or less success, in other parts of Europe. Some writers have gone so far as to rank

BIOG. DIV.—SUP.

Suger as the architect of the building, and to attribute to him the designs of some of the splendid glass windows which were erected in this and other churches about this time. He gave a great impetus to the arts in France; but though he may have studied art whilst a monk in St. Denis, and probably did, we may be sure that, with the government of the kingdom resting on him, he had neither time nor desire to engage in occupations which he could find others able and willing to perform. He was beyond doubt a warm and generous patron of the arts, and he probably gave valuable suggestions and wise advice to the artists who worked for him; it would be idle to suppose he did more. But he was not the patron of art merely. He sought to improve agriculture, and to ameliorate the condition of the labourer; he founded numerous villages; gave new charters to towns, and promoted in all ways he could the industry and commerce of the country. He died at St. Denis, January 30th, 1152.

* **SUMNER, CHARLES,** American politician, was born at Boston, Massachusetts, January 6th, 1811. He graduated at Harvard University in 1830; studied law under Judge Story, and was admitted to the bar in 1834. He gave lectures at the Law School in the university, but declined a professorship. From 1837 to 1840 he travelled in Europe, and then became popular in Massachusetts as a barrister and law writer. In 1845 he attracted attention by his first political speech, on the 'True Grandeur of Nations,' in which he advocated arbitration as a substitute for war. In the same year he opposed the Fugitive Slave Law; the annexation of Texas; and in the following year the Mexican war. In 1850 he entered the Senate as representative of Massachusetts, and took a leading position among anti-slavery advocates by his declaration that "freedom is national, slavery sectional." In 1856 a speech on the Kansas question so violently enraged the senators from the Southern States that one of them, Mr. Brooks, inflicted a violent personal assault, which injured the health of Mr. Sumner for three or four years. On his re-entering the Senate in 1859, he attacked the slaveowners by speech and by writing, and was instrumental in insuring the election of Mr. Lincoln to the presidency in the following year. When the civil war began in 1861, he opposed all compromise, insisting that the total abolition of slavery should be an indispensable condition of peace. As chairman of the Committee of the Senate on Foreign Relations, he was antagonistic to England, especially in relation to the 'Alabama' question. He opposed President Johnson in any show of leniency to the South during the process of reconstruction after the war. In 1869 he denounced the treaty signed by Mr. Reverdy Johnson and the Earl of Clarendon, and obtained its rejection. His rancorous speech against England was very generally disapproved by his countrymen, who felt that such a line of conduct in a prominent public man could not fail to lower the statesmanship of America in the eyes of intelligent foreigners: and this feeling probably had much to do with his removal, in March, 1871, from his position as chairman of the Foreign Affairs Committee of the Senate. He has pursued a similar course with reference to the Washington Treaty, and he has the credit of having invented, or given form to, the monstrous proposition of "consequential damages" as a part of the Alabama Claims, and which, being unhappily embodied in the American Case, has imperilled what appeared likely to be a friendly settlement of the differences between the two countries.

Many of Mr. Sumner's speeches, addresses, orations, and lectures have been printed, relating to Slavery, White Slavery, Unionism, Peace, National Greatness, the Origin of the Civil War, Education, Abolitionism, the Kansas Question, the Fugitive Slave Law, the Law of Human Progress, &c. Two collected reprints of these appeared in 1850 and 1856. His larger published works include a 'Catalogue of the Law Library of Harvard University,' 1834; contributions to and editing of eight volumes of the 'American Jurist'; 'Reports of Cases in the Circuit Courts of the United States,' 3 vols. 1836—1841; American edition of Dunlop's treatise, 'On the Practice of the Admiralty Courts in Cases of Civil Jurisdiction at Sea,' 1836; 'On the Foreign Relations of the United States,' 1837 (written at the request of General Cass when American ambassador at Paris); American edition of Vesey's 'Chancery Reports,' 20 vols. 1844, &c.; Additions to Justice Story's 'Commentary on the Law of Bills of Exchange,' 1853, &c.

SUMNER, MAJOR-GENERAL EDWIN VOSE, an officer in the United States army, was born at Boston, Massachusetts, in 1796. He received his training at Boston, and entered the army in 1819 as second lieutenant of the 2nd Infantry. After

seeing service in the Black Hawk war, he was appointed captain of the 2nd Dragoons, when that regiment was raised by General Jackson; and was for many years engaged with it on the Indian frontier. He was then placed in command of the School of Cavalry Practice at Carlisle, Pennsylvania. Promoted to the rank of major in 1846, he participated actively in the Mexican war; led the cavalry charge at Cerro Gordo, where he was wounded; fought at Contreras and Churubusco; and commanded the cavalry at Molino del Rey. In 1848, with the rank of lieutenant-colonel, he received the command of the department of New Mexico; in 1855 was made colonel of the 1st Cavalry; in 1856 received the command of Fort Leavenworth, Kansas; in 1857 led successfully an expedition against the Cheyenne Indians; and in 1858 was placed in command of the department of the West. On the breaking out of the civil war he was promoted to the rank of brigadier-general, and was made commander of the first army corps in the army of the Potomac. During the seven days' fighting on the Chickahominy he was wounded. As major-general of volunteers, and brevet major-general in the regular army, he took command of the second corps of the army of the Potomac, after its re-organization. After various operations under McClellan and Burnside, he quitted the army of the Potomac, and accepted the command of the army of the frontier; but while going thither he sickened at Syracuse, New York state, and died March 21, 1863.

SUMNER, JOHN BIRD, D.D., Archbishop of Canterbury. [E. C. vol. v. col. 828.] This excellent prelate and amiable man was gathered to his fathers on the 6th of September, 1862, at the age of 82. He was interred in Addington churchyard, Surrey.

SWAINSON, WILLIAM [E. C. vol. v. col. 842], geologist, died December 6, 1855.

* SWINBURNE, ALGERNON CHARLES, a poet and critical writer, eldest son of Admiral Charles Henry Swinburne and of Lady Jane Henrietta Swinburne, daughter of George, third Earl of Ashburnham, and the grandson of Sir John Edward Swinburne, Bart., of Capheaton, Northumberland, was born on the 5th of April, 1837, in Chester Street, Grosvenor Place, London, and received his earlier education successively in France and at Eton. In 1857 he was entered a commoner of Balliol College, Oxford; and his name still (1872) appears in the Calendar as an undergraduate member of the University. His first literary venture was a volume "affectionately inscribed to Dante Gabriel Rossetti," consisting of two plays entitled respectively 'The Queen Mother,' and 'Rosamond,' 8vo., London, 1860, &c., 16mo, Boston, U. S., 1866, which, although comparatively little known to the reading public, exhibits a singular literary power, the richness of which is intellectual and poetical, rather than dramatic. The heroine of the 'Queen Mother,' which is in five acts, is Catherine de' Medici, mother of Charles IX. of France, the scene being Paris, and the time, August 22-24, 1572, that of the Massacre of St. Bartholomew. 'Rosamond,' whose heroine is "not Rose the chaste, but Rose the fair," is a play in one act, the scene of which varies between Woodstock and Shene. In May, 1864, Mr. Swinburne, attracted by his admiration for the late Walter Savage Landor, who died on the 17th of September following, and fortified with a letter of introduction from Lord Houghton, went out to Florence for the sole purpose of paying homage to Landor, at whose feet, as he expressed it in a letter announcing his arrival, it was his eager wish to lay, what he could never hope to put into adequate words, his profound gratitude and life-long reverence. It was to the memory of Walter Savage Landor, "the highest of contemporary names," that Mr. Swinburne dedicated his 'Atalanta in Calydon,' 4to, London, 1865, and other editions, 16mo, Boston, U. S., 1865, the chief power of which was recognised as lying in its lyrical expression and description, and which at once made his reputation as a poet who out of an imitation of Greek form and feeling knew how to evolve originality. To 'Atalanta' succeeded 'Chastelard: a Tragedy,' 8vo, London, 1865, and other editions, 16mo, New York, 1865, a poem, which, dramatic in form, was chiefly remarkable for its power of poetic expression, and, being devoted to the unpalliated loves of the hero and Mary, Queen of Scots, was repellent of human sympathy and human interest, so that even its warmest admirers conceded that it must be regarded as a less absolute achievement than 'Atalanta.' About the same time, Mr. Swinburne edited, for the series known as 'Moxon's Miniature Poets,' 8vo, London, 1865, &c., 'A Selection from the Works of Lord Byron,' to which he prefixed an independent and remarkable essay upon the noble poet; and in the following year produced a volume of 'Poems and Ballads,' 8vo, London, 1866, which, having become unanimously obnoxious

to the charges of heresy, profanity, and uncleanness, were promptly withdrawn from circulation by Messrs. Moxon and Co., the publishers. Copies of the suppressed edition are said to have been sold for five guineas each; and when the issue of the work had been undertaken by another publisher, it went through several editions, both in this country and America, where it was brought out with the modified title of 'Laus Veneris, and other Poems and Ballads,' New York, 1866. Mr. Swinburne replied in 'Notes on Poems and Reviews,' 8vo, London, 1866, and 8vo, New York, 1866, to the critical animadversions which the manifold offences of the 'Poems,' &c., had called forth, in a form compounded of qualified apology and impenitent defiance. Carrying into his polemics the alliterative habit which is recognised as one of the overdone mannerisms of his poetry, he protested against the "prurient prudery and the virulent virtue of pressmen and prostitutes;" and, admitting that he did not write for children or for girls, claimed to deal neither "in poison nor in pap." Mr. W. M. Rossetti, who published a volume entitled 'Swinburne's Poems and Ballads: A Criticism,' 8vo, London, 1866, by way of apology for the idiosyncratic sensuousness and the "religious mutiny" of his friend, observed that, "in fact, Mr. Swinburne's mind appears to be very like a *tabula rasa* on moral and religious subjects, so occupied is it with instincts, feelings, perceptions, and a sense of natural or artistic fitness and harmony. . . . He has no idea of what philosophers call a sanction." The record of Mr. Swinburne's life is mainly a record of his literary activity, to which the following works, later than the above-mentioned, are owing:—'A Song of Italy,' 8vo, London, 1867, &c., and Boston, U. S., 1867, and re-published in the New York 'Weekly Tribune,' for May 1st, 1867, a poem conceived in a dramatic spirit, although lyrical in form, the rhapsodist of which seems to be an Italian patriot, probably a Roman, and certainly a republican and a fiery worshipper and partisan of Mazzini; 'William Blake: a Critical Essay. With Illustrations from Blake's Designs in Facsimile, coloured and plain,' 8vo, London, 1867, second edition, 1868, an exposition of the ideas of the artist-mystic in religion, morality, and design; 'Siena. A Poem,' 16mo, Philadelphia, U. S., 1868, and 8vo, London, 1868, reprinted from 'Lippincott's Magazine,' for June, 1868; the 'Second Part' of 'Notes on the Royal Academy Exhibition,' 8vo, London, 1868, the 'First Part' of which was furnished by Mr. W. M. Rossetti; 'Ode on the Proclamation of the French Republic, September 4, 1870,' 8vo, London, 1870, with a dedication to M. Victor Hugo, a work the anti-monarchical inspiration of which he further exhibited a few months later in a volume dedicated to Mazzini, and entitled 'Songs before Sunrise,' 8vo, London, 1871, in which the "Sunrise" indicated is characterised by a pantheistic theology and a republican form of government. In two of the 'Songs,' one entitled a 'Hymn of Man,' and the other 'Before a Crucifix,' the author, besides expressing his own views, assails the beliefs and the most consecrated associations of other people with a wanton violence which is more than offensive. Mr. Swinburne has been an occasional contributor to various periodicals, the 'Fortnightly Review,' 'Cornhill Magazine,' 'Lippincott's Magazine' (American), and others; and he has also edited, with an introductory essay, a volume forming part of Low's 'Bayard Series,' and entitled 'Christabel, and the Lyrical and Imaginative Poems of S. T. Coleridge. Arranged and introduced,' &c., 16mo, London, 1869. The 'Athenæum' for January 13, 1872, announced the completion of "the first part, entitled 'The Sailing of the Swallow,' of Mr. Swinburne's new poem, 'Tristram and Iseult,'" the prelude of which had appeared a few weeks before in an annual called 'Pleasure.'

SYME, JAMES, surgeon, was born in Kinross-shire in 1800. He was educated at Edinburgh, and in 1817 commenced his anatomical studies under Liston. In 1821 he was elected a member of the College of Surgeons, and from 1825 to 1832 he delivered courses of lectures in Edinburgh, which were considered to be of unusual excellence by the most eminent surgeons of the day. He maintained, partly at his own expense and partly by means of subscriptions, a special hospital where he delivered lectures on clinical practice. The operations which he effected on the patients were among the most successful and difficult in the whole range of surgery. In 1833 he was appointed to the chair of clinical surgery in the University of Edinburgh, and, with the exception of a short interval in 1847 and 1848, he held it till his resignation in 1869. He was surgeon to the Queen in Scotland. He died June 26, 1870, at Millbank, near Edinburgh. Professor Syme made many improvements in his art, more especially in his treatment

of senile gangrene, and in substituting the excision of the diseased part for the amputation of the limb. He wrote many works and papers on surgery, amongst them a 'Treatise on Excised Joints,' 1831; 'Principles of Surgery,' 1832, 2nd edition, 1856; 'Treatise on the Diseases of the Rectum,' 1838—46; 2nd edition, 1853; and others.

SYMINGTON, WILLIAM, one of the improvers of the steam engine, and co-inventor of steam navigation, was born about the year 1760, at Leadhills, in Lanarkshire, where his father was manager of the lead mines. He was trained at Edinburgh University, and was intended for the Church; but turned in preference to mechanical pursuits. Before his 21st year he had made improvements in the steam engine; and in 1785, while engineer at the Wanlockhead lead mines, near Sanquhar, he patented an invention connected with steam mechanism. At the same time he published a descriptive pamphlet, in which he claimed that his improved engine, with the same diameter of cylinder as Watt's, would produce more power, and with a less consumption of fuel. He at the same time offered to convert any other engine to his plan at a moderate expense. He obtained rotary motion without a beam; but his mechanism of chains, catches, and ratchet-wheels had eventually to be abandoned. Mr. Miller, of Dalswinton, saw a model of Symington's engine at Edinburgh in 1786, and conversed with Symington himself. Then followed the joint operations of Miller, Taylor, and Symington at Dalswinton Loch. [MILLER, PATRICK, E. C. S. col. 890; TAYLOR, JAMES, E. C. S. col. 1129] Symington, and after his decease, his relations asserted that both Miller and Taylor were conversant with his inventions before the Dalswinton experiments began—Taylor, as an old college acquaintance, and Miller through seeing the model at Edinburgh. The claims put forth by or for the other two inventors are noticed in the articles here cited. We need only add that the larger degree of credit seems to be due to Symington, who had evidently thought out the subject of the steam engine with great assiduity and intelligence in its principles and its details. Moreover, it is asserted that Fulton derived his idea of steam navigation from Symington—a statement disputed in America. Several years later, in 1801, Symington

took out a patent for a crank motion to turn paddle-wheels—a great improvement on his former chains and ratchets; he also compacted the machinery into a much smaller space than before, to suit the requirements of boats. In 1802 Lord Dundas, chairman of the Forth and Clyde Canal Company, invited Symington to try his engine on the canal. It was fitted to a boat called the 'Charlotte Dundas,' which drew two barges of seventy tons each nineteen miles and a half in six hours, against a strong head wind—by far the best achievement in steam navigation up to that time. Unfortunately, the company, apprehensive that the wash caused by the paddles would injure the banks of the canal, declined to pursue the matter further. The Duke of Bridgewater ordered eight of the new steamboats to be built for his canal, but his death caused the cancelment of the order. This was a blow to Symington's prospects, which he never overcame. He soon afterwards removed to London as a practical engineer; but his skill in dealing with mechanism was greater than in dealing with men; and he remained nearly unknown to the world. In 1824, after trying in vain for a small pension, the Government gave him 100*l.* and another 50*l.* soon afterwards, for his inventions of 1784—1802; and Mr. James Walker, the civil engineer, obtained a little more for him from the Thames steamboat owners. Symington died March 22nd, 1831, and was buried in Aldgate churchyard.

SZECHENYI, STEPHAN, COUNT VON. [E. C. vol. v. col. 879.] In retirement at Döbling, Count Szechenyi slowly recovered from the mental aberration referred to in the above memoir. He returned to his home, resumed his place in society, and began again to take part in industrial and political affairs. But the Austrian police pretended that he was engaged in intrigues against the government, and availed themselves of the publication in London of a pamphlet, entitled 'Ein Blick auf den anonymen Rückblick,' to subject his house to a search and his papers to examination. This indignity, and the knowledge that he was under strict police surveillance, threw him into a state of intense excitement, during which he shot himself on the night of April 7—8, 1860. (Recskmethy, *Graf Stephan Szechenyi's staatsmännische Laufbahn*, Pesth, 1866.)

T

TACHONI, or TACCONI, FRANCESCO, an Italian painter who practised his art with success at Cremona, in the last half of the 16th century. In 1464 Francesco and his brother Fillipo were exempted from the payment of municipal taxes as a reward for painting a loggia in the Town Hall, Cremona. The works of Francesco Tachoni are very rare. The latest known to have been executed by him were the doors of the organ in the church of St. Mark, Venice, which bore the date, May, 1490. In the National Gallery is a 'Virgin Enthroned,' inscribed "Francisi Tachoni," 1489. (Moschini; Wornum.)

TAINÉ, HIPPOLYTE ADOLPHE, a French writer on art, philosophy, and literature, was born on the 21st of April, 1828, at Vouziers, Ardennes, and was educated successively at the Collège Bourbon, where he carried off the rhetoric prize in 1847, and at the École Normale. In 1853 he took the degree of docteur-ès-lettres, upon which occasion he exhibited two theses, respectively in Latin and French, the former being entitled 'De Personis Platoniciis,' and the latter, 'Essai sur les Fables de La Fontaine,' 8vo, Paris, 1853, second edition, 1854, which was subsequently expanded and developed under the modified title of 'La Fontaine et ses Fables,' 12mo, Paris, 1860, new edition 1861. In March, 1853, he was appointed examiner in literature at the military school of Saint-Cyr; and on the 26th of October, 1864, was promoted to the professorship of aesthetics and art-history at the École impériale et spéciale des Beaux Arts at Paris.

M. Taine, who is a D.C.L. of Oxford, is the author of two books of travel, bearing the several titles of 'Voyage aux Eaux des Pyrénées, Avec 65 Vignettes par G. Doré,' 12mo, Paris, 1855, third edition, 8vo, 1860, and 'Voyage en Italie,' 2 vols., 8vo, 1866, of which an English translation by J. Durand was

issued, with the title of 'Italy, Naples, and Rome,' 8vo, London, 1867; 'Essai sur Tite-Live,' 8vo, Paris, 1856, second edition, 1860; 'Les Philosophes français du XIX^e Siècle,' 12mo, Paris, 1857, second edition, 1860; 'Essais de Critique et d'Histoire,' 12mo, Paris, 1858, and 'Nouveaux Essais,' &c., 8vo, Paris, 1865, each of which volumes consisted of a collection of articles originally contributed to the 'Revue des Deux Mondes,' the 'Journal des Débats,' and the 'Revue de l'Instruction publique;' 'L'Idéalisme anglais: Étude sur Carlyle,' 12mo, Paris, 1864, and 'Le Positivisme anglais: Étude sur Stuart Mill,' 12mo, Paris, 1864, each of which formed a part of the 'Bibliothèque de Philosophie contemporaine,' and the latter of which was translated into English, and published in 8vo, London, 1870; 'Philosophie de l'Art. Leçons Professées à l'École des Beaux Arts,' 12mo, Paris, 1865, and 'Philosophie de l'Art en Italie,' &c., 12mo, Paris, 1867, each of which formed one of the series entitled 'Bibliothèque de Philosophie contemporaine,' as did also a treatise 'De l'Idéal dans l'Art,' &c., 8vo, Paris, &c., 1867, English translation by J. Durand; 'The Ideal in Art,' 12mo, New York, 1870; 'De l'Intelligence,' 2 vols., 8vo, Paris, 1870; and 'Notes on England. Translated by W. F. Rae, with an Introduction by the Translator. Reprinted, with Additions, from the "Daily News,"' 8vo, London, 1872. The most characteristic of M. Taine's achievements, however, is perhaps his production of a work entitled 'Histoire de la Littérature anglaise,' 4 vols., 8vo, Paris, 1863-64, English translation by H. Van Laun, with a Preface by the author, 2 vols., 8vo, Edinburgh, 1871, in which, whilst his criticism is generally sympathetic, he propounds theories of some novelty and in accordance with the doctrines which have otherwise won for

him the reputation of a favourer of fatalism. The three primary forces which "call forth and regulate the unknown creations towards which the current of ages is drawing us," are race, *milieu*, and momentum. The literature of a nation depends on the national history and character, and it follows conversely that the history of a nation may be constructed from a perusal of its literature. From a literary work we can argue to the psychology of an individual, often to that of an epoch, and occasionally to that of a whole race. Thus a great poem, a fine romance, or the confessions of a man of superior intellect, will impart more instruction than a pile of histories, than fifty volumes of charters or a hundred volumes of treaties. In seeking for a national literature the most adapted for the illustration of his principles, M. Taine found it in the literary history of England, which he divides into four periods:—(1) *Les Origines*, which commences in the Scandinavian forests, and virtually ends with Chaucer and his followers; (2) the *Renaissance*, which has to deal with the colossal minds of the Elizabethan era, and lasts till the Restoration; (3) the *Age Classique*, including in its scope a magnificent procession of poets, essayists, historians, and orators, and bringing us down to the latter part of the eighteenth century; and (4) the *Age Moderne*, commencing with Burns, embracing the period of the "Lake Poets," and ending with Lord Byron.

* TAIT, RIGHT HONOURABLE and MOST REVEREND ARCHIBALD CAMPBELL, ARCHBISHOP OF CANTERBURY, son of Craufurd Tait, Esq., of Harviestoun, Clackmannanshire, a Scottish laird and lawyer, was born at Edinburgh, on the 22nd of December, 1811, and received his earlier education successively at the High School and the Academy of his native city. In 1827 he entered the University of Glasgow, and in 1830 was elected, by the votes of the professors, as an exhibitor on Snell's foundation to Balliol College, Oxford, where he gained an open scholarship within a month of his matriculation. He graduated as B.A. on the 5th of December, 1833, when he was first class in classics; proceeded M.A. on the 25th of May, 1836; took the degree of D.C.L. on the 20th of October, 1842; and was created D.D. in 1869. He became a fellow and tutor of his college; and in 1841, the year in which he acted as public examiner, was one of the four tutors who drew the attention of the University authorities to Tract XC. of the 'Tracts for the Times,' which, at a meeting of the Vice-Chancellor and Heads of Houses, March 15th, 1841, was censured for affirming the proposition that men holding the principles of the Church of Rome might honestly subscribe the Articles of the Church of England. The authorship of the Tract was next day acknowledged by the Rev. J. H. Newman, with an avowal of his continued belief in the soundness of its teaching. In 1838 Mr. Tait's proposed candidature for the lucrative professorship of Greek in the University of Glasgow, vacant by the death of Sir Daniel K. Sandford, was barred by the fact of his being a clergyman of the Church of England, in which he took deacon's orders in 1836, and was admitted to the priesthood in 1838. On the death of Dr. Arnold, June 12th, 1842, he was elected to succeed him in the head-mastership of Rugby School, and performed the duties of this office until 1849, when a severe illness, induced by his anxious and incessant application, which showed itself in the flourishing condition of the school, warned him to resign. Early in 1850 he received the appointment of Dean of Carlisle; where, although he subsequently professed in the House of Lords that he was a certain number of years in finding out what the duties of a Dean in the Church of England might happen to be, he displayed great activity in the origination of additional pulpit services on Sundays, in the visitation of the poor, the instruction of the young and ignorant, and the superintendence of charities. As custodian of the cathedral, one of his chief cares was the restoration of that building, which was effected at a cost of about 15,000*l.*; and it was mainly owing to his exertions that the Grammar School of the city was rebuilt, and its system of education extended and improved. He was also an active member of the Oxford University Commission, 1850—52, the secretary of which was his friend Dr. Stanley, in conjunction with whom he had formerly produced a pamphlet on the 'Revival of the Professorial System.'

Dr. Tait, who had married whilst at Rugby, lost five children by scarlet fever in the spring of 1856, a circumstance which evoked much sympathy from all quarters, including the highest, and which possibly quickened the perception of his merit on the occurrence of a vacancy in the see of London, consequent upon the retirement of Dr. Blomfield. He was appointed to the vacant bishopric in October, 1856, and was enthroned in

St. Paul's Cathedral on the 4th of December following. He signalled his incumbency, which extended over more than twelve years, by the kindly and comprehensive manner in which he was able to reproduce for himself the thoughts and position of others, to understand their difficulties, and to make allowance for their exaggerations. He brought to his new sphere of duty the same benevolent interest in the people which he had manifested in the artisans of Carlisle. He preached in Covent Garden Market; to the weavers of Bethnal Green; and to omnibus-drivers and cabmen in a stable-yard at Islington. He took part also in the special services at St. Paul's and at Westminster Abbey, where his sermons were characterised by their robust sense, their interesting reference to past or current history, their close, logical argument, and kindly and pointed appeal. The sermons delivered before the University of Oxford in his capacity of select preacher, 1844—45, are equally unaffected, while exhibiting more learning and elaboration. They were republished about fifteen years after their delivery, together with a few miscellaneous sermons, as an antidote to the 'Essays and Reviews,' and entitled 'The Dangers and Safeguards of Modern Theology. Containing Suggestions offered to the Theological Student under present Difficulties (a revised edition), and other Discourses,' 8vo, London, 1861. The most remarkable of Dr. Tait's exertions for the spiritual advantage of his diocese is his establishment of what is known as the "Bishop of London's Fund," propounded in May, 1863, for the purpose of a complete re-organisation of the church system in the metropolis, and an extension of it so comprehensive as to make up for arrears, and to provide for the exigencies of the future. His plan was to raise the sum of 1,000,000*l.* in the course of ten years; and although this has not been completely realised, a vast amount of beneficence in this direction has been the result. On the 4th of December, 1868, Dr. Tait was unanimously elected by the Dean and Chapter to the archiepiscopal see of Canterbury, in which he was confirmed on the 30th of December; and the duties of which, owing to his failing health, which necessitated first repose and then foreign travel, it was found expedient to lighten by the consecration, in 1870, of Dr. Edward Parry as Suffragan Bishop of Dover.

The incidental honours of Dr. Tait are numerous. He is one of the Lords of the Privy Council; an Extraordinary Visitor of Eton College; Visitor of All Souls' and Merton Colleges, Oxford; President of the Council of King's College, London; Visitor of Dulwich College, of St. Augustine's College, Canterbury, and of other collegiate and scholastic institutions; President of various religious societies; and a principal Trustee of the British Museum.

Dr. Tait has published several Lectures, Addresses, Speeches, and Charges; amongst the last of which may be especially mentioned his 'Charge delivered at his primary Visitation,' 8vo, London, first seven editions, 1858, which occupied five hours in speaking, and treated extensively the most pressing ecclesiastical matters of the day. Two other works remain to be particularised:—'The Word of God and the Ground of Faith. Sermons, &c.,' 2 parts, 8vo, London, 1863—64; and 'Harmony of Revelation and the Sciences, &c.,' 8vo, Edinburgh, 1864.

TAYLOR, ISAAC. [E. C. vol. v. col. 930.] In 1862 Mr. Taylor published a volume, entitled 'The Spirit of Hebrew Poetry,' which had been originally delivered as a course of lectures at Edinburgh. During 1864 he wrote a series of papers in 'Good Words,' with the general title of 'Personal Recollections,' and he was busily occupied in writing an essay on the religious history of England during the previous fifty years, when, in the spring of 1865, he was seized with the illness which, after three months of suffering, proved fatal. He died at his residence, Stanford Rivers, Essex, on the 28th of June, 1865, within a few weeks of the completion of his 78th year. A revised edition of his memoir of his sister, Jane Taylor, with 'The Family Pen,' an essay from the 'Personal Recollections' prefixed, appeared posthumously, under the editorship of his son, the Rev. Isaac Taylor, who added a brief sketch of his father's life; the title of the whole being 'The Family Pen. Memorials, Biographical and Literary, of the Taylor Family of Ongar,' 2 vols. 12mo, London, 1867.—His eldest sister, Mrs. GILBERT (Ann Taylor, born January 30, 1782, noticed in the E. C. memoir of the Taylors of Ongar), died at Nottingham, on the 20th of December, 1866, within a few weeks of having completed her 84th year. Isaac Taylor's eldest son,—

The REV. ISAAC TAYLOR, M.A., vicar of Holy Trinity, Twickenham, born at Stanford Rivers, March 3rd, 1829, is the author

of 'The Liturgy and the Dissenters,' and one or two other theological pamphlets; but he has best maintained the hereditary title of the Family Pen to literary distinction by the volume entitled 'Words and Places; or, Etymological Illustrations of History, Ethnology, and Geography,' 8vo, 1864, of which a "second edition, revised and enlarged," was published in 1865. This is a work of great research as well as erudition, and has done more towards the elucidation of the local names of English places than any book yet published.

TAYLOR, JAMES, one of the inventors of steam navigation, was born in 1758. In 1786, when tutor to the sons of Mr. Patrick Miller, of Dalswinton, Dumfriesshire, he was familiar with the experiments made by that gentleman on boats propelled by hand-worked wheels or paddles. According to a memorial presented to a committee of the House of Commons nearly thirty years afterwards, Mr. Taylor told Mr. Miller that the results of the experiments would not be important unless a better motive power were employed, and advised the trial of a steam engine to move the wheels. Mr. Miller asked Taylor to show how the engine could be connected with the wheels, which he did by means of a few rough sketches. Mr. Miller then desired Mr. Taylor to find an engineer who could construct a small steam engine suitable for the purpose. Mr. Symington was applied to, and the three then worked the idea into practical form, under the circumstances narrated in MILLER, PATRICK, E. C. S. col. 890, and SYMINGTON, WILLIAM, E. C. S. col. 1125. Mr. Taylor drew up an account of the man-boat voyage of 1787, and another of the steamboat voyage of 1788, for insertion in several Scotch newspapers; but in neither account did he mention his own name as an inventor. Another little steamboat, more successful than the first, was launched and tried in 1789; but Mr. Taylor could never again persuade Mr. Miller to continue his researches, or to take out a patent, which had at one time been proposed. This is all that seems to be known of Mr. Taylor's connection with steam-engine discoveries or inventions. Mr. Alexander Nasmyth, the artist, in a letter to Miss Taylor, in 1834, states that he was present at the conversation in 1787; that Taylor suggested the use of a steam engine; and that the suggestion was evidently a novel one to Miller; but the letter contains nothing further concerning the invention of steam navigation. Mr. Bennett Woodcroft, in an analysis of the evidence on this subject, states that Mr. Miller undoubtedly availed himself of the advice and assistance of Mr. Taylor in his several experiments; but he adds, "It is clear from his own statements and those of his friends, that he (Taylor) was neither the inventor of the machinery by which either of those boats was driven, nor of the mode of connecting the engine to the boat and wheels. This, it is admitted, was done by Symington. Neither was Mr. Taylor the first person to suggest the use of the steam engine to propel boats." In other words, his merits consisted in suggesting and assisting, not in discovering or inventing. Mr. Taylor died at Cumnock, Ayrshire, September 28th, 1825. The government gave a pension of 50*l.* per annum to his widow, and afterwards a gift of 50*l.* to each of his four daughters.

* TCHIHATCHEF, PIERRE DE, geologist and physical geographer, was born at Gatchina, near St. Petersburg, in 1812. His connection with the Russian Embassy at Constantinople led to his residence for three years in that city, and to his taking an interest in the scientific exploration of Asia Minor. In order to qualify himself for this task he quitted the diplomatic service in 1844, and went through a course of study at the Mining School of Freiberg. In 1846 he made a tour through the Altai Mountains, under the direction of his government, and wrote a report thereon. This done, he prepared for the more arduous work which he had planned by giving up his official appointment and realising his property. He has since passed most of his time in travelling about Asia Minor, and examining that country in its botanical, zoological, meteorological, geological, and archaeological aspects. The intervals between his various journeys have been mainly passed in Paris. The results of his researches have been given in various articles, but his great literary work is 'Asie Mineure, description physique, statistique et archéologique de cette contrée,' 7 vols. 8vo and 4to, Paris, 1853—1869. He is a member of the Academy of Sciences of France, and of many other learned institutions.

TEMPMINCK, CONRAD JACOB [E. C. vol. v. col. 956], was born at Amsterdam, March 31, 1778. Early in life he obtained a situation in the service of the Dutch East India Company, in which he had many opportunities of studying the objects of natural history, which were brought from time to time from the East Indies. His father, who had a taste for

natural history, became acquainted with Le Vaillant, and the specimens which that traveller brought home from Africa were prepared by the younger Temminck, who thus acquired great skill in the preservation of animals. His mode of preparing fishes is known as "Temminck's method." His intimacy with Le Vaillant had much influence in forming his taste for zoology, but Bernhard Meyer, the ornithologist, was his most influential friend and instructor. His first contribution to literature was a systematic catalogue of the collection of birds and monkeys which he had himself formed. His most important work was a 'Manuel d'Ornithologie,' which first appeared in 1815, but was afterwards enlarged into four volumes, 8vo, 1835—40. Another work of importance is a 'Nouveau Recueil de Planches coloriées d'Oiseaux,' folio, 1820—44, consisting of 600 plates. In 1820 he became director of the Natural History Museum at Leyden, which he soon rendered one of the finest museums in Europe. He always took an interest in the East Indies, and wrote several valuable works respecting them; amongst others, 'Coup d'œil général sur les possessions Néerlandaises dans l'Inde Archipelagique,' 3 vols. 8vo, Leyden, 1847—49. He superintended the 'Verhandelingen over de natuurlijke Geschiedenis des Nederlandsche over zeeische bezittingen,' 3 vols. folio, which was drawn up by the officers of the Leyden Museum. He materially assisted Von Siebold in his work entitled 'Fauna Japonica.' He was a member of most of the principal scientific bodies of Europe, and received many honours. He died January 30, 1858.

* TEMPLE, RIGHT REVEREND FREDERICK, BISHOP OF EXETER, son of the late Major Octavius Temple, Lieutenant-Governor of Sierra Leone, was born on the 30th of November, 1821, at Santa Maura, Ionian Islands; and was educated at Blundell's School, Tiverton, and at Balliol College, Oxford, where he entered in 1839, and of which he became successively scholar, fellow, and tutor. He graduated as B.A. on the 18th of May, 1842, when he was double first-class; proceeded M.A. on the 11th of March, 1847; and took the degrees of B.D. and D.D. in June, 1858. He was ordained deacon by Dr. Bagot, then Bishop of Oxford, on the 7th of June, 1846, and priest, by Bishop Wilberforce, on the 19th of December, 1847; and in 1848 was appointed principal of the Training College, Kneller Hall, near Twickenham. He resigned this office in 1855; and having for some time held an inspectorship of training schools, was elected head master of Rugby School, on the 12th of November, 1857, on the resignation of Dr. Goulburn, thus being the third Balliol scholar selected successively for this honour. He endeavoured to extend the efficacy of the school by widening the area of the operation of its endowments and advantages; a course of conduct for which, as well as for his defence of the proposed disestablishment of the Irish Church, he was attacked with offensive vigour and personality by Mr. C. N. Newdegate, on the 26th of October, 1868, when that gentleman met the supporters of the Conservative candidates for North Warwickshire, in the Town Hall, Rugby. Mr. Newdegate professed to find in his defence of the interests of his constituents, so far as these were concerned in the endowments of the school, a reason for the irritation of Dr. Temple; "and I am apprehensive," he said, "that his determination to take this property from you, and his hitherto want of success in that object, has exasperated him against me as your representative." Dr. Temple made several endeavours to mount the platform in the course of the strictures of Mr. Newdegate; but was opposed in every effort, and finally ejected from the meeting by force. He was recalled upon Mr. Newdegate's suggestion, but the meeting had become demoralised; and as no one could hear a sentence Dr. Temple spoke, the chairman in despair dissolved the assembly, declaring it impossible that it should be continued in consequence of the tumult and disturbances. The good service which Dr. Temple had done the Gladstone administration in the apology for measures which were so obnoxious to Mr. Newdegate, was, however, rewarded by his nomination to the bishopric of Exeter, October 1869; an appointment which gave rise to an excitement and discussion of almost national dimensions, on account of Dr. Temple's connection with the volume entitled 'Essays and Reviews,' 8vo, London, 1860, to which he had contributed the first of the seven articles of which it was composed. An opposition was organised, and at a meeting of the English Church Union, at Devonport, October 11th, 1869, it was unanimously resolved to request the Dean and Chapter of Exeter to refuse to act upon the royal congé d'élire. Dr. Pusey with unusual virulence described the appointment as a horrible scandal; and preferred disestablishment at once, which "must come in ten years at

latest," rather than that the Church should wait to be bared of all external help until after it had been paralysed by such appointments. The Bishop-nominate, Dr. Pusey said, was "recommended as the guardian of the faith which once he destroyed; as a chief pastor of the sheep whom once he betrayed to the wolf." The *congé d'élire* was "Gazetted" on the 26th of October; and about the same time Dr. Temple, in a letter to a public journal, expressed his regret at the anxiety and excitement caused by his nomination, and which he would be glad to be able to allay. Still he felt it inexpedient, as likely to form a precedent for the infringement of the liberty of the ministers of the Church, to make any other declaration than those which the law required. He declined, therefore, to offer any explanatory statement; and confidently trusted that personal intercourse with the clergy of his diocese would dissipate all uncomfortable feeling. On the 28th of October he received from the inhabitants of Rugby an address expressive of their mingled congratulation at his promotion and regret at his departure. His election took place on the 11th of November, when a majority of thirteen against a minority of six voted in his favour, the opposition in the Chapter being led by Dr. Trower, sub-dean of the diocese, and formerly Bishop of Gibraltar, who, with other remonstrants, renewed the opposition on the confirmation of the election, in Bow Church, London, on the 8th of December. The case of the objectors was stated at length by Dr. Deane, Q.C., and, at the close of his arguments, the Vicar-General, Sir Travers Twiss, declared that the statute gave him no discretion, and that he was bound to confirm the choice of the Dean and Chapter; upon which the Bishop-elect made the usual declaration. Still the opposition did not determine; and four bishops sent in written protests against his consecration, which took place on the 21st of December, in Westminster Abbey, whilst four other bishops, in a less formal manner, signified their dissent from the proceedings. The new bishop was enthroned in his own Cathedral of Exeter, on the 29th of December, when he preached a sermon from the text, "The Word was made flesh, and dwelt among us." It was now possible for Dr. Temple to make some concession; and at a meeting of Convocation, February 9th, 1870, it was announced by Archdeacon Freeman—authoritatively, although not on the Bishop's behalf—that the obnoxious essay should not appear in any future edition of the 'Essays and Reviews.' This announcement was met with another on the part of Archdeacon Denison, that he "would surcease from the opposition" he intended proceeding with against Dr. Temple; whilst the latter, on the 11th of February, explained that in withdrawing the Essay he did not mean any retraction of what he had written, or condemnation of the other essayists. He admitted the book might have done harm—Luther's writings had perhaps done harm—but it had done much more good. It was better, he thought, to allow discussion within the Church than to compel it to take an unhealthy form outside.

The academical and other educational experience of Dr. Temple has been in various ways turned to public account; and he is especially known as an important member of the Schools Inquiry Commission, whose 'Report,' folio, London, 1868, based upon nineteen other volumes of 'Evidence,' folio, London, 1868, is all but exhaustive and inestimable. It may be added that in the year after the publication of 'Essays and Reviews,' Dr. Temple published a volume, apparently intended as a manifesto of orthodoxy, entitled 'Sermons preached in Rugby Chapel in 1858—60,' 8vo, London, 1861.

TENERANI, PIETRO, CAVALIERE. [E. C. vol. v. col. 960.] This distinguished Italian sculptor died at Rome on the 15th of December, 1869.

TENNENT, SIR JAMES EMERSON, BART. [E. C. vol. v. col. 962.] Sir James resigned his secretaryship to the Board of Trade in 1867, and in the same year was made a baronet. He died suddenly, from apoplexy, in Pimlico, London, March the 5th, 1869.

* **TENNYSON, ALFRED, D.C.L.** [E. C. vol. v. col. 965.] The life, and it may be almost said the existence, of the Laureate is chiefly known to the outer world by the frequently recurring publication of his several works; one of the most remarkable instances of his breach of the rule of seclusion which ordinarily governs his conduct being his appearance at an Oxford Commemoration, at which the University conferred upon him the degree of D.C.L. The expected volume, the issue of which, as mentioned in the notice to which the present one is supplementary, had been delayed, was at length published with the title of 'Idylls of the King,' 8vo, London, 1858, &c., of which a new edition, with a noble 'Dedication' to

the memory of the late Prince Consort, was published in 1862, the 'Dedication' being one of the few poems the production of which has prevented the laureateship, in Mr. Tennyson's hands, from being a sinecure. The 'Idylls' consisted of four poems, which were severally published, with illustrations by Gustave Doré, as 'Enid,' folio, London, 1863, French translation, folio, Paris, 1869; 'Vivien,' folio, London, 1867, French translation, folio, Paris, 1868; 'Elaine,' 4to, London, 1867, French translation, folio, Paris, 1867; and 'Guinevere,' folio, London, 1867, French translation, folio, Paris, 1868. The 'Idylls of the King' present an image of the hero of ancient national romance, King Arthur, to the exposition of whose character and fate the author returned ten years afterwards in 'The Holy Grail,' and other Poems, 8vo, London, 1869, &c., in which, besides the eponymous poem, occur the legends entitled 'The Coming of Arthur,' 'Pelleas and Ettarre,' and 'The Passing of Arthur,' with a few miscellaneous poems, which include 'The Northern Farmer' and 'The Death of Lucretius,' the last of which had appeared a few months previously in 'Macmillan's Magazine.' The other more recent works of Mr. Tennyson include a short poem addressed to the Princess Alexandra, entitled 'A Welcome,' &c., 8vo, London, 1863, and an edition, illuminated by Owen Jones, 4to, London, 1863; and 'Enoch Arden,' and other Poems, 8vo, London, 1864, a volume which also contained 'Aylmer's Field' and 'Sea Dreams,' a shorter piece, originally published in 'Macmillan's Magazine,' and which, despite the apparent homeliness of the theme—the thoughts and conversations of a city clerk and his wife, in lodgings at the sea-side, on account of their little daughter's health—exhibits a high imaginative quality. It was in this volume that the public first became acquainted with 'The Northern Farmer,' to whom, as has been seen, Mr. Tennyson returned in 'The Holy Grail,' &c., and who presents an extraordinarily faithful picture of a stolid agriculturist pouring forth his ideas in the dialect of North Lincolnshire. An edition of 'Enoch Arden,' illustrated by Arthur Hughes, was published in 1865; a Danish translation, in 12mo, Copenhagen, 1866; and a Latin version, by W. Selwyn, in the following year, entitled 'Enoch Arden. Poema Tennysonianum, Latine redditum,' &c., 4to, London and Cambridge, 1867. Mr. Tennyson's latest volume is one containing twelve brief lyrics, which, about the year 1866, he was requested by Mr. Sullivan to produce as a "little song-cycle, German fashion, for him to exercise his art upon. He had been"—the words are from Mr. Tennyson's preface—"very successful in setting such old songs as 'Orpheus with his lute,' and I drest up for him, partly in the old style, a puppet whose almost only merit is, perhaps, that it can dance to Mr. Sullivan's instrument. I am sorry that my four-year-old puppet should have to dance at all in the dark shadow of these days [December, 1870]; but the music is now completed, and I am bound by my promise." The result of the labours of poet and composer was entitled 'The Window: or, the Songs of the Wrens. Words written for Music by Alfred Tennyson. The Music by Arthur Sullivan,' 4to, London, 1871. A recent poem, a new Idyll of the King, entitled 'The Last Tournament,' which appeared in the 'Contemporary Review' for December, 1871, had the effect of at once sending that periodical through several editions. Mr. Tennyson's works have been extensively circulated in this country and America, and indeed in all English-speaking countries; and translations of many of them have been made into the leading continental languages. 'A Selection from the Works of Alfred Tennyson' forms part of 'Moxon's Miniature Poets,' 8vo, London, 1865; and the 'Poetical Works,' &c., 4 vols. 16mo, Leipzig, occupy vols. 501—504 of the 'Tauchnitz Collection of British Authors,' 1841, &c. Amongst the works illustrative of his poems or his genius, may be mentioned, 'An Index to "In Memoriam,"' 8vo, London, 1862, "in which every separate clause is referred to under the headings of one or more of the principal words contained in it"; 'Analysis of Mr. Tennyson's "In Memoriam,"' 16mo, 1862, by the late Rev. F. W. Robertson, of Brighton, a small work well calculated to assist the general reader to a comprehension of the poem; Mr. A. H. Japp's 'Three Great Teachers of our own Time: being an Attempt to deduce the Spirit and Purpose animating Carlyle, Tennyson, and Ruskin,' 8vo, London, 1865; Mr. E. C. Tainsh's 'Study of the Works of Alfred Tennyson,' &c., 8vo, London, 1868, new edition, 1869 and 1870; 'A Concordance to the Entire Works of Alfred Tennyson. By D. B. Brightwell,' 8vo, London, 1869, and London and Bungay, 1870; and 'Horæ Tennysonianæ: sive Eclogæ e Tennysono Latine redditæ. Cura A. J. Church,' 8vo, London and Cambridge, 1870.

TESTA, PIETRO, called IL LUCCHESINO, a celebrated Italian painter and engraver, was born at Lucca in 1617. He was first a pupil of Paolini at Lucca, and then of P. da Cortona, at Rome, who, however, turned him out of his school for speaking disparagingly of his teaching. After this he studied the works of Domenichino; but his manner is considered to have been influenced by his intimacy with N. Poussin. He was a laborious student, and is said to have made drawings of all the principal antiquities in Rome. His imagination was fertile; he possessed much poetic feeling, his style was varied and vigorous, and he composed with facility; but he was of a gloomy temperament, sarcastic in speech, and unsocial, and he had few friends and fewer patrons. He drowned himself in the Tiber in 1650. His best pictures are 'The Death of Beato Angelo,' in S. Martino a Monte; 'Joseph sold by his Brethren,' in the Gallery of the Capitol; and 'The Massacre of the Innocents,' in the Spada Palace. He painted some works for churches in Lucca, and a cupola in the oratory of the Lippi Palace. Testa is perhaps more widely known as an engraver than a painter. He left many prints etched in a free and masterly manner from his own designs.

TEXIER, CHARLES-FELIX-MARIE, a distinguished French archaeologist, was born at Versailles, August 29th, 1802. Of a family of artists, his attention was in the first instance directed to architecture; he entered the École des Beaux-Arts, and published an essay, 'Sur les Ports des Anciens,' which was crowned in 1831 by the Académie des Inscriptions, and another on the 'Architecture et la Lithologie anciennes.' But gradually his attention was directed to archaeology, and in 1833 he was entrusted by the French government with the conduct of a mission to Asia Minor, to examine the vestiges of antiquity remaining or discoverable there. During the next ten years he made four visits to that region, and whilst there diligently explored, measured, and made drawings of the various ancient monuments. At home he devoted himself with equal zeal to working out for publication the results of his researches. In 1839-49 he published, under the auspices of the government, a 'Description de l'Asie Mineure: Beaux-arts, Monuments-historiques, Plans et Topographies des Cités antiques,' 3 vols. folio; and in 1842-52 a 'Description de l'Arménie, de la Perse, et de la Mésopotamie,' 2 vols., folio. These superb works, richly illustrated with line engravings and chromolithographs from the drawings of the author, are as instructive and valuable to the archaeologist, and to all whose studies lie in the direction indicated by the titles, as they are gratifying to the admirers of handsome books. He has since published 'Édesse et ses Monuments,' 8vo, Paris, 1859; 'Asie Mineure,' 8vo, 1863; and in conjunction with Mr. P. P. Pullan, 'L'Architecture Byzantine; ou Recueil de Monuments des premiers temps du Christianisme en Orient,' English and French editions, folio, London, 1864. M. Texier received the decoration of the legion of honour in 1837, and was elected a member of the Académie des Inscriptions in 1855. He died at Paris, July 1, 1871.

THACKERAY, WILLIAM MAKEPEACE [E. C., vol. v., col. 982]. Whilst Mr. Thackeray was at Oxford as a candidate for the representation of that city in the House of Commons, he despatched his agent to Mr. Dickens, urging the latter to "come down to make a speech, and tell them who he was, for he doubted whether more than two of the electors had ever heard of him, and he thought there might be as many as six or eight who had heard of Mr. Dickens." Just after the failure of his candidature he delivered a public lecture in London, which he introduced with a reference, that was full of good sense, good spirits, and good humour, to his electioneering disappointment.

One of the most salient events of the later life of Mr. Thackeray, besides his ordinary activity in the way of literary production, was his connection with the 'Cornhill Magazine,' the first number of which was brought out under his editorial care in January, 1860, and which he continued to conduct until the 1st of April, 1862. His reign of little more than two years, was characterised by qualities which endeared him to his collaborators. "He was," says Mr. Anthony Trollope, in a short obituary article in the 'Cornhill,' for February, 1864, "the kindest of guides, the gentlest of rulers, and, as a fellow-workman, liberal, unselfish, considerate, beyond compare. It has been said of him that he was jealous as a writer. We of the 'Cornhill' knew nothing of such jealousy. At the end of two years Mr. Thackeray gave up the management of the magazine, finding that there was much in the very nature of the task which embarrassed and annoyed him. He could not bear to tell an ambitious aspirant that his aspirations were in vain; and, worse again, he could not endure to do so when a lady was his sup-

pliant. Their letters to him were thorns that festered in his side, as he has told us himself. In truth it was so. . . . He lacked hardness for the place, and therefore, at the end of two years, he relinquished it." But in quitting office, he did not sever his connection with the Magazine as a contributor. His 'Roundabout Papers,' 8vo, London, 1863, and other editions, were commenced in the first number of the 'Cornhill,' were carried on through 1862, and were completed in the early part of 1863. 'Lovel the Widower,' 8vo, London, 1861, and other editions; and 'The Four Georges,' 8vo, London, 1861, which had previously been delivered as lectures in America and in England, appeared in the 'Cornhill' under his own editorship, and a French translation of the latter 'Les Quatre Georges,' &c., 12mo, Paris, 1869, by M. Le Foyer, with a Preface by M. Prévost-Paradol, formed part of the collection entitled 'Bibliothèque d'Histoire contemporaine.' 'Philip' was commenced in like circumstances, but was completed after its author had vacated the editorship. This work, the most elaborate of all his contributions to the 'Cornhill,' was published with the title of 'The Adventures of Philip on his Way through the World: showing who robbed him, who helped him, and who passed him by,' 3 vols., 8vo, London, 1862. The last words Mr. Thackeray lived to publish, were those of a paper which appeared in the 'Cornhill' for November, 1863, entitled 'Strange to Say, on Club Paper;' in which he ridiculed a silly report as to Lord Clyde, then recently deceased, which had spread itself about the town. When Mr. Thackeray died he was still at work for the 'Cornhill,' for which he left an incomplete novel, upon which he wrought, as it seemed to Mr. Dickens, "in the healthiest vigour of his powers. In respect of earnest feeling, far-seeing purpose, character, incident, and a certain living picturesqueness blending the whole, I believe it to be much the best of all his works. That he fully meant it to be so, that he had become strongly attached to it, and that he bestowed great pains upon it, I trace in almost every page. . . . The condition of the little pages of manuscript where Death stopped his hand, shows that he had carried them about, and often taken them out of his pocket here and there, for patient revision and interlineation." The fragment thus feelingly commended by the author's friend and fellow-novelist was published in the 'Cornhill,' and afterwards in a substantive form, with the title of 'Denis Duval,' 8vo, London, 1867; in which year a volume appeared in America, with an introductory essay by J. T. Fields, entitled 'Early and late Papers hitherto uncollected,' 8vo, Boston and Cambridge (U.S.), 1867. The only remaining work calling for individual mention is 'The Virginians: a Tale of the Last Century,' 2 vols., 8vo, London, 1858-59, which, like many other of the author's productions, formed a part of the Tauchnitz Collection of British Authors, and has been frequently reprinted in this country and America. The smaller productions of Mr. Thackeray have been combined in various groupings both in English and in foreign languages; many of his works have been translated into French, chiefly as forming part of a series entitled 'Bibliothèque des meilleurs Romans étrangers;' and most of them have been translated into German. He had suffered from attacks of illness—cold shiverings "which quite took," as he said, "the power of work out of him"—for more than a week before he died; but the fatal event came suddenly and unexpectedly. On the night of Christmas Eve, December 24th, 1863, he was found lying with his head back on his pillow and with his arms thrown up, according to his custom when very weary, so peaceful, composed, and undisturbed, that he appeared to be asleep. But in fact he was dead; and on the 30th of December, he was buried in a simple grave at Kensal Green, where, wrote Mr. Dickens, "the heads of a great concourse of his fellow-workers in the Arts, were bowed around his tomb." A bust by Marochetti has since been erected to his memory in Poet's Corner, Westminster, and near it his friend Dickens now lies.

Of the works published in illustration of his life and career may be mentioned Mr. James Hannay's 'Brief Memoir,' &c., 8vo, Edinburgh, 1864, reprinted from the 'Edinburgh Courant;' Mr. William B. Reed's 'Haud Immemor: a few Personal Recollections of Mr. Thackeray in Philadelphia.' [With Extracts from his Correspondence], 8vo, Philadelphia, 1864, privately printed; Mr. Theodore Taylor's 'Thackeray, the Humourist, and the Man of Letters. The Study of his Life, including a Selection from his Characteristic Speeches, now for the first time gathered together,' 8vo, London, 1864; and 'Studies on Thackeray,' 16mo, London, 1869.

THEED, WILLIAM, R.A., was born in 1764; became a student of the Royal Academy in 1786, and practised for a while

as an historical and portrait painter. He then went to Rome and by the advice of Flaxman, learned to model and use the chisel, and studied the ancient sculpture. On his return to England, Flaxman introduced him to Wedgwood, by whom he was employed to make designs for his pottery; and some years later he was engaged as designer and modeller by Messrs. Rundell and Bridge, the silversmiths, in whose service he remained for fourteen years. For these firms he made designs of great beauty and refinement; his independent works include several pieces of great merit, the best known being the bronze group of 'Thetis with the arms of Achilles,' in the royal collection, of which he executed a duplicate for Mr. Hope. In his later years he was much occupied on monumental sculpture. He was elected A.R.A. in 1811 and R.A. in 1813, and died in 1817. His son,

* WILLIAM THEED, born about the beginning of the century, the pupil of his father and of the Royal Academy, has also attained distinction as a sculptor. His early works were classical or scriptural as 'Prometheus,' 'Psyche,' the groups of 'Rebekah at the Well,' 'The Prodigal's Return,' &c., and within the last few years he has executed a series of reliefs for the Houses of Parliament, a colossal statue of the Bard for the Mansion House, Burke for St. Stephen's Hall, and other works of a poetical and historical order, but he has been more employed on portrait busts and statues, in which he has achieved a reputation for fidelity of likeness, animation of character, and elevation of style: among well-known examples are his Sir James Mackintosh in Westminster Abbey, Hallam in St. Paul's, Sir Isaac Newton, at Grantham, the Prince Consort at Balmoral, and the group of the Queen and Prince Consort, in Saxon costume of the nineteenth century, in the principal corridor of Windsor Castle.

THIERS, ADOLPHE. [E. C. vol. v. col. 1029.] For the first twelve years of the rule of Louis Napoleon, whether as President or Emperor, M. Thiers devoted himself exclusively to literature, painting, and the fine arts; and did not re-enter the Chamber until June, 1863, when he was elected for Paris, with MM. Émile Ollivier, Jules Favre, and other opposition candidates, the particular constituency of M. Thiers being the second circumscription of the Seine. He successively attacked the administration of the finances, the municipal administration of M. Haussmann, and the foreign policy of the Emperor. He denounced the conduct of France with regard to Rome and Italy, with regard to the Mexican expedition, and with regard to the war between Prussia and Austria in 1866. In the long and memorable debate of March, 1867, when M. Rouher, apologising for the Government, maintained that it had committed no faults, M. Thiers concentrated his opposition in the taunt, "Vous n'avez plus de fautes à commettre." All the speeches he afterwards delivered upbraided the government with the loss of its foreign prestige, and tended to precipitate France into the disastrous war of 1870, repeatedly reproaching the Emperor with allowing the union of North Germany to be accomplished without intervening to prevent it; and yet, when war became inevitable, M. Thiers bitterly opposed it as inopportune, and demonstrated that the government was unprepared, and was rushing headlong to certain defeat. The war, in his opinion, came too soon; in the opinion of others, his warning came too late.

A few months before the war broke out, M. Thiers had explained to a friend the plan he had traced out for passing his declining days. "See here," he said, laying his hand on a pile of papers, "these are the materials I have gathered for making my political testament. Here is deposited my experience of men and things. Out of these notes I mean to extract a philosophy of history as I understand it—that is, such a work as I might leave to my son, if I had one, to guide him in his conduct through life." The performance of such a work is presumably held in abeyance, and it will not be strange if it never advances beyond the stages of promise and intention.

The early disasters of the war summoned M. Thiers to prominence and activity. On the 17th of August, 1870, he expressed a hope that Paris would, in case of necessity, oppose an invincible resistance to the enemy. For that purpose he insisted that it was necessary to make a waste round Paris, with the double object of depriving the enemy of sustenance and of causing abundance in the capital by allowing the people of the surrounding country to take refuge in it with all their produce. On the 27th of August he was appointed a member of the Paris Defence Committee; and although he declined to become a member of the Government of National Defence, formed after the downfall of the Empire, he assumed the position of a negotiator abroad for the purpose of requesting the intervention of the neutral

nations to drive Germany back beyond the frontiers of France, if the Germans should not immediately retire upon their remonstrance. Accordingly, he arrived in London on the 13th of September, and, after conferences with Mr. Gladstone and Earl Granville, left on the 18th to prosecute his mission at the courts of St. Petersburg, Vienna, and Florence, the last of which cities he left, on his return to Tours, on the 18th of October. Ten days afterwards, in accordance with the proposal of the four neutral powers, he proceeded, as envoy extraordinary of the French Republic, to Versailles, then the Prussian head-quarters; and, having received from the Paris government the completion of the powers with which he had been entrusted by the Delegation at Tours, opened negotiations with Count Bismarck on the 1st of November for a twenty-five days' armistice, which should stay the effusion of blood, and should allow France to constitute, through elections freely held, a regular government, with which it would be possible for Prussia to treat in a valid form. The negotiations were broken off on the 6th of November on the question of the revictualling of the besieged fortresses, and specially of Paris, during the armistice, a concession which was refused by Count Bismarck in deference to the representations of the Prussian military leaders; and M. Thiers returned to Tours to place himself again at the disposal of the Delegate Government, which on the 9th of December removed from Tours to Bordeaux, the former of which towns fell on the 21st of the same month into the hands of the Prussians.

The surrender of Paris on the 28th of January, 1871, was followed on the evening of the same day by an armistice which was arranged in order that elections might be held throughout France for a National Assembly, which was to meet at Bordeaux, for the purpose of concluding peace with the German Empire. To this Assembly M. Thiers—who was only twentieth on the list of members elected by the constituencies of the capital—was returned by one-third of the nation; and this unrivalled popularity, which itself was a sign of the universal appreciation of his patriotic endeavours, naturally pointed him out to the Assembly as the future head of the Provisional Government, and one of the first acts of the Chamber, which met for a preliminary sitting on the 12th of February, was to confer that dignity upon him, February 17th. Two days afterwards he delivered a speech in the National Assembly, in which he stated that, although appalled at the painful task imposed upon him by the country, he accepted it with obedience, devotion, and love, and with hope in the youth, resources, and energy of France. Besides the prerogatives of the Chief of the State, he enjoyed the privileges of a deputy, and was allowed to take part in the deliberations of the Assembly whenever he pleased—a circumstance which, however it may have subsequently been a hindrance to public business, he turned to good and decisive account, when, during the debates on the terms of peace, he had to counteract and control the passionate appeals of such deputies as M. Keller and other advocates of *guerre à outrance*, who protested against the abandonment of any portion of French territory.

On the 28th of February, M. Thiers introduced to the Assembly the treaty of peace, which he had assisted to conclude on the 26th at Versailles, subject to the ratification of the National Assembly, which was sorrowfully voted on the succeeding day by a majority of 546 over 107. By this treaty France had to submit to the loss of a fifth part of Lorraine, including Metz and Thionville, and Alsace, less Belfort, and to the payment of a war indemnity of five milliards of francs, or 200,000,000*l.* This enormous sum was to be paid by successive instalments, extending over a period of three years, or up to the month of May, 1874. A certain number of the departments of France were to be occupied by German troops as a security for the fulfilment of the pecuniary engagements of the conquered country, and were to be redeemed only in the same proportion as the obligations were discharged. The object nearest to the heart of M. Thiers has been to precipitate the emancipation of French territory; and his government has been enabled already to pay three half-milliards of francs, or 60,000,000*l.*, in consequence of which the immediate neighbourhood of the capital and several western and northern departments have been already set free. By an "evacuation treaty" concluded at Berlin on the 12th of October, 1871, the German government consented to the acceptance of negotiable bills for a fourth half-milliard in the place of cash, in order to accelerate the restoration to France of six other departments, the evacuation of which by the Germans had otherwise been fixed for the beginning of May, 1872.

Early in March, 1871, the National Assembly removed to Versailles; on the 18th of that month Paris fell into the hands of the Communists, who, about the 15th of May, destroyed the house of M. Thiers; and it was only on the 28th of May that the capital was completely recovered to the government by the army of MacMahon. The supplementary elections of July gave additional power to the policy of M. Thiers in the Assembly; which, by a law passed by a very large majority on the 31st of August, prolonged his tenure of office "until it shall have concluded its labours," increased his powers, and changed his designation from "Chief of the Executive Power" to that of "President of the French Republic." At the opening of the sitting of the National Assembly on the 1st of September, M. Grévy, its president, read a first "Message" of thanks and encouragement to the Assembly, in which the new President of the Republic pledged himself to the utmost devotion for the benefit of his country. In a longer "Message" from M. Thiers, prepared on the eve of prorogation, and read before the Assembly on the 13th of September, by M. Jules Simon, the President of the Republic recited the long and important labours performed by the Assembly during the period of nearly eight months that it had been in session. "To complete peace, to gather up again the reins of government, which had fallen off or become loosened, to transport the entire administration from Bordeaux to Versailles, to deal with the most terrible insurrection of any time, to restore credit, to pay our ransom to the enemy, to watch continually all incidents connected with the foreign occupation in order to guard against consequences sometimes very alarming, to undertake a reconstitution of our army, to re-establish our commercial relations by negotiations with all our neighbours, to effect the liberation of our soil (which is every day progressing), and to endeavour to restore order to men's ideas, after restoring it in respect of acts—such has been the work which during the past eight months we have performed together." The Message then proceeds with a heavy programme for presidential and ministerial labour during the recess, and to foreshadow the future duties of the Assembly. "My colleagues and myself," the President resumes, "do not seek for rest: what we ask for is time to work, to prepare the subjects for your deliberations next year; to draw up a normal Budget, if possible; to complete the practical reorganisation of the army as relates to the reconstitution of our regiments, to restore to them the unity which they have lost, to equip them, to distribute them, to arm them; to observe the course of the administration, to regulate it according to your views and ours; to terminate the negotiations which should place our commercial system upon a fixed basis; finally, to continue that infinite and incessant task—the reorganisation of a country cast into disorder by two terrible wars, domestic and foreign wars unexampled in their character, but the effects of which may be modified by our common devotion." M. Thiers recommended the deputies, upon their separation and departure for their own homes, to gather up public opinion in their several localities, so that they might bring back to a resumption of their labours sufficient light and knowledge upon the great question—which had been held in abeyance from February to September, in virtue of the "Pact of Bordeaux"—as to "whether it is after the tradition of the past—the glorious tradition of a thousand years—that our country is to be constituted, or whether, abandoning itself to the torrent which to-day precipitates human societies towards an unknown future, it is to put on a new shape in order peacefully to fulfil its noble destinies. This country, the object of passionate attention by the universe—shall it be a Republic or a Monarchy?"

On the 17th of September, four days after the delivery of the Message, the Assembly was prorogued to the 4th of December, during which interval a committee of twenty-five of its members, elected for that purpose, was to watch over the course of the government in accordance with the provisions of the Constitution of 1848. On the 26th of September, Senor Olozaga, the Spanish ambassador, presented to M. Thiers a royal warrant by which the King of Spain conferred upon the President of the French Republic the Order of the Golden Fleece.

After a recess, during which M. Thiers endeavoured to prepare the way to a settlement of those questions to which his Message had particularly referred, and during which he had manifested especial interest in military affairs, had expressed his willingness to give an asylum to the Pope, and had received, November 23rd, the Chinese ambassadors who had waited a year for the ceremony, the Assembly re-opened at Versailles on the

BIOG. DIV.—SUP.

4th of December. M. Thiers, who seemed to wish to gather up the expressions of provincial and parliamentary sentiment before expressing his own, did not deliver his Message until the 7th of December, when it was received with demonstrations of applause now from one side of the Chamber, now from the other, and again from neither. He reviewed at great length the condition and prospects of the country, but with less courage and decision than had led him, either in his valedictory Message of September 16th or during the preceding session of the Assembly, to express, upon more than a dozen important subjects that would have to be debated, opinions in opposition sometimes to the feeling of one section of the Chamber, sometimes of the other, and frequently of both. Scarcely a step has been definitively taken; and the Assembly, which, with the consent of the Government, declared itself constituent, still maintains (March, 1872) a provisional republic, although one or both of the monarchical parties have from time to time displayed impatience. One of the most significant events of recent occurrence has been the taking of their seats by the Orleans princes, the Duc d'Aumale and the Prince de Joinville, who for several months had failed of their duty as representatives of constituencies, owing to the promise which they had given to M. Thiers, when chief of the executive power, not to take their seats. Being at length relieved from their engagement, they entered, December 19th, on the active duties of members of the Assembly, where, although they profess themselves ready to accept a republic, they cannot help at the same time representing royalty.

At the official reception given by M. Thiers on the 1st of January, 1872, the Papal Nuncio did not, as formerly, speak in the name of the Diplomatic Body. Every ambassador or head of legation addressed the President separately, who, in his turn, replied separately to each. On the same day M. Thiers received numerous congratulatory telegrams, one of which was commissioned with the good wishes of the Emperor of Germany for the success of the patriotic efforts of the President of the French Republic.

Of M. Thiers' literary labours, the completion of his great work should be noticed, '*Histoire du Consulat et de l'Empire, faisant suite à l'Histoire de la Révolution Française*,' 20 vols. 8vo, Paris, 1845—62, vol. 21, '*Table Analytique*,' 8vo, Paris, 1869, English translation, by D. F. Campbell, 20 vols. 8vo, London, 1845—62, Modern Greek translation, by X. B. *Βουγιωρakis*, 8vo, Athens, 1860, &c., illustrated edition, 4to, Paris, 1865; and he has also published many of his speeches:—'*Discours prononcés dans la Session 1863—1864, sur la Dette flottante, les Libertés nécessaires à la France, les Candidatures officielles, l'Expédition du Mexique, la Marine marchande, et les Finances de la France*,' 8vo, Paris, 1864; '*Discours . . . sur la Politique intérieure. Corps Législatif, Discussion de l'Adresse, Séance du 11 Janvier, 1864*,' 12mo, Paris, 1864; '*Discours . . . sur l'Expédition du Mexique, prononcés dans la Discussion de l'Adresse au Corps Législatif, Séances des 26 et 27 Janvier, 1864*,' 12mo, Paris, 1864; '*Discours sur les Libertés Politiques, prononcé . . . au Corps Législatif dans la Séance du 28 Mars, 1865*,' 8vo, Paris, 1865; '*Discours . . . sur la Question Romaine, prononcés les 13 et 15 Avril, 1865, au Corps Législatif*,' 12mo, Paris, 1865; '*Discours . . . sur les Libertés Politiques, la Question Romaine, et les Finances*,' 3 parts, 8vo, Paris, 1865; '*Discours . . . sur la Politique extérieure, prononcé au Corps Législatif dans la Séance du 3 Mai, 1866*,' 8vo, Paris, 1866; '*Discours . . . sur les Principes de 1789*,' &c., 8vo, Paris, 1866; '*Discours . . . sur la Politique extérieure de la France, spécialement en ce qui concerne l'Allemagne et l'Italie, prononcés au Corps Législatif dans les Séances des 14 et 18 Mars, 1867*,' 8vo, Paris, 1867; '*Discours . . . sur l'Expédition du Mexique, prononcés au Corps Législatif dans les Séances des 9 et 10 Juillet, 1867*,' 8vo, Paris, 1867; Speeches, collected in a popular edition, entitled '*Discours prononcés au Corps Législatif. Mexique. Question Romaine. Les Libertés nécessaires. Agriculture. Affaires d'Allemagne*,' 12mo, Tours, 1867; and '*Discours prononcés au Corps Législatif sur la Question Romaine . . . et sur la Politique extérieure*,' &c., 12mo, Tours and Paris, 1868.

THIERSCH, FRIEDRICH WILHELM. [E. C. vol. v. col. 1031.] Professor Thiersch was elected president of the Munich Akademie der Wissenschaften in 1848. He died on the 25th of February, 1860. (*Friedrich Thiersch's Leben*, by his son, Heinrich Thiersch, 2 vols. 8vo, Leipzig, 1866.)

*THOMAS, MAJOR-GENERAL GEORGE HENRY, of the United States Army, was born in Southampton County, Virginia, July 21st, 1816. He entered the West Point Military Academy

in 1836, received four years' training, left the academy in 1840, and entered on his soldier's career as sub-lieutenant of the third regiment of artillery. He became first lieutenant in the following year, and was for some time engaged in operations against the Florida Indians. During the war with Mexico, 1846 and 1847, he greatly distinguished himself, and was promoted to the rank of captain, and afterwards to that of major. In 1848 he served again in Florida; then for a few years was professor of artillery studies at West Point; and, in 1855, fought against the Indians in Texas, as major of the second cavalry. When the civil war broke out in 1861, the superior officers of the regiment (one of whom was Robert Lee) went over to the Confederates; whereupon Thomas, who remained with the Federals, at once became colonel of the regiment. In November he was appointed brigadier-general of volunteers. Early in the following year he defeated Zollikofer at Somerset, in Kentucky, and by an effective flank movement drove him beyond the Cumberland. Promoted to the rank of brigadier-general in the regular army, he took the command of the first corps of the army of Ohio in October, 1862, under Rosecranz. He led the centre at Murfreesboro, fought stubbornly, chased the enemy from Tullehorna, won a cavalry action at Morris Ferry, and compelled the enemy to evacuate the region near the river Elk. In September, 1863, when Rosecranz, after taking up a strong position at Chattanooga, was defeated by Bragg at Chickamauga, Thomas, by his firmness, partially retrieved the loss of the day, and was rewarded with the command of that army. In November Sherman and Thomas defeated Bragg at Chattanooga. Acting under General Grant, Thomas was engaged in much active service in 1864. Amongst other engagements, he repelled an attack made by Hood at Franklin, and shortly afterwards defeated him near Nashville, thereby clearing Tennessee from the enemy. With the rank of major-general, Thomas earned the credit of being a cool and steady, rather than brilliant officer. Since the war he has been engaged in the command of some of the military districts into which the United States were reorganised.

THOMAS, JOHN, sculptor and architect, was born at Chalford, Gloucestershire, in 1813. Whilst apprenticed to a stone-cutter in a neighbouring village, he taught himself to paint and engrave, and thus earned a few extra shillings by engraving door-plates and painting sign-boards in his over hours. When out of his time he was for awhile with a brother, an architect in Birmingham, and later in Leamington. Under his direction, Mr. Thomas carved and erected an elaborate Gothic monument at Huntingdon, and some other works of a like kind. These procured for him the commission to execute the stone carvings of the Grammar School, Birmingham, of which Mr. (afterwards Sir Charles) Barry was the architect, and thus laid the foundation of his future prosperity. For so well satisfied was Barry with his work, that when he had to erect the New Houses of Parliament, he gave Mr. Thomas the commission to superintend the whole of the stone carvings of that vast edifice. On this immense work the best years of his life were spent. All the statues, as well as carvings of the exterior, the decorative stone carvings of the interior, and some of the bronze statues of the barons, were designed by him, and executed under his superintendence. His labours on the Houses of Parliament brought him into general notice, and he received commissions for architectural and decorative sculpture far beyond any other sculptor of his day, and which it required a large establishment to supply. Among other works he executed some on an important scale at Buckingham Palace and Windsor Castle; at the Euston Station of the North-Western Railway; the colossal lions for the Britannia Tubular Bridge; the carvings for the National Bank, Glasgow, and for a large number of other companies and commercial establishments. He also executed the interior as well as external carvings of many private mansions, among them being the costly internal decorations for the late Mr. Holdsworth, of Glasgow. But whilst thus extensively occupied on decorative sculpture, Mr. Thomas devoted a good deal of time to works of a more ambitious order. Of this class, he exhibited at the Royal Academy statues or groups in marble of Musidora, a Nymph (for her Majesty), 'Boadicea addressing the Britons,' 'Lady Godiva on Horseback,' and 'Una and the Lion.' He also executed many portrait statues, and busts of the Prince Consort, Maclise, Frith, &c. To these must be added several memorial statues, including those of Mr. Sturge, at Birmingham, and Sir Hugh Middleton, erected at Islington shortly after the sculptor's death. His most pretentious effort in this line, however, was the colossal memorial of Shakespeare, of which the model formed a conspicuous object in the International Exhibition of 1862.

The same building also contained his principal work in ornamental art, the well-known majolica fountain under the eastern dome, constructed by Messrs. Minton from Mr. Thomas's designs, and since erected in the garden of the Horticultural Society. As an architect, Mr. Thomas designed Somerleyton hall and village, Norfolk, for Sir Morton Peto; Preston Hall, Maidstone, Kent, for Mr. Betts; the Earl of Harrington's town house at Kensington, and some others. Mr. Thomas was the most distinguished architectural sculptor of his day; a man of various accomplishments, of considerable inventive and executive skill, and of indefatigable industry; but honourable as his works were, he was more of a manufacturer than an artist in the higher sense of the term. He died April 9th, 1862.

THOMPSON, JOHN, an eminent wood engraver, born in 1785, was a pupil of Mr. Branston. He engraved the vignettes for Whittingham's Cabinet Library; many of the woodcuts in Mr. Charles Knight's and Mr. Van Voorst's illustrated works, and other of the high-class publications of the time; and much of the best work issued by French publishers before French wood engravers attained their present skill. A large number of William Harvey's best drawings, and the whole of Mulready's illustrations to the 'Vicar of Wakefield,' were cut by him; as were also Mulready's celebrated postage envelope, and Maclise's figure of Britannia for the Bank of England notes. Thompson was perhaps the best wood engraver, especially of figure pieces, of recent times. His execution was neat, firm, spirited and thoroughly artistic. He belonged to the time and school of English artists who engraved their blocks without the aid of journey-work, and was one of the ablest and most conscientious of the school. In his later years he conducted the class of female students in wood engraving at the Central School of Design, and he presented to the South Kensington Museum an excellent collection of examples illustrating the history of wood engraving, including proofs of the finest of his own cuts. He died at Kensington on the 20th of February, 1866.

THOMPSON, MAJOR-GENERAL THOMAS PERRONET, F.R.S. [E. C. vol. vi. col. 9.] General Thompson retained his seat as member for Bradford till 1859, when failing health led to his retirement. He died at his residence, Blackheath, near London, on the 7th of September, 1869, at the ripe age of 86.

THOMSON, MRS. A. T. [E. C. vol. vi. col. 12.] Katherine, the wife of Dr. Anthony Todd Thomson, was the daughter of Thomas Byerly, Esq., of Etruria. Besides the works enumerated in the article cited, she wrote a 'Life of Wolsey' for the series of lives published by the Society for the Diffusion of Useful Knowledge; a 'Life of Raleigh'; 'Memoirs of Villiers, Duke of Buckingham'; and a novel, 'Constance.' Her latest works were light, anecdotal volumes, entitled 'Wits and Beaux of Society,' 'Queens of Society,' and 'Literature of Society,' written in conjunction with her son, J. C. Thomson, but published as "by Grace and Philip Wharton." Mrs. Thomson died at Dover on the 19th of December, 1862. Her son, J. C. Thomson, was drowned whilst bathing at Tenby a few months before.

* THOMSON, RIGHT HONOURABLE AND MOST REVEREND WILLIAM, Archbishop of York, was born on the 11th of February, 1819, at Whitehaven, where his father was engaged in the local commerce of the place; and was educated at Shrewsbury Grammar School, and at Queen's College, Oxford, of which he was successively scholar, fellow, tutor, dean, bursar, and provost, and with which he still continues to be connected as visitor. He took a third-class degree as B.A. on the 25th of June, 1840; proceeded M.A. on the 26th of January, 1844; and took the degrees of B.D. and D.D. in 1856. He was ordained deacon in 1842, and priest in 1843; and, after four years' experience of parochial work at Guildford and Cuddesden, returned to Oxford, where he acted as a tutor of his college, and was chosen, in 1848, select preacher to the University. Soon afterwards he published a work which, considering its subject, has attained a wonderful popularity, and which has been adopted as a text-book in several universities in this country and America, entitled 'An Outline of the necessary Laws of Thought: a Treatise on pure and applied Logic,' 8vo, London, 1849, seventh thousand, 8vo, 1864; and being Bampton lecturer in 1853, delivered in that capacity a series of discourses which were collectively issued as 'The Atoning Work of Christ, viewed in Relation to some current Theories. In eight Sermons preached before the University of Oxford in the Year MDCCCLIII.' &c., 8vo, Oxford and London, 1853, &c., of which he gave the sum and substance in a simpler, clearer form, and stripped of the critical apparatus of learned authorities, in an essay on 'The

Death of Christ,' which he contributed to a volume entitled 'Aids to Faith: a series of Theological Essays,' &c., 8vo, London, 1861, third edition 1862, written by several writers, and produced under the editorship of Dr. Thomson, with a view of counteracting the effect of the 'Essays and Reviews,' then recently published. He was appointed to the rectory of All Souls, Marylebone (Langham Place), in 1855; and in the same year contributed to the first issue of the 'Oxford Essays,' a treatise on 'Crime and its Excuses,' in which he especially deals with the question of unsoundness of mind in criminal cases. In November, 1855, he was elected Provost of Queen's College, Oxford, and carried into his schemes for the discipline and efficiency of this society the same active and reforming spirit for which he had been remarkable during his career as a tutor and a member of convocation. In 1856, he was a second time appointed select preacher before the university; was elected preacher at Lincoln's Inn, on the 16th of April, 1858, the literary result of which office was a volume entitled 'Sermons preached in Lincoln's Inn Chapel,' 8vo, London, 1861; and became chaplain in ordinary to the Queen in 1860. In November, 1861, he was promoted to the Bishopric of Gloucester and Bristol, from which he was translated in December, 1862, to the Archbishopric of York, where, whether as the chief pastor of a diocese or as the metropolitan of a province, he has exhibited a philanthropic and multiform activity, devoting himself especially to church extension, and to the furtherance of education. Dr. Thomson is a member of several learned societies, and holds several offices of honour and usefulness, being one of the Lords of the Privy Council; an elector of St. Augustine's College, Canterbury; a governor of the Charterhouse, and of King's College, London, &c. Besides the works which have been already particularised, he is the author of various pamphlets, articles, addresses, charges, and occasional sermons, delivered for ecclesiastical, missionary, or generally benevolent purposes; amongst which may be mentioned the articles 'Jesus Christ,' and 'Gospels,' which, with other smaller ones, he contributed to Dr. Smith's 'Dictionary of the Bible;' and 'The Limits of Philosophical Enquiry.' Address delivered to the Members of the Edinburgh Philosophical Institution, November 6, 1868, 8vo, Edinburgh, 1868. Archbishop Thomson has also produced a volume entitled 'Life in the Light of God's Word,' 8vo, London and Edinburgh, 1868.

* THORNYCROFT, MARY, sculptor, was born at Thornham, Norfolk, in May, 1814. She learned to model of her father, the late Mr. John Francis, a sculptor of reputation, and early contributed to the exhibitions of the Royal Academy statues of Penelope, Ulysses, a Flower Girl, &c. In 1840 she married Mr. Thomas Thornycroft, and in 1842 went with him to Italy. They stayed two years at Rome, where she benefited by the valuable advice of Mr. Gibson. At Rome she made several models, and among them one of a 'Sleeping Child,' which Mr. Gibson so much admired that, on being requested by the Queen to recommend a sculptor to execute statues of the Royal children, he named Mrs. Thornycroft. She accordingly received a commission for marble statues of the Princess Royal, the Prince of Wales, Princess Alice, and Prince Alfred, as the 'Four Seasons;' and afterwards others of the younger princes and princesses, as Peace, Plenty, &c. She has also executed busts of the Queen, the Prince Consort, the Prince and Princess of Wales, the Princess Louise, and other members of the Royal Family, and many of private personages. Besides these, she has exhibited several statues in bronze and marble, including a 'Girl Skipping,' 1867; a 'Young Cricketer,' 1869, &c.

* THORNYCROFT, THOMAS, born about 1813, was a pupil of Mr. J. Francis, but completed his studies in Rome. His early works were chiefly classical and academic in character. One of his first efforts in a more naturalistic manner was 'Alfred the Great and his Mother,' 1850; a later statue, which attracted some attention, was his 'Knitting Girl,' 1855. He afterwards executed a bronze statue of the Earl of Hereford, and marble statues of Charles I. and James I., for the House of Lords. For the Queen he executed a marble bust of the Prince Consort; and he designed several memorials of the prince, among others colossal bronze equestrian statues for Halifax, Wolverhampton, and Liverpool. The Liverpool statue was placed in front of St. George's Hall, and he has since completed a companion statue of the Queen. In 1870 a marble statue by him of the Marquis of Westminster was erected at Grosvenor Park, Cheshire, and he has executed a very large number of portrait and monumental statues and busts.

THORPE, BENJAMIN, a philologist and archaeologist, was

born about the year 1782, and through a long life acquired a reputation as an Anglo-Saxon scholar; and for his zeal in the cause of social progress and enlightenment. He was member of the Royal Academy of Sciences at Munich, and of the Society of Netherlandish Literature at Leyden. He lived to the advanced age of eighty-eight years; and expired, apparently without suffering, at his house at Chiswick, on the 19th of July, 1870.

The works with which he was connected, for the most part editorially or as a translator, include 'Cædmon's Metrical Paraphrase of Parts of the Holy Scriptures in Anglo-Saxon. With an English Translation, Notes, and a Verbal Index,' &c., 8vo, London, 1832, being one of the publications of the Society of Antiquaries; 'Analecta Anglo-Saxonica. A Selection in Prose and Verse from Anglo-Saxon Authors. With a Glossary,' 8vo, London, 1834, new edition, 12mo, London, 1846; 'Exeter Book. Codex Exoniensis. A Collection of Anglo-Saxon Poetry. With English Translation, Notes, &c.,' 8vo, London, 1842; 'Translations from Johann Martin Lappenberg's 'Geschichte von England,' &c., entitled 'A History of England under the Anglo-Saxon Kings, &c. With Additions and Corrections by the Author and the Translator,' 2 vols., 8vo, London, 1845, and 'A History of England under the Norman Kings. To which is prefixed an Epitome of the Early History of Normandy, &c. With considerable Additions and Corrections by the Translator,' 8vo, Oxford and London, 1857; 'Yule Tide Stories. A Collection of Scandinavian and North German Popular Tales and Traditions, from the Swedish, Danish, and German,' 8vo, London, forming part of 'Bohn's Antiquarian Library,' 1847, &c.; 'Tha halgan Godspel on Engliše. The Anglo-Saxon Version of the Holy Gospels. Edited, &c., from the original Manuscripts. Reprinted by L. F. Klipstain,' 12mo, New York, 1846, new edition, 8vo, New York, 1851; 'The Life of Alfred the Great. Translated from the German of Dr. R. Pauli [by A. P.]. To which is appended Alfred's Anglo-Saxon Version of Orosius. With a literal English Translation, and an Anglo-Saxon Alphabet and Glossary,' 8vo, London, 1853, forming part of 'Bohn's Antiquarian Library'; 'The Anglo-Saxon Poems of Beowulf, the Scöþ or Gleeman's Tale, and the Fight at Finneburg. With a literal Translation, Notes, Glossary,' &c., 8vo, Oxford, 1855; 'The Anglo-Saxon Chronicle, according to the several original Authorities,' 2 vols., (I.), 'Original Texts,' (II.), 'Translation,' 8vo, London, 1861, published by the authority of the Lords of the Treasury, under the direction of the Master of the Rolls, and forming part of the 'Chronicles and Memorials of Great Britain,' &c.; an edition of R. C. Raak's 'Grammar of the Anglo-Saxon Tongue, from the Danish,' &c., 8vo, London, 1865; and 'Diplomatariū Anglicū Ævi Saxonici. A Collection of English Charters, from the Reign of King Æthelbeht of Kent, A.D. DCV. to that of William the Conqueror. Containing (I.), Miscellaneous Charters; (II.), Wills; (III.), Guilds; and (IV.), Manumissions and Acquittances. With a Translation of the Anglo-Saxon,' 8vo, London, 1865.

THORPE, JOHN, an English architect who flourished in the reign of Elizabeth and the early part of that of James I. Of his personal history nothing whatever is known. He is referred to by Peacham in his 'Gentleman's Exercise,' and his works are ascertained by a volume, in atlas folio, of his drawings, comprising the ground-plans, with a few elevations, of the principal buildings erected by him. Attention was first called to this volume, and the name of Thorpe rescued from the oblivion into which it had fallen, by Horace Walpole, in the Supplement to the first volume of his 'Anecdotes of Painting in England' (1762). Thorpe's volume was then in the possession of the Earl of Warwick; it was afterwards lost sight of for a while, but reappeared at the sale of the library of the Hon. C. Greville, 1810, when it was purchased by Mr. (afterwards Sir John) Soane, R.A., for 28*l.* 17*s.* 6*d.*, and now forms one of the treasures of the Soane Museum.

From it we learn that Thorpe was the chief architect, if, indeed, he was not the inventor, of what is known as the Elizabethan style of domestic architecture. As Walpole pointed out, he "designed or improved most of the principal and palatial edifices erected in the reigns of Elizabeth and [the early part of] James I." His dated buildings range from Kirby, Northamptonshire, 1570, to Holland House, Kensington, 1607. One of the most characteristic of his buildings was Wollaton House, Nottinghamshire, of which an engraving is given under ELIZABETHAN ARCHITECTURE, E. C. vol. iii. col. 838. Among the other houses erected by him were Burleigh, near Stamford, for Lord Treasurer Cecil; Burleigh-on-the-Hill; Holdenby, for Sir Christopher Hatton; Audley End, Essex; Giddy Hall, Essex;

Amphill Old House, Bedfordshire; Amphill (afterwards called Houghton); the Strand front of Somerset House; and Longford Castle, Ireland. All his buildings are rich, stately, effective, and picturesque in general effect; the details full of fancy and ingenuity. The style reached at once its utmost perfection in his hands. Under the Jacobean architects it ran into extravagance, often bordering on the grotesque; and it gave way before the more regular Italian Renaissance introduced by Inigo Jones.

THOUVENEL, EDOUARD ANTOINE, French diplomatist and statesman, was born at Verdun, November 11th, 1818. In early life he made a tour in Hungary and the Danubian principalities, and published an account of it in the *Revue des Deux Mondes*, afterwards published separately as *La Hongrie et la Valachie: Souvenirs de Voyage, et Notices Historiques*, 8vo, Paris, 1840. He soon afterwards entered the bureau of the minister of foreign affairs; was appointed attaché at Brussels in 1844; became secretary of legation at Athens in the following year; and then chargé d'affaires at the same place. Changes of government did not much affect his position; Cavaignac confirmed him in his post in 1848, and in 1849 he was made minister plenipotentiary to Greece. He was engaged in the Pacifico dispute in 1850, on the side of France, and warmly seconded the mission of Baron Gros relating to it. His favour with King Otho of Greece led to his being well received by Otho's brother, the King of Bavaria, when M. Thouvenel went as minister plenipotentiary to Munich in 1851. The Emperor Napoleon III. appointed him minister of foreign affairs in 1852; two years later he took part in the Vienna conferences relating to the Russo-Turkish war; and in 1855 went as ambassador to Constantinople, where his policy was often antagonistic to England and Austria. He was raised to the senate in 1859, and in 1860 was made Grand Cross of the Legion of Honour. About the same time he resumed his position in the cabinet, succeeding M. Walewski as minister of foreign affairs. In a circular despatch addressed to the French representatives at foreign courts, he upheld the claim of France to maintain the occupation of Syria; and in the same year, 1861, he conducted commercial, maritime, and literary conventions with Belgium. Once again quitting the foreign office, he became president of the commission appointed in 1862 to arbitrate between the Pasha of Egypt and the Suez Canal Company. His participation in public affairs after this was chiefly as a senator. M. Thouvenel died October the 19th, 1866.

THWAITES, SIR JOHN, chairman of the Metropolitan Board of Works, was born at Meaburn, Westmoreland, in 1815. After receiving his education at Meaburn school, he came to London, and gradually formed an extensive trade as a woollen draper in Southwark. He took an active part in parochial affairs, became a leading member of the vestry-boards, and was one of the founders of the Surrey Consumers' Gas Company. The experience and influence thus obtained led to his election as representative for Southwark in the Metropolitan Commission of Sewers in 1852; and three years afterwards, when the Metropolitan Board of Works was founded, he was elected chairman. This post he retained during the remainder of his life. He was closely associated with the various important works undertaken by the Board, including the main drainage of the Metropolis, the Victoria Embankment on the north shore of the Thames, the Albert Embankment on the south shore, Finsbury and Southwark Parks, Commercial and Southwark Streets, the formation of other new streets and widening of old streets in various parts of the metropolis, and numerous improvements of minor character. In 1865 he received the honour of knighthood on the occasion of the public opening of the northern high-level and mid-level sewers; and about the same time published a 'Sketch of the history and prospects of the Metropolitan Drainage Question.' He was a magistrate for the county of Surrey, and a magistrate and deputy lieutenant for the county of Middlesex. He died August the 8th, 1870.

TICKNOR, GEORGE, [E. C. vol. vi. col. 52.] In 1863 Mr. Ticknor published an interesting memoir of his friend William H. Prescott, the historian, which was reprinted in London, 1864. He died on the 26th of January, 1871, in the 80th year of his age.

* TIDEMAND, ADOLPH, a distinguished Norwegian painter, was born August 14th, 1815, at Mandal, in Norway. He studied first in the Copenhagen Academy, and afterwards in that of Düsseldorf. Having settled in Norway, he obtained great success by his scenes of domestic and familiar life. He was appointed painter to the king, and commissioned to decorate

the royal palace near Christiania. His reputation steadily extended beyond his native country, and he is now very generally regarded not only as the chief of Norwegian artists, but as among the first painters of national manners in Europe. He confines his pencil to the representation of Scandinavian life, but this he depicts in its various phases with truth, refinement, feeling, and great technical skill. His pictures at the International Exhibition of 1862, excited very general admiration; they included some of his earliest and some of his latest productions, and afforded a good illustration of his style and range of subjects. They comprised a 'Bridal' and a 'Funeral Procession about to cross a ford'—the landscapes being painted by his countryman Gude; 'Sunday Afternoon,' an aged couple reading their bible; 'Administration of the Sacrament to Sick Persons and Cripples in a Norwegian Hut'; 'Haugians: a Norwegian Sectarian Minister, Preaching'; 'Schoolmaster Catechising'; 'Card Players,' &c. At the London International Exhibition of 1871, was exhibited 'The Grandparents' Visit,' painted in 1870. Several of Tidemand's pictures are in English collections. Tidemand is a professor in the Düsseldorf Academy; member of the Academies of Copenhagen, Stockholm, Berlin, and Amsterdam; knight of the Norwegian order of St. Orlaf, and of the French Legion of Honour.

TIEDEMANN, FRIEDRICH [E. C. vol. vi. col. 58.] anatomist, died at Munich, January 22, 1861.

* TISCHENDORF, LOBEGOTT FRIEDRICH CONSTANTIN VON, generally known as Constantin, a distinguished Biblical scholar and critic, was born on the 18th of January, 1815, at Lengenfeld, in Upper Saxony, where his father practised as a physician. After receiving his preparatory education at Lauen, the capital of his native territory of Voigtland, he repaired to the University of Leipzig, where he devoted himself especially to the study of philology and theology. He became a licentiate in 1838; and in the period just before and just after this year, produced two prize theses, entitled respectively, 'Doctrina Pauli Apostoli de Vi Mortis Christi satisfactoria,' &c., 8vo, Leipzig, 1837 and 'Disputatio de Christo, Pane Vitæ,' &c., 8vo, Leipzig, 1839; a volume of poems, entitled *Maybuds*, 'Maiknospen,' 12mo, Leipzig, 1838; a critical and exegetical dissertation, 'De Evangelio Matthæi, c. xix. v. 16, et seq.,' &c., 8vo, Leipzig, 1840; and a free translation, from the French of Louis Schneegans, of the account of the great pilgrimage of the Flagellants to Strasburg in the plague-year, 1349, 'Die Geissler, namentlich die grosse Geisselfahrt nach Strasburg im Jahre 1349,' 8vo, Leipzig, 1840. The biblical labours of Tischendorf more properly began when, subsidised by the Saxon government, he set out upon a journey of investigation to the principal libraries of Europe, for the purpose of consulting the best and the rarest manuscripts of the books of scripture. In 1843 he received from the University of Breslau the degree of D.D.; and published, as the results of a course of travel in Egypt, Syria, and Asia Minor, a Christmas sermon, preached at Lengenfeld, on his return from the East, 'Weihnachtspredigt. Bei seiner Heimkehr aus dem Morgenlande in seiner Vaterstadt Lengenfeld gehalten,' 8vo, Leipzig, 1845; 'Reise in den Orient,' 2 vols. 8vo, Leipzig, 1846, English translation, by W. E. Shuckard, 'Travels in the East,' 8vo, London, 1847; and a treatise, entitled 'De Israelitarum per Mare Rubrum Transitu. Cum Tabula,' 8vo, Leipzig, 1847. In 1845 and 1850 respectively, Dr. Tischendorf was appointed to an extraordinary and an ordinary professorship of theology in the University of Leipzig, where, in 1859, a chair of biblical palæography was specially instituted for him. He has more than once repeated his tour of the principal libraries of Europe, and in 1853 paid another visit to the East, from which he returned with new and valuable documents and material. During one of his visits to England, in 1865, he was admitted by the University of Cambridge, March 9th, to the honorary degree of doctor in the faculty of law, and to a like honour, on the 16th of March, by the University of Oxford, after he had been engaged at the Bodleian Library in carefully revising the Laudian Græco-Latin Manuscript of the Acts of the Apostles, and had gratified the scholars of this country by exhibiting to them the Leipzig fragments of his famous manuscript.

The labours of Professor Tischendorf have been almost exclusively directed to the illustration of biblical or collateral antiquities, and to the application of sound principles of textual criticism. He has edited 'Codex Ephraemi Syri Rescriptus: sive Fragmenta Veteris Novi Testamenti e Codice Græco Parisiensi celeberrimo quinti ut videtur post Christum Sæculi,' &c., 4to, Leipzig, 1842—46; 'Codex Friderico-Augustanus: sive Frag-

menta Veteris Testamenti e Codice Græco omnium qui in Europa supersunt facile antiquissimo in Oriente detexit, in Patriam attulit,' &c., folio, Leipzig, 1846; 'Monumenta Sacra inedita: sive Reliquiæ antiquissimæ Textus Novi Testamenti Græci. Ex Novem plus Mille Annorum Codicibus per Europam dispersis,' &c., 4to, Leipzig, 1846, 'Nova Collectio,' 1865, &c.; 'Codex Claromontanus: sive Epistolæ Pauli omnes Græce et Latine. Ex Codice Parisiensi celeberrimo Nomine Claromontani plerumque dicto sexto ut videtur post Christum Sæculi,' &c., 4to, Leipzig, 1852; 'Bibliorum Codex Sinaiticus Petropolitanus. Auspiciis Augusti Imperatoris Alexandri II. ex Tenebris protrahit, in Europam transtulit, ad juvandas atque illustrandas Sacras Litteras,' &c., 4 vols., folio, St. Petersburg and Leipzig, 1862; and 'Testamentum Novum Sinaiticum: sive Novum Testamentum cum Epistola Barnabæ et Fragmentis Pastoris. Ex Codice Sinaitico Auspiciis Alexandri II. omnium Russiarum Imperatoris,' 4to, Leipzig, 1863. The principal life-work of Professor Tischendorf, however, is his 'Testamentum Novum Græce,' 16mo, Leipzig, 1841, of which the first volume of an eighth edition appeared in 1869, in which the critical apparatus of former editions was entirely re-written in the light of eighteen new uncials MSS. for the Gospels, including the Sinaitic Codex, already edited in various forms. The last edition, therefore, represents an approximation to a standard text which scholars might accept as the best result of ripened judgment and enlarged experience. It bears the title of 'Novum Testamentum Græce. Ad antiquissimos Testes denuo recensuit, Apparatum criticum omni Studio perfectum apposuit, Commentationem isagogicam prætexit Constantinus Tischendorf. Editio octava critica major,' vol. i., Leipzig, 1869. Translations from antecedent Tischendorf texts appeared as 'The New Testament, from the Greek Text,' &c., 12mo, London, 1869, by the Rev. R. Ainslie, and in 8vo, 1869, by G. R. Noyes; whilst the thousandth volume of the 'Tauchnitz Collection of British Authors,' 16mo, Leipzig, 1841, &c., bears the title of 'The New Testament: the authorised English Version, with Introduction and various Readings from the three most celebrated Manuscripts of the original Greek Text, by Constantin Tischendorf,' 16mo, first two editions, 1869. A few other productions, to which Professor Tischendorf stands in the relation, either of author or of editor, remain to be mentioned. They include an Occasional Sermon, entitled the Spirit of Truth, 'Der Geist der Wahrheit. Zeitpredigt am Sonntag Cantate den 6 May, 1849, zu Leipzig gehalten,' 8vo, Leipzig, 1849; 'De Evangeliorum Apocryphorum Origine et Usu. Disquisitio historica critica, quam Præmio aureo dignam censuit Societas Hagana pro defendenda Religione Christiana,' 8vo., The Hague, 1851; 'Acta Apostolorum Apocrypha, ex XXX. antiquis Codicibus Græcis,' &c., 8vo, Leipzig, 1851; 'Synopsis Evangelica,' &c., 8vo, Leipzig, 1851, "editio 11 emendata," 1864, "editio in Commodum academicum repetita," 1854; 'Anecdota sacra et profana ex Oriente et Occidente allata: sive Notitia Codicum Græcorum, Arabicorum, Syriacorum, &c. Editio repetita emendata, aucta,' 4to, Leipzig, 1861; 'Wann wurden unsere Evangelien verfaast?' 8vo, Leipzig, 1865, fourth edition, 1866, English translation, by W. L. Gage, 'Origin of the Four Gospels,' 8vo, London, 1868, French translation, by L. DuRAND, 'A quelle époque nos Évangiles ont-ils été composés?' &c., 8vo, Paris, 1866, Italian translation, 16mo, Florence, 1868; and 'Responsa ad Calumnias Romanas, item Supplementum Novi Testamenti ex Sinaitico Codice Anno 1865 edita,' 8vo, Leipzig, 1870.

TOCQUEVILLE, ALEXIS CHARLES HENRI CLÉREL DE. [E. C. vol. vi., col. 102]. After the publication of 'L' Ancien Régime et la Révolution,' 1856, M. Tocqueville addressed himself to the preparation of a Second Part. He was anxious to complete the work by a comprehensive survey of the results of the revolution, and the influence of the Emperor and imperialism; but, whilst persistently labouring, his health was becoming more and more feeble. The rupture of a blood-vessel in June, 1858, rendered necessary a milder climate than that of Normandy. He removed to Cannes, but the malady had made too great progress to be arrested. He lingered till the 16th of April, 1859, when death terminated at once his labours and his sufferings. His 'Œuvres et Correspondance Inédites' were published in two volumes, 8vo, 1862, with a most interesting memoir of him by his friend, G. De Beaumont, prefixed; an English translation, by Mr. H. Reeve, appeared the following year. His 'Œuvres Complètes,' have been published in 9 vols., 8vo, Paris, 1861—66.

TODD, REV. JAMES HENTHORNE, D.D., son of Mr. C. H. Todd, a distinguished surgeon of Dublin, was born in that city, April 23rd, 1806. He was educated at Trinity College,

Dublin, where he graduated B.A. in 1825, and was elected to a fellowship in 1831. He remained closely connected with the college throughout his life, and at his death, which occurred at his residence, Rathfarnham, near Dublin, June 28th, 1869, he was senior fellow and librarian of Trinity; regius professor of Hebrew; and also treasurer and precentor of St. Patrick's Cathedral. While still young, Mr. Todd distinguished himself as a theologian, but later in life he became more eminent as a writer on the language, history, and antiquities of Ireland, on which subjects he was regarded as one of the first authorities of his time. His published works include 'Discourses on the Prophecies relating to Anti-Christ in the writings of Daniel and St. Paul,' 8vo, 1840; 'Discourses on the Prophecies relating to Anti-Christ in the Apocalypse of St. John,' 8vo, 1846, being the Donnellan lectures for those years; 'The Search after Infallibility,' &c. He also edited Wycliffe's 'Last Age of the Church,' and 'Apology for Lollard Doctrines,' and accompanied them with valuable prefaces and notes. The 'Life of St. Patrick,' 8vo, 1863, does much to disentangle the terribly confused biography of Ireland's patron saint, and equally valuable are his editions of 'The Book of Hymns of the Ancient Church of Ireland,' and the 'Martyrology of Donegal.' On Irish antiquities he contributed numerous valuable papers to the Transactions of the Royal Irish Academy, of which during five years he occupied the post of president; and he was one of the most active members of the Irish Archaeological Society. For the series of Chronicles and Memorials published under the direction of the Master of the Rolls, Dr. Todd edited the 'Wars of the Danes in Ireland:' written in the Irish language.

TODD, ROBERT BENTLEY, M.D., F.R.S., [E. C. vol. vi. col. 105], died January 30, 1860.

* TOMLINSON, CHARLES, F.R.S., was born in London, on the 27th November, 1808. His father, who was of an old Shropshire family, died while he was yet an infant, leaving a widow in circumstances of deep poverty, to bring up two boys as best she could. She was able to provide them with only the mere elements of education, and at about twelve years old each had to earn his own living. Both boys had a strong love for learning, and managed to acquire a considerable amount of knowledge after working hours. The elder soon became a junior usher in schools, and made his way steadily onwards until he managed to get to Oxford and study for the church. The younger, the subject of our sketch, whether as office boy or lawyer's clerk, gave nearly all his leisure to the study of languages and science, eagerly availing himself of such opportunities in the shape of lectures, classes, &c., as his very scanty means would allow. But a dearth of books, a home from which every luxury, as well as every opportunity of private study, was banished—most of all, the absence of a directing mind to indicate the best course of study—placed the young student under great disadvantages. In 1830, however, there was a promise of better things. His brother, who had just left college, and had accepted a curacy in conjunction with classical teaching, invited him to assist in the latter, an offer which was eagerly embraced, and which gave greater opportunities for the acquirement of systematic knowledge. A few years later the elder brother took a curacy in the diocese of Salisbury, and, in conjunction with Charles, opened a classical school in that city. The strong tendency to scientific pursuits which had always characterised the younger brother here led to the introduction of what was then a novel system in schools, namely, the teaching of experimental science by lectures and written and oral examinations. These lectures proved a success; they were carefully prepared, and embodied the results of the training Charles had undergone as a member of the London Mechanics' Institution under the presidency of Dr. Birkbeck, and also as an occasional attendant at lectures on chemistry by Professor Turner, of University College. Every opportunity of adding to his scientific knowledge seems to have been eagerly embraced during his vacation visits to London, and by the study of the best books. At this time also he made some feeble attempts at original research, and having sent an account of them, and of his science-teaching, to the 'Magazine of Popular Science,' he was invited by the editor (J. W. Parker, West Strand) to increase his connection with his house. This led to the collection and publication of his papers in a volume entitled 'The Student's Manual of Natural Philosophy,' which was adapted to the wants of a science-reading public at the time, as was proved by its rapid sale; also to a large amount of literary work in connection with the 'Saturday Magazine' and other publications, and finally to his settling in London in 1841. He then became a publisher's hack, taster, and intellectual Jack of

all trades. In this capacity, however, he sometimes fell upon congenial work. He assisted Sir W. Snow Harris in bringing out his book on *Thunderstorms*, Professor Daniell in a new edition of his *'Meteorology'*, Professor Brande in his *'Chemistry'*, and so on. Soon after his settlement in London, he made the acquaintance of Dr. Wm. Allen Miller, at that time demonstrator of chemistry at King's College, and this ripened into a steady friendship undisturbed to the time of Dr. Miller's death, a period of nearly thirty years. Several of their vacation rambles were taken in company, and it was during one of these that the idea of Miller's work on Chemistry was first broached, and was urged and encouraged by Tomlinson, who subsequently took a share in its revision. Early in his London career, Tomlinson was asked to receive into his house a few students from the department of applied sciences in King's College; and this led to the delivery of occasional lectures in King's College School, and afterwards to his appointment by the council as permanent lecturer on science. He held this post until 1868, when defective sight, brought on by almost incessant literary work, suggested rest and retirement.

Mr. Tomlinson was one of the first members of the Cavendish Society, and served on its council under Professor Graham during many years. He rendered considerable assistance to Professor George Wilson in his *Life of Cavendish*; also in some other works published by the society. He prepared a number of popular scientific treatises for the Society for Promoting Christian Knowledge. Most of these have passed through many editions. He wrote some of the most popular treatises in Weale's series. He has also published a *'Cyclopædia of Arts and Manufactures'*, of which a second and larger edition has appeared.

On retiring from King's College, and, indeed, for some years previously, Mr. Tomlinson gave his attention to original research, which had occupied his scanty leisure from an early date. In 1861 he began to publish in the *'Philosophical Magazine'*, and elsewhere, such papers as the following:—*'A Critical Examination of Welle's Theory of Dew'*, *'On the Cohesion Figures of Liquids'*, *'On Lightning Figures'*, *'On the supposed Action of Light on Crystallization'*, &c. He has also published numerous papers on a very difficult branch of physico-chemical science, namely, the phenomena of supersaturation and the action of nuclei. On this subject he has two memoirs in the *'Transactions'* of the Royal Society (of which he became a fellow in 1867), and several in the *'Proceedings.'* Many of the articles on physics, in the English *Cyclopædia* and Supplement, were written by him.

TONSON, JACOB, who has been styled the prince of booksellers, and immortalised by Pope as "left-legg'd Jacob," was born in 1656, the son of a barber-surgeon in Holborn, who, dying in 1668, bequeathed to Jacob, his elder brother Richard, and their three sisters, each 100*l.*, to be paid to them as they severally came of age. Jacob was apprenticed in 1670 to Thomas Basset, bookseller, and in 1677 admitted a freeman in the Stationers' Company. His father's bequest enabled him to enter upon business as a bookseller, at the sign of the Judge's Head, at the Fleet Street end of Chancery Lane. Here, shortly after, he published some of Otway's and Tate's plays, and in the following year Dryden's *'Troilus and Cressida.'* Tonson's relations with Dryden soon became very intimate; he continued to be his regular publisher, and though Dryden sometimes haggled and sometimes grumbled, the only occasion of temporary quarrel was while the poet was engaged on his translation of Virgil, and seemingly more than usually irritable. The publication of the celebrated *'Miscellanies'*, seems to have originated with Tonson, though the work was edited by Dryden, and hence perhaps it has always been called indifferently Tonson's or Dryden's *Miscellanies*. For the publication of the first worthy edition of Milton, and the first complete octavo edition of Shakspeare, the credit is wholly due to the bookseller. His *Cæsar*, published in 1703, was admittedly the handsomest book that had been issued by an English publisher. He also published Addison's *Companions*, and some of Pope's earlier verses. Tonson migrated to Gray's Inn Gate in 1697, where he continued till 1712, when he removed to the Shakspeare's Head, over against Catherine Street in the Strand. Tonson was now at the head of the trade, a man of wealth and influence. He had his warehouse in the Savoy, and printing-office in Bow Street, holding under patent the post and privileges of printer to the Excise. He had a pretty villa on the banks of the Thames at Barn Elms, where the most famous poets, wits, and notables of the day, used to assemble. Tonson was, if not the founder, the secretary and main stay of the famous Kit-Cat

Club, for whose meetings he built a room at Barn Elms, and round which he hung the portraits of the members painted for him by Sir Godfrey Kneller, of a size ever since known as Kit-Cat: this celebrated collection is still kept intact by the representative of the Tonson family, Mr. R. W. Baker, of Bayfordbury Park, Hertfordshire. Tonson retired from business in 1720. He had purchased an estate in the country, and he found occupation in its improvement. He died March 18th, 1736.

TOOKE, THOMAS, F.R.S., [E. C. vol. vi. col. 119], the author of the *'History of Prices'*, died on the 26th of February, 1858, in his 84th year.

TOOKE, WILLIAM, F.R.S., [E. C. vol. vi. col. 120], died on the 20th of September, 1863, at the age of 86.

* TOPETE, JUAN BAUTISTA, a Spanish admiral and politician, was born in Andalusia in the year 1820. Having served his country in his professional vocation through a series of years, and having especially distinguished himself by his conduct at the bombardment of Callao, in Peru, on the 2nd of May, 1866, when he received a serious wound, he occupied a prominent position in the revolution which put an end to the reign of Queen Isabella, in September, 1868. Being in command of the iron-clad squadron then anchored in the port of Cadiz, he issued a proclamation to the inhabitants of that town, in which he undertook to place himself in the van of the insurrection. The combined action of army and navy speedily accomplished the overthrow of the Queen; and Topete became a member of the Provisional Government which succeeded upon her flight to France, assuming the office of Minister of Marine, October 8th, 1868. Although he was of accord with Prim and Serrano in his desire to uphold the monarchical form of Government, he disagreed with his colleagues as to the person who should be elevated to the throne of Spain; and whilst a majority adopted the selection of the Duke of Genoa, Topete favoured the candidature of the Duc de Montpensier. Impelled by this divergence of opinion, he withdrew from the administration in November; upon which he was elected, almost unanimously, to the vice-presidency of the Cortes Constituyentes. In ceasing to be the ally of Prim and Serrano, however, he did not become their enemy; and he spoke no word of opposition until Friday, December 23rd, 1870, when, amidst the storm of angry and re-criminatory debates which at that period agitated the Cortes, he pronounced a spirited apology for his own conduct, and an attack upon the Government for the violation of the constitution and of parliamentary privileges of which they were guilty in their haste to introduce the king-elect. Having once broken his obedience and discipline for the honour of his country and for the sake of a constitutional government, he professed that his own honour demanded that for the future he should hold no command, and that the ruin of the ex-royal house should not seem to have been brought about in order to afford him a stepping-stone to greatness and to power. Continuing to favour in his own heart the claims of the Duc de Montpensier, he trusted that Spain might be happy and prosperous under the king-elect, whom, if he forbore to assist, he would equally forbear to embarrass. The circumstances of the next few days, however, made an appeal to his patriotism, too strong to be repudiated. On the evening of the 28th of December immediately after General Prim had received the wounds of which he died on the 30th, it was unanimously decided at a Council of Ministers, at which many of the leading deputies of the Cortes were present, to request Topete to assume the presidency of the Council, and to go down to Cartagena to receive the King, and to bring him to Madrid. After some natural reluctance on the score of seeming inconsistency, and after consultation with other partisans of the Duc de Montpensier, Topete frankly accepted the office and the mission thrust upon him, assuming at the same time the offices of Minister of State and Minister of War. But the offices were only temporary; and on the appointment of a ministry, January 5th, 1871, of which the ex-regent Serrano was at the head, Topete resolutely refused to accept a portfolio, even when requested to do so by the young King Amadeo. In July following, upon the resignation of Serrano, Topete accepted office in a reconstructed administration which was sought to be established under the presidency of the former; who, however, baffled by the difficulties he had to encounter, was succeeded on the 24th by Zorilla, who entered upon office with an administration formed exclusively of members of the Progresista party. On the 21st of December Admiral Topete took office in the Sagasta administration, as Minister of the Colonies, in which capacity the affairs of Cuba engaged much of his attention.

TORQUEMADA, TOMAS DE, Grand Inquisitor of Spain,

and compiler of the 'Instructions' of the council of the supreme inquisition, founded by Ferdinand in 1482. Torquemada was born at Valladolid in 1420; he died on the 16th of September, 1498. For particulars of the atrocious cruelties committed by the new tribunal whilst under Torquemada's direction, it will suffice to refer to the article, INQUISITION, E. C. Arts and Sciences Div. vol. iv., col. 881, &c.

TOYNBEE, JOSEPH, aurist, was born at Heckington, Lincolnshire, in 1815. His education was received at Lynn, after which he entered on his medical career by being articled to Mr. Wade, which was continued as a pupil in St. George's Hospital, the assistant curator at the Museum of the Royal College of Surgeons, surgeon to the St. George's and St. James's Dispensary, and as a practitioner. His earlier practice was general, but it was ultimately restricted to aural surgery. His practice in this special branch of his profession was very large. He gave great attention to the structure and functions of the various parts of the organ of hearing, both in their healthy and diseased conditions. He formed an excellent collection of about 1700 human temporal bones, most of which he described in the medical journals. At the time of his death he was making experiments with a view to finding out a method of introducing chloroform into the tympanic cavities of the ear; but having taken an over-dose at a time when no assistant was near, he was found dead in his chair, July 7, 1866.

TRENDELENBURG, FRIEDRICH ADOLF, a German philosopher, was born on the 30th of November, 1802, at Eutin, in Oldenburg, and was educated successively at the Universities of Kiel, Leipzig, and Berlin; at the last of which, having gone through the inferior academic grades, he became, in 1833, extraordinary, and in 1837 ordinary professor of philosophy. He was secretary of the Berlin Academy of Sciences, and a member of various learned and scientific societies. As a representative to the Prussian Chamber in 1849, he voted with the Conservatives, and favoured the cause of German unity, until his retirement in 1851. He died on the 24th of January, 1872.

The numerous works with which, either as editor or author, Professor Trendelenburg has been identified, include, 'Platonis de Ideis et Numeris Doctrina ex Aristotele illustrata,' 8vo, Leipzig, 1826; 'De Aristotelis Categoriis, Prolusio academica,' 8vo, Berlin, 1833; 'Aristoteles De Anima Libri tres,' &c., 8vo, Jena, 1833; 'Elementa Logices Aristotelice. In Usum Scholarum ex Aristotele excerptis, convertitis, illustravit,' and also with the title, 'Excerpta ex Organo Aristotelis,' 8vo, Berlin, 1836, fifth edition, 1862; 'De Platonis Philebi Consilio. Prolusio academica,' 8vo, Berlin, 1837; a work in illustration of the Aristotelian Logic, for the pupils of Gymnasias, 'Erläuterungen zu den Elementen der Aristotelischen Logik. Zunächst für den Unterricht in Gymnasien,' 8vo, Berlin, 1842, second edition, 1861; Two controversial Treatises on the logical Questions in Hegel's System, 'Die logische Frage in Hegel's System. Zwei Streitschriften,' 8vo, Leipzig, 1843; Considerations on the Beautiful and the Sublime, delivered before the Scientific Society of Berlin, entitled, 'Niobe. Einige Betrachtungen über das Schöne und Erhabene, vorgetragen im wissenschaftlichen Vereine zu Berlin,' 8vo, Berlin, 1846; Historical Contributions to Philosophy, 'Historische Beiträge zur Philosophie,' 2 vols., 8vo, Berlin, 1846—55; a political brochure, entitled, 'Eine Kammer oder zwei? und von welcher Art?' &c., 8vo, Berlin, 1848; several Discourses delivered at different times at the Royal Academy of Sciences, including those on the Moral Idea of Justice, 'Die sittliche Idee des Rechts,' &c., 8vo, Berlin, 1849, on the Fundamental Ideas of Spinoza and their Results, 'Ueber Spinoza's Grundgedanken und dessen Erfolg,' &c., 4to, Berlin, 1850, in Memory of Frederick the Great [30 January, 1851], 'Zum Gedächtniss Friedrichs des Grossen,' &c., 8vo, Berlin, 1851, in Memory of Leibnitz [July 1st, 1852], 'Leibnitz und die Philosophie Thätigkeit der Akademie im vorigen Jahrhundert,' &c., 8vo, Berlin, 1852, on Cologne Cathedral, 'Der Kölner Dom,' &c., 8vo, Cologne, 1853, in memory of Frederick the Great [January, 25, 1855], 'Machiavelli und Antimachiavelli,' &c., 8vo, Berlin, 1855, on King Frederick William IV. and the Royal Academy of Sciences, 'Die Königlich preussische Akademie der Wissenschaften über dem Könige Friedrich Wilhelm IV.,' &c., 4to, Berlin, 1861; a series of reprinted articles from the 'Abhandlungen' of the Berlin Royal Academy of Sciences, entitled, respectively, On Leibnitz's Design of a Universal Characteristic, 'Ueber Leibnizens Entwurf einer allgemeinen Charakteristik,' &c., 4to, Berlin, 1856; Frederick the Great and his Lord Chancellor, &c., 'Friedrich der Grosse und sein Grosskanzler Samuel von Cocceji,' &c., 4to, Berlin, 1863, Herbart's practical Philosophy, &c., 'Her-

bart's praktische Philosophie und die Ethik der Alten,' 4to, Berlin, 1856; a series of articles reprinted from the 'Monatsberichten' of the same Academy, respectively entitled, On some Passages, &c., 'Ueber einige Stellen im 5 Buche der nichomachischen Ethik,' 8vo, Berlin, 1850, On a new Explanation of Herbart's Metaphysics, 'Ueber Herbart's Metaphysik und eine neue Auffassung derselben,' 8vo, Berlin, 1854, second article, 8vo, Berlin, 1856; and several lectures on academical or philosophical subjects, especially a memorial lecture to Fichte, 'Zur Erinnerung an Johann Gottlieb Fichte. Vortrag, gehalten in der Königlich Friedrich-Wilhelms-Universität zu Berlin am 19 Mai, 1862,' 4to, Berlin, 1862. Professor Trendelenburg has also treated of the relations between Ethics and Natural Law, 'Naturrecht auf dem Grunde der Ethik,' 8vo, Leipzig, 1860; and has produced a work entitled Logical Investigations, 'Logische Untersuchungen,' 2 vols., 8vo, Leipzig, 1840, &c., and 1862.

TREVITHICK, RICHARD, inventor of the locomotive steam-engine, and of many improvements in machinery, was born at Illogan, Cornwall, April 13th, 1771. Under his father, the purser of a mining company, he was conversant with the Cornish mines, to one of which he became mechanical engineer. He noticed the imperfect action of much of the machinery employed, and constructed some steam-engines marked by several improvements which did not clash with James Watt's patents. Amongst other things, the 'waggon-tilt' boilers until then in use suggested to him the substitution of wrought-iron cylindrical boilers, which, when introduced, were found to effect a large saving of coal at the Cornish mines. About 1800 his attention was directed to the possibility of placing a steam-engine on wheels, to run on roads and tramways. Some such idea had occurred to Leupold, then to Watt; Cugnot made a rough attempt in this direction in 1770; and Murdoch constructed a small working model in 1784; but the solution of the problem was given by Trevithick, in introducing high-pressure steam as a substitute for the condensing action. In partnership with Andrew Vivian, who provided capital, he patented his new engine in 1802; and his locomotive ran upon a public road near Camborne in the following year. In 1804 another locomotive was tried on a tramway at Merthyr Tydvil, in South Wales; it drew a net load of ten tons at the rate of five miles an hour. Trial trips were also made in London, near the Bethlehem Hospital and the site of the present Euston Station. There was, however, not the necessary public enterprise to encourage the invention at that time; but the principle of steam locomotives on roads and railways was virtually established. Trevithick was employed in much engineering work in Cornwall, continually inventing and making improvements in machinery. In 1811 a silver mine in Peru ceased work on account of the extreme difficulty of getting any machinery up from the sea-coast to the mine in the mountains; an agent came to England, became acquainted with Trevithick's high-pressure steam-engine, and found it smaller and more compact than any condensing engine of equal power. He returned to Peru with a small engine, and proved its availability. An order was given to Trevithick to send out nine steam-engines, so packed in pieces that they could be conveyed by mules from the port up to the mines; this was done in 1814, and in 1816 Trevithick himself went out as engineer and part proprietor of the mines. He prospered for a time, but the civil war, which began in 1820, frustrated his plans; and he was for many years plunged in exciting adventures, in some of which he was associated with Lord Cochrane (afterwards Earl of Dundonald). In 1827 Trevithick landed at Falmouth, penniless. He was about to petition the House of Commons for a grant, on the ground that his steam-engine inventions had effected a vast saving of coals, and had greatly facilitated all the mechanical operations in the mining districts—facts which are indisputable—but meeting with partners who had command of a little money, he resumed operations as an engineer, introduced many inventions and mechanical improvements, and patented some of them. Besides land steam-engines, Trevithick invented and constructed new Mint machinery, which he took out with him to Peru; and his prolific mechanical genius displayed itself in inventions relating to warning apparatus, iron stowage-tanks, iron buoys, a gun-carriage for single-decked ships, a furnace for purifying silver ores, an hydraulic engine, floating docks, a salt-water distilling apparatus, &c. Early in the century he had been one among many engineers who engaged in attempts to excavate a tunnel under the Thames. He died at Dartford, Kent, April 22, 1833, little enriched by inventions which had enriched others, and added largely to the wealth of the country.

TRICOUP, or TRIKUPIS, SPIRIDION, [E. C. vol. vi., col. 166]. Notwithstanding the many changes of ministers and policy which followed the insurrection of 1859, in one at least of which, May, 1862, King Otho asked Tricoupi to form a ministry with himself as chief, Tricoupi retained his post as ambassador at the English court till 1867, when advancing years (he was born in 1791) and failing health, warned him that it was time to retire from public life. A second edition of his great History of the Hellenic Insurrection, 'Ἱστορία τῆς Ἑλληνικῆς Ἐπαναστάσεως,' appeared in four volumes, 8vo, 1862.

TRIMMER, JOSHUA, geologist, was born at North Cray, Kent, July 11, 1795. In 1806 he became the pupil of the Rev. W. Davison, who taught him classics and mathematics. In or about 1814 he superintended some copper mines in North Wales for his father, and was thus enabled to acquire a practical knowledge of mineralogy. He then managed his father's farm in Middlesex, which led him to give close attention to soils. In 1825 he worked some slate quarries in Carnarvonshire. Whilst thus engaged, he actively promoted the formation of a palæontological museum in Carnarvon; and frequently acted as a guide to Dr. Buckland, and pointed out to him the glacial and other geological phenomena observable in the district of which Snowdon forms the centre. In 1840 and subsequent years he was employed on the Geological Survey of Great Britain. He died in London, September 16, 1857. He wrote many valuable papers on geology, more especially as studied from an agricultural point of view. He discovered the marine fossils in the drift bed on Moel Tryfane, and at a great elevation above the sea. His maps of soils and subsoils, and his system of drainage, which was applied over extensive areas, were important results of his attempts to render his geological knowledge practically useful. His 'Practical Geology and Mineralogy,' 8vo, London, 1841; and treatise 'On the Agricultural Geology of England and Wales,' 8vo, London, 1852, are his principal separate works.

* TROCHU, LOUIS JULES, French general, was born March 12, 1815, at Le Palais, the capital of Belle-Ile, an island off the coast of Le Morbihan, a department of Brittany; and was educated at Saint-Cyr and the École d'Application du Corps d'État major. He obtained a lieutenant's commission in 1840, and three years after was promoted to a company; and served under Marshal Bugeaud in Algeria. He was appointed chef d'escadron in 1846, and became lieutenant-colonel in 1853; and having acted as aide-de-camp to Marshal Saint-Arnaud during part of the Crimean war, was promoted on the 24th of November, 1854, to be general of brigade, in which capacity he commanded until the termination of the campaign. He was made a commander of the Legion of Honour on the 22nd of August, 1855, and became grand officer on the 12th of August, 1861. He was also nominated as a member of the consultative committee of the État major; and was elected to succeed his father as a member of the conseil général of the department of Morbihan, for the canton of Belle-Ile. He served with considerable distinction during the Italian campaign as a general of division, to which rank he was promoted on the 24th of May, 1859; and at the close of 1866 was commissioned to procure information to serve as data for the re-organisation of the army. The literary result of this employment appeared in a publication, issued under the pseudonym of "Général X***," with the title of 'L'Armée Française en 1867,' 8vo, Paris, first eighteen editions, 1867, twentieth edition, 1870, the substance of which was incorporated in a German work, by F. Treuenpreuss, entitled, 'Die Französische Armee und ihre Reform. Nach den Schriften des Herzogs von Aumale, Changarnier, Trochu, &c.' 8vo, Berlin, 1867. On the 17th of August, 1870, when misfortune had already borne hard on the Imperial arms in the disastrous war against Germany, General Trochu was appointed Governor of Paris, and chief of all the forces entrusted with the defence of the capital. On the 4th of September, the day of the formal deposition of the Emperor, a deputation waited on General Trochu at the Louvre, inviting him to proceed to the Hôtel de Ville, and to become a member of the Provisional Government, with the office of Minister of War, under the Presidency of M. Jules Favre. The expression of an opinion, however, to the effect that what remained of the army would rally round him if he were the head of the Government of Defence, but that it probably would not do so under M. Jules Favre, was the occasion of his immediate nomination to the Presidency of that Government, in place of M. Jules Favre, who became Vice-President. For some time, relying upon the number of troops under his command, he declared confidently that the safety of the city was assured; but as he became more intimately acquainted with the material on

which he had to depend, General Trochu and the other members of the Government, after anxious deliberation unanimously agreed upon the adoption of a course suggested to them from without, of an ultimatum, which was an armistice, with the revictualling of Paris, elections in all the departments, and the convocation of a National Assembly. Whilst M. Thiers was at Versailles, fruitlessly endeavouring to negotiate an armistice on this basis, the Government of the besieged city were surprised and forcibly detained for several hours at the Hôtel de Ville, on the 31st of October, by a band of rioters organised by the partisans of the Commune. General Trochu was released in the evening by the 106th battalion of the National Guard.

After a series of sorties, especially on the 28th and 30th of November, and the 21st of December, the common result of which was the disorderly retreat of the besieged to recover the immediate protection of their forts, the Germans opened the bombardment of Paris, by an attack on Mount Avron, on the 27th of December, which, two days afterwards, was evacuated by its defenders, under the personal superintendence of General Trochu, who at length, on the 21st of January, 1871, resigned his command in consequence of the dissatisfaction expressed at a meeting of the Council of Defence. The city of Paris surrendered on the 28th of January; and on the 7th of February, General Trochu declined the honour of election to the Bordeaux Assembly. On the 31st of October, 1871, his election was announced as President of the Conseil Général of the department of Morbihan.

General Trochu has served as a prominent member of the Commission for the Re-organization of the Army, 1871—72; and is said to be awaiting the period when he will have a right to retire as a General, at present, March, 1872, only a few weeks distant, before tendering his resignation as a Deputy, and retiring completely into private life. His most recent contribution to contemporary literature is entitled 'Une Page d'Histoire devant l'Assemblée Nationale,' 8vo, Paris, 1871.

* TROLLOPE, ANTHONY, a voluminous novelist, who derives from the Lincolnshire family of which Lord Kesteven, formerly Sir John Trollope, is the head, was born on the 24th of April, 1815, and was educated successively at Winchester and Harrow. He received an appointment in the General Post Office; and it was whilst occupying a position in the Surveyor's department in Ireland, that he gave the first public indication of his powers as a writer of fiction, by the publication of two works illustrative of Irish life and character. These were entitled respectively 'The Macdermotts of Ballycloran,' 8vo, 1847, fourth edition, 1867, and 'The Kellys and the O'Kellys: or, Landlords and Tenants,' 8vo, 1848, sixth edition, 1867, less painful in its interest than its predecessor, but giving evidence of the same vividness and ability. After a period of probation, he was promoted to fulfil the duties of a surveyor at St. Martin's-le-Grand; and before his retirement from the service, about the year 1867, was for some time employed in the Secretary's department. During his later connection with the Post Office, he was sent abroad on various important missions, the object of which was to establish or to modify postal conventions between this and other countries. Wherever he went he found material for his literary activity; and the titles of some of his works bear witness to his experience of sojourn in the West Indies and in the United States of America, the latter of which he has frequently visited. Mr. Trollope has been an extensive contributor to the periodical literature of this country and of America; and many of his novels have made their first appearance in the 'Cornhill,' 'St. Pauls,' and other magazines, whilst some of them have had their first issue in the shape of serials. Mr. Trollope is the editor of 'St. Pauls,' which was commenced in October, 1867, and contained the first instalment of a novel afterwards published with the title of 'Phineas Finn, the Irish Member,' 2 vols., 8vo, London, 1869.

As a novelist Mr. Trollope has especially distinguished himself by a series of fictions in which the incidents are chiefly conversant about the domestic and worldly side of clerical life; and of this series 'The Warden,' 8vo, London, 1855, new edition, 1859, and, like most of his novels, republished in the 'Tauchnitz Collection of British Authors,' was the first. 'The Warden,' the scene of which is the cathedral town of Barchester, in the West of England, found its continuation in the 'Barchester Towers,' 3 vols., 8vo, London, 1857, new edition, 1858; to which succeeded 'Framley Parsonage,' 3 vols., 8vo, 1861, which changes the scene from the cathedral town to a country parish.

The other novels and miscellaneous works of Mr. Trollope include 'La Vendée: an Historical Romance,' 3 vols., 8vo, London, 1850; 'Doctor Thorne. A Novel,' 3 vols., 8vo, Lon-

don, 1858, ninth edition, 1867; 'The Three Clerks. A Novel,' 3 vols, 8vo, London, 1858, &c., new edition, 1865; 'The Bertrams. A Novel,' 3 vols., 8vo, London, 1859, seventh edition, 1867; 'The West Indies and the Spanish Main,' 8vo, London, 1859, fifth edition, 1867; 'Castle Richmond. A Novel,' 3 vols., 8vo, London, 1860, fifth edition, 1867; 'Orley Farm,' 3 vols., 8vo, London, 1861, cheaper one-volume edition, 1867; 'Tales of all Countries,' first and second series, 2 vols., 8vo, London, 1861—63, fourth edition, 1867; 'North America,' 2 vols., 8vo, London, 1862, fifth and cheaper edition, in one volume, 1867; 'Rachel Ray,' 2 vols., 8vo, London, 1863, ninth edition, 1867; 'Can you forgive her?' 3 vols., 8vo, London, 1864, cheaper one-volume edition, 1867; 'The Small House at Allington,' 2 vols., 8vo, London, 1864; 'Miss Mackenzie. A Novel,' 2 vols., 8vo, London, 1865, new edition, 1867; three volumes of reprints from the 'Pall Mall Gazette,' entitled respectively, 'Hunting Sketches,' 8vo, London, 1865, 'Travelling Sketches,' 8vo, London, 1866, and 'Clergymen of the Church of England,' 8vo, London, 1866; 'The Belton Estate. A Novel,' 3 vols., 8vo, London, 1866, fourth edition, 1867; 'The last Chronicle of Barset,' 8vo, London, 1867; 'The Claverings,' 2 vols., 8vo, London, 1867; 'Lotta Schmidt, and other Stories,' 8vo, London, 1867, a volume of reprints from 'Good Words,' and other magazines; 'British Sports and Pastimes, 1868,' 8vo, London, 1868, reprinted from 'Saint Pauls Magazine'; 'He knew he was right,' 2 vols., 8vo, London, 1869; 'An Editor's Tales,' 8vo, London, 1870; 'The Vicar of Bullhampton,' 8vo, London, 1870; 'Ralph the Heir,' 3 vols., 8vo, London, 1871; and 'Sir Harry Hotspur of Humblethwaite,' 8vo, London, 1871. Mr. Trollope is the reputed editor and real author of a work which he contributed to the early numbers of the 'Cornhill,' and which was republished with the title of 'The Struggles of Brown, Jones, and Robinson. By [George Robinson] one of the Firm. Edited by Anthony Trollope,' 8vo, London, 1870; and he has contributed the third volume, being 'The Commentaries of Cæsar,' 8vo, London, 1870, to a series entitled 'Ancient Classics for English Readers,' which is at present in course of publication under the editorship of Mr. William Lucas Collins. A story entitled 'The Eustace Diamonds,' which Mr. Trollope is at present contributing to the 'Fortnightly Review,' reached its thirty-second chapter in the number of that periodical for February, 1872; and another, called 'The Golden Lion of Grandpere,' the issue of which was commenced in January, 1872, in 'Good Words,' is announced to be "continued throughout the year."

TROLLOPE, FRANCES [E. C. vol. vi. col. 173]. Mrs. Trollope died in her eighty-fifth year, on Tuesday, October 6th, 1863, at Florence, which had for many years been the residence of her son, the subject of the following notice.

TROLLOPE, THOMAS ADOLPHUS, a novelist and historian, who was born on the 29th of April, 1810, and was educated successively at Winchester and at Magdalen Hall, Oxford, where he took his B.A. degree on his twenty-fifth birthday, 1835. His first two serious literary ventures were made under the auspices of his mother, and were entitled respectively 'A Summer in Brittany. Edited by Frances Trollope,' 2 vols., 8vo, London, 1840; and 'A Summer in Western France. Edited,' &c., 2 vols., 8vo, London, 1841. His residence at Florence quickened his interest in the fortunes of that city, and in Italian questions generally, with which a considerable proportion of his works is conversant. These, in addition to numerous contributions to periodical literature, include 'Impressions of a Wanderer in Italy, Switzerland, France and Spain,' 8vo, London, 1850; 'The Girlhood of Catherine de' Medici,' 8vo, London, 1856; 'Tuscany in 1849 and in 1859,' 8vo, London, 1859; 'A Decade of Italian Women,' 2 vols., 8vo, London, 1859; 'Filippo Strozzi. A History of the last Days of the old Italian Liberty,' 8vo, London, 1860; 'La Beata,' 2 vols., 8vo, London, 1861; 'Paul the Pope [i.e., Paul V.] and Paul the Friar [i.e., Pietro Sarpi]. A Story of an Interdict,' 8vo, London, 1861; 'A Lenten Journey in Umbria and the Marches,' 8vo, London, 1862; 'Marietta. A Novel,' 2 vols., 8vo, London, 1862; 'Giulio Malatesta. A Novel,' 3 vols., 8vo, London, 1863; 'Beppo the Conscript. A Novel,' 2 vols., 8vo, London, 1864; 'Lindisfarne Chase. A Novel,' 3 vols., 8vo, London, 1864; 'Gemma. A Novel,' 3 vols., 8vo, London, 1866, a story of Italian private life of the present day; 'Artingale Castle. A Novel,' 3 vols., 8vo, London, 1867; 'The Dream Numbers. A Novel,' 3 vols., 8vo, London, 1868; 'Leonora Casoloni. A Novel,' 2 vols., 8vo, London, 1868; and 'The Garstangs of Garstang Grange,' 3 vols., 8vo, London, 1869. Mr. Trollope's principal work is of a more serious character than

BIOG. DIV.—SUP.

any of the above-mentioned, being 'A History of the Commonwealth of Florence, from the Earliest Independence of the Commune to the Fall of the Republic in 1531,' 4 vols., 8vo, London, 1865, of which the first two volumes are devoted to the rise of the Florentine Commonwealth, whilst the third and fourth volumes are devoted to its fall. The wife of Mr. Trollope has produced an English translation of Niccolini's 'Arnoldo di Brescia,' and has likewise contributed to the 'Athenæum' some valuable papers on the social aspects of political movements in Italy.

TROPLONG, RAYMOND THÉODORE, a French legist and judge, was born at St. Gaudens, Haute Garonne, October 8th, 1795. Admitted to the bar as an advocate in 1816, he entered the bureau of the Prefect of Châteauroux; became substitute in the tribunal of Sartène, and in 1819 in that of Corse. At Bastia, in 1820 and subsequent years, he acted as substitute for the procureur-général of the Cour Royale; and afterwards practised as avocat-général at Bastia and at Nancy. His leisure was spent in the study of Roman and old French law. In 1822 he was appointed president of the Chamber of Nancy; and in 1835 councillor of the Court of Cassation. The Institute admitted him a member of the Academy of Moral Sciences, in the section of legislation, in 1840. In 1846 he was made a peer of France; in 1848 succeeded Baron Séguier as premier-président of the Court of Paris; and in 1852 became premier-président of the Court of Cassation. Among the offices which he filled were those of vice-president and president of the Senate, and president of the Council General of l'Éure. He drew up, for the Prince President Louis Napoleon, in 1852, a report on the establishment of the Empire; and his high reputation, together with his dictum that the empire "avait tous les avantages de la république sans en avoir les inconvénients," tended to strengthen the newly-elected Emperor. In 1858, M. Troplong became one of the members of the Imperial Council. He wrote largely in the 'Gazette des Tribunaux,' the 'Revue de Législation,' the 'Revue Européenne,' and other journals. Among his separately-published works were 'Du Pouvoir de l'État sur l'enseignement,' 8vo, Paris, 1844; 'De l'Influence du Christianisme sur le droit Civil des Romains,' 8vo, Paris, 1843, 3rd edition, 1868; 'De la Propriété,' 8vo, Paris, 1848, forming part of the 'Petits Traités' published by the Academy of Moral and Political Sciences. But his great work is 'Le Droit Civil expliqué, suivant l'ordre des Articles du Code depuis et y compris le titre de la Vente.' It is a continuation of Toullier's 'Commentaire du Code Civil,' and was published in sections at various dates extending over a period of more than twenty years. Other separate treatises are, 'Des Privilèges et Hypothèques,' 4 vols., 8vo, Paris, 1833, 5th edition, 1850; 'La Vente,' 2 vols., 8vo, Paris, 1834, 4th edition, 1851; 'La Prescription,' 2 vols., 1835, 3rd edition, 1841; 'L'Echange et la Louage,' 1840; 'Le Contrat de Société,' 1843; 'Le Prêt,' 1854; 'Le Mandat,' 'Le Dépôt,' 'Le Contrainement,' 'La Contrainte par Corps,' 1845—1847; 'Le Contrat de Mariage,' 4 vols., 1850; 'Les Donations,' 1855; 'La Transcription hypothécaire,' 1856. The whole series, extending to 28 volumes, is distinguished by much erudition and an animated style of treatment. M. Troplong died on the 2nd of March, 1869.

TROYON, CONSTANT, an eminent French animal and landscape painter, was born at Sèvres in 1813. For a time he was engaged in the royal manufactory of porcelain, and then entered the atelier of M. Riocreux. He afterwards worked much from nature in the rural districts of France, and visited Holland to study the methods of the animal painters of the Netherlands. M. Troyon soon occupied a prominent place in the Salon; and for some years before his death he ranked as the first painter of his class in France, and one of the very first in Europe. Animals in motion usually form the principal objects in his pictures, but not to the exclusion of the landscape. His pictures are mostly of rather large size; painted in a broad masculine manner; true to nature, but with marked individuality; and he was fond of striking effects of light and shadow, early morning scenes, &c. His large picture of 'Animals going forth to labour,' (from the Luxembourg), which was in the International Exhibition of 1862, and the 'Return of the Flock,' in the International Exhibition of 1871, were good examples of his style. Several of his pictures have been engraved. M. Troyon received three first-class medals; and was made knight of the Legion of Honour in 1849. He died March 20th, 1865.

TSCHUDI, JOHANN JAKOB VON [E. C. vol. vi. col. 1028].

TUCKERMAN, HENRY THEODORE, American writer,

was born at Boston, Massachusetts, April 20th, 1813. Between 1833 and 1839, he travelled much in Europe, and as the result of his travels published his first volume, 'The Italian Sketch Book,' 8vo, Boston, 1835, consisting of descriptive and historical sketches, essays, and tales. In 1845 he settled at New York, and thenceforth passed the usual uneventful life of a literary man. He was a voluminous contributor to the 'North American Review,' the 'Christian Examiner,' the 'Democratic Review,' 'Graham's Magazine,' the 'Southern Literary Messenger,' 'Putnam's Monthly,' the 'Atlantic Monthly,' and other periodicals. Among his separately published works are 'Sicily: a Pilgrimage,' 8vo, Boston, 1839, the fruit of his second voyage to Europe; 'Rambles and Reveries,' 12mo, Boston, 1841; 'The Spirit of Poetry,' 1843; 'Thoughts on the Poets,' 8vo, New York, 1846, third edition, 1848; 'Artist Life: a Sketch of American Painters,' 8vo, New York, 1847; 'Characteristics of Literature,' 8vo, New York, 1849; 'Over the Mountains on the Western Prairies,' 1852; 'Book of the Artists,' 1869. He died at New York on the 17th of December, 1871.

* TULASNE, LOUIS RENÉ, cryptogamist, was born at Azay-le-Rideau, in the Indre and Loire department, September 12, 1815. His botanical career commenced as the assistant of Auguste de St. Hilaire, in his work on the flora of Brazil. In 1842, he was appointed assistant naturalist in the Museum of Natural History at Paris. He has written many articles and works, amongst which may be mentioned 'Études d'embryogénie végétale,' 8vo, Paris, 1849; 'Mémoire pour servir à l'histoire anatomique et physiologique des lichens,' 8vo, Paris, 1852; and 'Podostemacearum monographia,' 4to, 1852. He is, however, best known on account of the works which he has written in conjunction with his brother, CHARLES TULASNE (born 1816), such as 'Fungi hypogæi,' folio, 1851; and 'Selecta fungorum carpologia,' folio, 3 vols. 1861—65. The last mentioned work is one of the most remarkable and valuable of the more recent additions to botanical literature. It contains a large amount of evidence on a subject to which the MM. Tulasne have devoted some of the best years of their lives, viz., the polymorphism of mushrooms.

* TULLOCH, VERY REV. JOHN, D.D., a divine of the Church of Scotland, and Principal of St. Mary's College, St. Andrews, was born in the year 1823, at Tippermuir, near Perth, of which parish his father was the minister. After having gone through the curriculum of arts at the United College of St. Leonard and St. Salvador, at St. Andrew's, where he matriculated in 1837, he became a student of theology at St. Mary's College, in the same University. He received a licence to preach the gospel in 1844, and in the following year was ordained to a charge in Dundee, which he vacated in 1849, on being presented to the parish of Kettins, near Cupar Angus. He had already attracted attention for his intelligence of the philosophical and theological questions of the day, and during a sojourn in Germany had become acquainted with the speculations of its thinkers, when he was called, in 1854, to the office he at present holds, in succession to the late Principal Haldane. Upon the occasion of this appointment he received the degree of D.D.; and his "inaugural lecture" was published with the title of 'Theological Tendencies of the Age,' 8vo, Edinburgh, 1855. In the last-named year he was awarded the second of the Burdett Prizes—of the value of 600*l.*, the first of which, value 1800*l.*, was presented to the Rev. Robert Anchor Thompson—which are periodically distributed to the writers of the best essays on the "Being and Attributes of God." Dr. Tulloch's essay was published with the title of 'Theism: the Witness of Reason and Nature to the All-Wise and Beneficent Creator,' 8vo, Edinburgh and London, 1856. Besides this, the most important of his works, Principal Tulloch has produced various sermons, lectures, and historical and biographical studies; including a sermon on the 'True Doctrine of Christian Unity,' which forms part of the second series of the 'Sacred Oratory' department of 'British Eloquence of the Nineteenth Century'; 'The Theological Faculties of the Scottish Universities in Connection with University Reform. A Letter to Her Majesty's University Commissioners for Scotland,' 8vo, Edinburgh, 1858; 'Leaders of the Reformation, Luther, Calvin, Latimer, Knox,' 8vo, Edinburgh, 1859, second edition, 1860; 'English Puritanism and its Leaders, Cromwell, Milton, Baxter, Bunyan,' 8vo, Edinburgh and London, 1861; 'Beginning Life. Chapters for Young Men on Religion, Study, and Business,' 8vo, Edinburgh, 1862, sixth thousand, London and Edinburgh, 1863; 'The Christ of the Gospel and the Christ of Modern Criticism: Lectures on M. Renan's "Vie de Jésus,"' 8vo, London and Cambridge, 1864; and 'Theological Contro-

versy: or, the Function of Debate in Theology. An Address delivered to the Members of the Theological Society in the University of Edinburgh. With an Appendix on the Study of the Confession of Faith,' 8vo, Edinburgh and London, fourth edition, 1866. Principal Tulloch has been a considerable contributor to the 'British Quarterly' and the 'North British Reviews'; and more recently has furnished a number of articles to the 'Contemporary Review,' of which the most remarkable are 'Rationalism,' March, 1866; 'Studies in the History of Religious Thought in England: I. John Hales; II. William Chillingworth,' which appeared respectively in June and September, 1867; 'Jeremy Taylor and the Liberty of Prophecy,' in two parts, October and December, 1868; 'Edward Stillingfleet and his "Irenicum,"' February, 1869; and 'The English and Scotch Churches,' December, 1871.

TURA, COSIMO, called IL COSMÈ, an early Italian painter, was a native of Ferrara, where he was born in the early part of the 15th century, and learned painting of Galasso Galassi. His most noted works were a series of frescoes, painted for the Duke Ercole of Ferrara, in the new palace of Scandiana. In process of time the palace was neglected, and is now used as a tobacco manufactory, and the frescoes were destroyed or covered over, but seven of them were recovered by Sig. A. Campagnoni in 1840. The chief works of Cosimo, who has been termed the Mantegna of Ferrara, are an 'Annunciation' and a 'St. George,' formerly in the cathedral, but now in the Costabili collection, Ferrara. A portrait of the poet Tito Strozzi is preserved in the Strozzi Palace. Outside Ferrara his works are rare. The National Gallery, however, contains three good specimens from his pencil: No. 772, 'The Madonna and Child Enthroned,' the centre of a large altar-piece from the Frizzoni collection, Bergamo; No. 773, 'St. Jerome in the Wilderness,' a very fine picture, formerly in the Certosa and afterwards in the Costabili collection, Ferrara; and No. 590, 'Christ placed in the Tomb,' from the Lombardi-Baldi collection. The Berlin Museum also possesses a carefully painted 'Madonna and Saints,' by Cosimo Tura. The exact date of Cosimo's death is unknown. He was alive in February, 1481.

TURGENEV, NIKOLAI IVANOVICH [E. C. vol. vi. col. 197]. The author of 'Russia and the Russians,' died at his residence near Paris, on the 10th of November, 1871, at the age of eighty-one years, the last forty-six of which had been spent in exile.

TURNER, CHARLES, an eminent mezzotint engraver, was born at Woodstock, Oxfordshire, in 1773. When a youth he obtained employment in the establishment of Alderman Boydell. In 1795 he became a student of the Royal Academy. As an engraver he distinguished himself by breadth of handling, richness of tone, and brilliancy. His large plate of the 'Shipwreck,' after J. M. W. Turner, is, of its class, the finest mezzotint ever published. He also engraved, in an admirable manner, several of the prints in our great landscape painter's 'Liber Studiorum,' and in his 'Rivers of England.' Among his landscapes after other masters, the best perhaps is Callcott's 'Water Mill.' Among the most noted of his portraits are the Marlborough Family, after Reynolds; James Watt, after Lawrence; and Sir Francis Chantrey, after Raeburn. During his later years Mr. Turner drew a great many portraits in chalk, and painted a few in oil. Mr. Turner was engraver in ordinary to George IV.; in 1828 he was elected associate engraver of the Royal Academy, and he died August 1st, 1857.

TURNER, DAWSON [E. C. vol. vi. col. 201], botanist, died June 20, 1858, at the age of 83.

TURRITA, FRA GIACOMO (or JACOPO) DA, one of the most famous of the early Italian workers in mosaic, was a native of Siena, and is sometimes called Fra Mino da Turrita, from a place in that territory. The year of his birth is not known, nor whether he studied under one of the Byzantine mosaicists then much employed in Italy, or in the Roman School, which at the beginning of the thirteenth century was celebrated. All that is really known is that in the mosaics he executed in the tribune of S. Giovanni at Florence, which bear the date 1225, he was considered to have surpassed all his predecessors, and from that time he was placed at the head of the living workers in mosaic. He introduced many technical improvements into the art, helped to rid it of some of its archaic conventionalisms, and altogether brought it to a higher stage than it had previously occupied. At Rome he executed mosaics in the chapel of the high altar at S. Giovanni Laterano; others in Santa Maria Maggiore, which appear still fresh, but have been "restored" and altered; and he commenced some important works in the

apse of the Duomo at Pisa, but died about 1289, before they were far advanced. Da Turrita was a monk of the order of Saint Francis.

TURTON, WILLIAM, M.D. [E. C. vol. vi. col. 209], conchologist, died at Bideford, December 28, 1835, aged 73.

TYLER, JOHN, tenth President of the United States of America, was born in Charles City, Virginia, March the 29th, 1790. He graduated at William and Mary College in 1807; was admitted to the bar in 1809, and attained extensive practice in the law. In 1811 he entered the State Legislature of Virginia, where he joined the party at that time known as the Democrats. Elected to Congress in 1816, he upheld the Democratic or States' rights policy on all occasions. He resigned his seat in 1819, was elected Governor of Virginia in 1825, and entered the Senate of the United States in 1827. During nine years he was actively concerned in the political antagonisms of Adams, Jackson, Calhoun, and Clay, on various questions of the time. He was unconnected with politics from 1836 to 1840; but in the last-named year was elected Vice-President of the United States. The death of President Harrison in 1841 led to the immediate accession of Mr. Tyler, who signalled his elevation by placing Whigs in office in substitution of Democrats. His change in party allegiance, together with an evasive policy in reference to a Bank Act, brought upon him the animosity of both parties in turn; many of his ministers quitted him, but he acquired the support of Calhoun, at that time an influential Southern Democrat. Tyler signed the Webster-Ashburton treaty with England in 1842, settling the north-eastern boundary question; and effected the annexation of Texas in 1845. At the close of his presidency, he had lost the confidence both of Democrats and Whigs, and abandoned an intention of seeking re-election. Selected in 1861 as a member of the Border or Neutral Committee, to endeavour to heal the breach between North and South, he joined the South on the failure of that attempt, and was a member of the Confederate Congress at Richmond at the time of his death, which took place January 17th, 1862.

* TYNDALL, JOHN, son of John Tyndall, of Leighlin Bridge, in Ireland, was born about the year 1820. He is descended from an English family, named Tyndall, or Tyndale, some of whom emigrated to Ireland in the 17th century. From his father he derived a love of independence, together with a taste for controversial divinity as set forth by Tyndale, Chillingworth, Tillotson, and others, whose works were, in fact, the first text books for the future natural philosopher. From a tutor named Conwill young Tyndall acquired a taste for mathematical knowledge, and in 1839, when he left school, he joined in the capacity of "civil assistant" a division of the ordnance survey stationed in his native place, under the command of Lieutenant George Wynne. Here he quickly acquired a practical knowledge of every part of the survey, and became, in turn, draughtsman, computer, surveyor, and trigonometrical observer. While stationed at Cork, he worked at mapping in the same room with a very able man, Mr. Lawrence Ivers, who was looked up to with great respect by his younger colleagues. Noticing the work and conduct of Tyndall, Mr. Ivers asked him how he employed his leisure time. "You have five hours a day at your own disposal," he said, "and these ought to be devoted to systematic study." Next morning Tyndall was at his books before five o'clock, and for twelve years afterwards he never swerved from the practice.

In 1844, seeing no prospect before him, Mr. Tyndall had nearly decided on going to America. But his friends opposed the notion; and engineering employment offering in the same year, he was induced to give up the idea. For three years he was engaged in railway work. Caution, accuracy, and perseverance distinguished his labours, and his resolution in overcoming difficulties is described as having been remarkable.

In 1847, Mr. Tyndall gave up this laborious life for the more retired one of a teacher in Queenwood College, Hampshire, where Frankland was resident chemist. During part of this period, Tyndall renounced a portion of his small income in order to get additional time for study; but his longing for better opportunities made him still dissatisfied with his position, and led to another change. In 1848, Frankland and Tyndall left England

together, and, attracted by the fame of Professor Bunsen, repaired to Marburg in Hesse Cassel. Bunsen was celebrated not only as a chemist, but as a natural philosopher. Tyndall attended his lectures, and worked hard in his laboratory. He also attended the lectures of the physicists, Gerling and Knoblauch, and the mathematical lectures of Stegmann. His first scientific paper was a mathematical essay on "screw surfaces," being his inaugural dissertation on taking his degree. He was first made known to the world of science by a paper published in the 'Philosophical Magazine' in 1850, being the result of an investigation conducted in conjunction with Professor Knoblauch, and entitled 'Magneto-Optic Properties of Crystals, and the relation of Magnetism and Diamagnetism to Molecular Arrangement.'

In 1851 Mr. Tyndall went to Berlin, and continued his studies in the laboratory of Professor Magnus. In the same year, however, we find him in London, making the acquaintance of Faraday, and by the originality of his investigations leading the late President of the Royal Society to request that he would offer himself for election into that body, which election followed in 1852. In the February of the following year, Tyndall was invited to give one of the Friday-evening lectures at the Royal Institution, and in June, 1853, he was unanimously elected to the appointment which he still holds, of Professor of Natural Philosophy at that institution. Various memoirs now appeared in the 'Philosophical Transactions' and the 'Philosophical Magazine,' embodying the results of investigations, during the first three years of his residence in London, on the Influence of Crystalline and Organic Structure upon Magnetism, and on the Polarity of the Diamagnetic Force. In 1856 Switzerland was visited in company with Professor Huxley, for the express purpose of scientific investigation, and joint papers were published by the two friends on the structure and motion of glaciers. It may be added that in 1852 Huxley and Tyndall applied for two vacant chairs in the University of Toronto, but they were not considered eligible. Other perilous journeys and investigations in company with Mr. Hirst were described in 1860 in Mr. Tyndall's work, 'On the Glaciers of the Alps.' In 1871 he published his 'Hours of Exercise in the Alps,' which is for the most part a record of bodily action.

It is difficult to write an impartial biographical notice of a man who, in the prime of life, is actively engaged in professional work before the public eye. Tyndall is a remarkable example of combined cerebral and muscular activity. To be the best physicist and the best climber might well satisfy the ambition of any man living in a highly intellectual age, when, at the same time, all classes admire, appreciate, and practise bodily exercise. Not only is Tyndall distinguished by the variety, extent, and originality of his researches, whether in heat, light, sound, electricity, and other branches of physical and physico-chemical science, but he is also a lecturer whose highest praise it is to be worthy to succeed Faraday at the Royal Institution. He has also produced two of the best popular books that have ever been written—the one on Heat, the other on Sound; and by popular we do not mean that the difficult and therefore most essential parts of the subject are omitted, but that they are fairly grappled with and made intelligible to the non-mathematical reader. He has published a small book entitled 'Faraday as a Discoverer;' a volume on 'Diamagnetism;' and in 1871 a collection of essays, entitled 'Fragments of Science.' His experimental researches on radiant heat in reference to the molecular constitution of bodies, which have occupied him during the last twelve years, are recorded in the Transactions of the Royal Society.

In all Tyndall's labours, whether as a writer or a lecturer, there is an unmistakable personality, so that you cannot forget the man in his work. This characteristic, which some might consider a defect, is really due to the thorough earnestness of his character. There is no play about his work. That which makes the subject easy to the reader or the listener is the result of very hard work on the part of the writer or lecturer, and this anxiety always to do his best has the effect of bringing the man himself prominently before us. A scientific paper or lecture by Tyndall implies an amount of previous careful elaboration that those only are aware of who have the privilege of going behind the scenes.

U

UDEN, LUCAS VAN [VANUDEN, LUCAS, E. C. vol. vi. col. 283].

UGOLINO DELLA GHERARDESCA, COUNT, famous especially for the cruel catastrophe of his death, was, for some time in the latter half of the thirteenth century, at the head of the faction of the Guelphs in Pisa, of which, by a series of traitorous practices, he made himself master. His deadly adversary was Ruggieri Ubaldini, Archbishop of Pisa, and one of the principal chiefs of the Ghibelines in that city; one of whose nephews Count Ugolino had slain. By various acts of unscrupulous finesse and policy, Ubaldini had in revenge brought about the ruin of Ugolino; whom, with the assistance and complicity of the people of Pisa, he imprisoned, March, 1288, in company with his two nephews and two sons in a tower of which the key, after their confinement on a scanty supply of provisions had lasted for some time, was thrown into the river Arno. The miserable inmates of the tower were left to perish of hunger; and Archbishop Ubaldini, and the people of Pisa, became, on account of their cruelty, obnoxious to universal odium and execration. The fate of Count Ugolino was not so much resented, for there was a conviction that by a series of treacheries he had deserved it; but for the more youthful and innocent members of his family, the pity was as profound as it was wide-spread. The catastrophe of the tower, involving the slowly fatal misery of Ugolino and his kinamen, has been frequently the subject of the sculptor and the painter; and Dante, in *Cantos xxxii. and xxxiii.* of his '*Inferno*,' has given a horrible vividness to this episode in the civil dissensions of Pisa. Count Ugolino, eternally tormented by hunger, eternally devours Ruggieri; and the loathsome picture which the poet calls up is that of "two spirits frozen in one hole, one of which gnaws the skull of the other."

UHLAND, LUDWIG [E. C. vol. vi. col. 225]. This popular German poet died on the 13th of November, 1862, aged 75. His songs have been often reprinted. His prose writings and posthumous remains appeared under the title of '*Schriften zur Geschichte der Dichtung und Sage*,' 3 vols. 8vo, Stuttgart, 1865, &c. Among the biographical and critical accounts of him may be mentioned—Pfeiffer's '*Ludwig Uhland*,' Vienna, 1862; Jahn's '*Ludwig Uhland*,' Bonn, 1863; and Mayer's '*Ludwig Uhland, seine Freunde und Zeitgenossen*,' 2 vols. Stuttgart, 1867.

UMBREIT, FRIEDRICH WILHELM KARL [E. C. vol. vi. col. 231], died at Heidelberg, on the 26th of April, 1860, a fortnight after the completion of his 65th year.

UNGER, FRANZ-JOSEPH ANDREAS NICHOLAUS, botanist, was born at Leitschach, in Styria, November 30, 1800. He was educated at Vienna and Prague. At first he studied for the law, but abandoning this, he devoted himself to medicine and natural history. In 1823 he incurred the suspicion of his government, and was imprisoned. During his confinement he was able to pursue his studies, amongst which botany seems to have attracted most of his attention, owing to his being permitted to make occasional visits to the Botanic Gardens of Vienna. In 1825 he was released; and, after graduating in medicine in 1827, he practised at Stockerau, near Vienna, and at Kitzbühel, in the Tyrol, until about 1833, when he succeeded Heyne as professor of botany at the Joanneum, at Gratz. In 1849 he went to Vienna as successor to Endlicher in the chair of botany in the University of that city. In 1866 he resigned that post, and retired to Gratz. He died at Gratz, February, 13, 1870. He wrote many

botanical works and papers, amongst which the most important are those relating to fossil plants, which were [his special study. He described a large number of species and genera, whose structure he ascertained by means of microscopical examination of their sections. He was eminently successful in bringing before the mind the general character of the floras of past periods, and in showing how the later growths seem to be an evolution of those which preceded them. His principal works are a paper on the zoospores of *Vaucheria*, published in 1827; '*Grundzüge der Anatomie und Physiologie der Pflanzen*,' 8vo, Vienna, 1846; '*Genera et species plantarum fossilium*,' 8vo, 1850; '*Die Urwelt in ihren verschiedenen Bildungs perioden*, 4to and folio, 1847, new edition, 1858; '*Anatomie und physiologie der Pflanzen*,' 8vo, Pest and Leipzig, 1855; '*Die versunkene Insel Atlantis*, 8vo,' Vienna, 1860; '*Wissenschaftliche Ergebnisse einer Reise in Griechenland und in den Ionischer Inseln*,' 8vo, Vienna, 1862; '*Die Insel Cypern*,' 8vo, Vienna, 1865, in conjunction with Kotschy; '*Die fossile Flora von Kumi in Euböa*,' Vienna, 1867, &c. He continued working to the time of his death, his last paper, published in 1871, being on the fragments of plants found in some of the very old Egyptian bricks.

UPCOTT, WILLIAM, antiquary and collector, born in London, June, 1779, was the illegitimate son of Ozias Humphrey, R.A. He was apprenticed to Wright, the bookseller, of Piccadilly, and was afterwards for six years assistant to Evans, of Pall Mall, where he attracted the notice and acquired the confidence of several well-known book collectors. On the foundation, in 1806, of the London Institution, in the Old Jewry, Porson was appointed chief, and Upcott sub-librarian. Here, while Porson directed his attention to the formation of a classical library, Upcott applied himself to the acquisition of a collection of works on British topography, in which he was eminently successful. Upcott's occupation at the London Institution left him little time for original research, but he published an exceedingly useful '*Bibliographical account of Works relating to English Topography*,' 3 vols. 8vo, 1818. He made extensive collections for a history of Oxfordshire, but as far as we know did nothing toward the writing such a work. Upcott was a great collector, especially of autographs, of which he eventually possessed an unrivalled store, and on all matters connected with which he came to be regarded as the leading authority of his time. Upcott was the discoverer of Evelyn's '*Memoirs, Diary, and Correspondence*,' the first edition of which he saw through the press, and he edited Evelyn's '*Miscellaneous Writings*.' The '*State Letters, &c.*, of Henry Hyde, second Earl of Clarendon,' &c., 1820, and the '*Diary and Correspondence of Ralph Thoresby*,' 4 vols. 8vo, 1830—32, were printed in a great measure from his collection. A '*Catalogue of Original Letters, Manuscripts, and State Papers, collected by William Upcott, of Islington*,' was "privately printed," 4to, London, 1836. The treasures described in this catalogue were dispersed after Upcott's death, but many were purchased for the British Museum. Upcott died at his residence, Autograph Cottage, Islington, in September, 1845.

UWINS, THOMAS, R.A. [E. C. vol. vi. col. 243]. This pleasing painter and estimable man died at his residence, Staines, on the 26th of August, 1857, aged 75. An ill-digested, tedious, and unsatisfactory '*Memoir of Thomas Uwins, R.A., late Keeper of the Royal Galleries, &c.*, by Mrs. Uwins,' in which all that is of value relating to the painter is thrown into the Appendix, appeared in 2 vols. 8vo in 1858.

V

* VACHEROT, ÉTIENNE, a French philosopher, was born at Langres, on the 29th of July, 1809, and in 1827 became a student at the École Normale; and after completing his course at this institution, devoted some years to the teaching of philo-

sophy in the provinces. He was admitted *agréé de philosophie* in 1833; and in 1836 took the degree of *docteur-es-lettres*, on which occasion his French and Latin theses—subsequently published—were entitled respectively, '*Théorie des premiers Prin-*

cipes suivant Aristote,' and 'De Rationis Auctoritate, tum in Re, tum secundum Anselmum, considerata,' 8vo, Paris, 1836. In the year following his admission to the doctorate he was selected by M. Cousin to fill the office of director of studies at the École Normale; and during the year 1839 supplied the place of M. Cousin in the philosophy chair of the Sorbonne. On the 28th of April, 1844, he received the decoration of the Legion of Honour. M. Vacherot carried off the prize of the French Institute for his 'Histoire critique de l'École d'Alexandrie,' &c., 3 vols. 8vo, Paris, 1846—51, the independence and freedom of which rendered it obnoxious to the clergy, and especially to the Abbé Gratry, at that time the chaplain of the École Normale, who died on the 5th of February, 1872, a few weeks after he had recanted the opposition which he had at first resolutely and eloquently shown to the doctrine of papal infallibility. The severance of M. Vacherot's connection with the École Normale put an end to the controversy, which had produced from the Abbé Gratry an 'Étude sur la sophistique contemporaine,' and a reply from M. Vacherot, entitled 'Lettre à M. Abbé Gratry,' &c., 1851. The 'Histoire de l'École d'Alexandrie' was also attacked in M. Veuillot's journal, 'L'Univers,' and the charges brought against it were answered by the author in a 'Réponse au Journal de l'Univers,' &c., 8vo, Paris, 1851. M. Vacherot became involved in a more serious quarrel of a political nature by the publication of his celebrated work, entitled 'La Démocratie,' 8vo, Paris, 1859, &c., "deuxième édition, suivie du Texte des Jugemens rendus en France contre l'Ouvrage," 8vo, Brussels, 1860, which entailed upon the author a legal prosecution, and a condemnation to a year's imprisonment. This sentence was reduced upon appeal to one of three months' imprisonment; but even this modified judgment carried with it the deprivation of political rights, to which M. Vacherot was not restored until March, 1870. His advocate, also, M. Emile Ollivier, was suspended for three months from his professional functions on account of the manner in which he had opened the defence of M. Vacherot. The latter became, in 1865, a candidate for the membership of the Académie des Sciences Morales et Politiques; but found his claim, otherwise a perfectly valid one, objected to by the authorities on account of his heretical doctrines. Three years afterwards, however, March 7th, 1868, he was elected to the Académie, in succession to M. Victor Cousin.

The principal works of M. Vacherot, besides those which have been already mentioned, are 'La Métaphysique et la Science: ou, Principes de Métaphysique positive,' 2 vols. 8vo, Paris, 1858, second edition, 3 vols. 18mo, 1863; 'Essais de Philosophie Critique,' 8vo, Paris, 1864; and 'La Religion,' 8vo, Paris, 1869, in which he endeavours, in accordance with psychological rules, to discover the origin of the religious sentiment. M. Vacherot has acted as the editor of some of Cousin's philosophical Lectures; and in addition to articles furnished to M. Franck's 'Dictionnaire des Sciences philosophiques,' and other publications, contributed, in 1855, to the journal, 'L'Avenir,' a remarkable series of essays on the Spirit of the Nineteenth Century. An article from his pen, which appeared in the 'Revue des Deux Mondes,' for July, 1868, with the title of 'La Théologie Catholique en France,' attracted considerable attention.

VALENCIENNES, ACHILLE, naturalist, was born at Paris, August 9, 1794. In 1830 he became professor of anatomy at the École Normale, and professor of zoology at the Museum of Natural History. He was the companion of Humboldt and Cuvier in some of their labours; but his reputation is chiefly based on his 'Histoire Naturelle des Poissons,' 11 vols. 8vo, 1829—1849. Cuvier helped him in the earlier volumes. Valenciennes furnished the volume on 'Ichthyologie' in Du Petit Thouar's account of his voyage round the world; and wrote numerous articles, most of which relate to marine zoology. He was a member of the Academy of Sciences and of many other scientific institutions. He died April 14, 1866.

VALLANCEY, GENERAL CHARLES, F.R.S., a once famous writer on the Irish language and antiquities, though English by birth was of French descent. Born in 1720 he entered the army young; attained a captaincy in the 12th regiment, and afterwards joined the royal corps of engineers, of which he obtained the colonelcy in 1782. About 1770 he was engaged on a military survey of Ireland, which occupied him for several years, and obtained the warm approbation of the government. It was in the course of this survey that his attention was strongly directed to Irish antiquities, the study of which became a more and more absorbing pursuit. He published 'A Grammar of the Ibero-Celtic or Irish Language; with an Essay on

the Celtic Language, showing the importance of the Ibero,' 4to, Dublin, 1773, new edition with additions, 8vo, 1782; and in 1774 commenced the issue of his 'Collectanea de Rebus Hibernicis, published from original MSS., and illustrated by Notes and Remarks.' The first number of this comprehensive work contained a description of the county of Westmeath, written by Sir Henry Piers in 1682, and was accompanied with a large map; the second number comprised a letter from Sir John Davis to the Earl of Salisbury; Archbishop Usher's 'Original and first institution of Corbes, Erenach and Termon Lands;' and an account of two ancient instruments lately discovered. Tanistry, the Brehon Laws, and other important subjects completed the first volume. There was then a delay of publication till 1781 when it was renewed, but the continuation consisted at first mainly, and soon exclusively, of original dissertations, in which the language and antiquities were treated with great research and fulness, but Vallancey's peculiar views and system of interpretation now formed an increasingly prominent feature. The publication of the Collectanea was continued till 1812, the last part issued being 'An Account of the Ancient Stone Amphitheatre lately discovered in the County of Kerry, with Fragments of Irish History relating thereto.' The Collectanea forms seven quarto volumes, but the seventh volume was to have contained further matter which was never printed; and the sixth volume is extremely scarce, the greater part of the impression having been accidentally destroyed. Vallancey was a man of great learning, research, and industry, and a most enthusiastic investigator and admirer of Irish antiquities; but he believed that the old inhabitants of Ireland were "descended from the Pheno-Scythians of the East," and he sought in the Sanskrit, Persian, Chaldee, Hebrew, and Arabic, to find corroboration of his notion. Yet though visionary in his theories he was patient in collecting, and his works are a quarry of valuable materials for the Irish antiquary; and he gave a great impulse to the study of the archæology and language of Ireland. Vallancey wrote 'The Ancient History of Ireland proved from the Sanscrit Books of the Bramins of India,' for private circulation; a 'Prospectus of a Dictionary of the Language of the Aire Coti, or Ancient Irish, compared with the language of the Cuti, or Ancient Persians,' &c., and various papers in the Transactions of the Irish Academy, but most of his dissertations were given in the Collectanea. Vallancey's labours were perhaps over-estimated in his own day, they are certainly underrated now. He was created LL.D.; elected fellow of the Royal Society in 1784; he was also a fellow of the Society of Antiquaries and other learned bodies. He was made a lieutenant-general in 1798 and a general in 1803. He died in Dublin on the 8th of August, 1812, aged 92.

* VAMBERY, ARMINIUS, traveller and philologist, was born at Duna Szerdahely, on the Danube, in 1832. He was educated at Pesth. In 1848 he took part in the revolution of the Hungarians against Austria, and when it was suppressed he went to Constantinople. Here he gave himself up to a study of the Oriental languages, which led to a strong desire to make personal researches in Central Asia, with a view to determining whence the Magyar stock originated. Knowing how difficult it would be for him to traverse the country of the Turkoman tribes as a European, he resolved to attempt to pass through it in the disguise of a mendicant dervish. In order to qualify himself to assume this character, he was obliged to study their ways, and undergo a long training. In 1863 he joined a party of dervishes or hadjis at Teheran, who were about to return to their homes in Turkistan. A general outline of his travels is given under ASIA, E. C. S. GEOG. DIV. col. 85. His position precluded him from making instrumental observations for geographical purposes, but it was highly favourable to his obtaining an insight into the inner life and languages of the peoples he visited; and much information will be found on these subjects in his book of 'Travels in Central Asia, being the Account of a Journey from Teheran across the Turkoman Desert on the Eastern shore of the Caspian to Khiva, Bokhara, and Samarcand . . . performed in 1863,' 8vo, London, 1864. Editions in Hungarian and German were published in the same year. He has written a few other works on Persia and Central Asia. Soon after his return from his travels he was appointed to the post he now holds, that of the professorship of oriental languages in the university of Pesth.

VANDER CAPPELLE, or CAPELLA, JAN, Dutch marine painter, was a native of Amsterdam, to the freedom of which city he was admitted on the occasion of his marriage in 1653. Nothing further is known of his life. He painted mostly calm

sea or river pieces in a clear, transparent, unaffected style, and in his way, is one of the best painters of his time and country. His works, however, seem to have been little appreciated, even in Amsterdam. The best of them are in English collections, such as those of the Duke of Bedford, Lord Overstone, Messrs. Ellis, Baring, Wright, &c. The National Gallery possesses a small but pleasing 'Coast Scene,' (No. 865) by him, which formed a part of the Peel collection. He etched a few plates.

VANDER GOES, HUGO [GOES, HUGO VANDER, E. C. vol. iii. col. 134].

VANDERGUCHT, MICHAEL, a celebrated engraver, was born in Antwerp about 1660. He learned engraving of one of the Boutats, and settled in London, where he met with much success. His best known plates are the portraits to Clarendon; several portraits after Kneller, including Atterbury, Congreve, and Addison; Sir Josiah Child, after Riley; and Savage, after Foster—this last being esteemed his best print. He also engraved many anatomical plates. He died in London, October the 16th, 1725.—His son and pupil,

GERARD VANDERGUCHT, born about 1695, was much employed by the booksellers in engraving portraits; and in his later years kept a print shop, and dealt in pictures. He died in 1776.—A second son, JOHN, also learned engraving of his father, and etched several plates, among others Thornhill's pictures in the dome of St. Paul's.

VANDER HOEVEN, JAN [HOEVEN, JAN VAN DER, E. C. S., col. 678].

VANDER MEIRE, GERARD, and known also as GEERAERT, or GERARD, VAN GHENT, an early Flemish painter was born at Ghent, probably about 1425. He belonged to a family of painters and is said to have been a pupil of Hubert Van Eyck, but this the ascertained dates of his life contradict. He painted, however, much in Hubert's manner, and may possibly have been a scholar of Jan Van Eyck, or worked in his school. He painted a portrait of a nun of St. Clara, Collette, as early as 1447; was received a master of the Guild of Painters of Ghent in 1452, and he was chosen one of the two jurats of that body in 1474. The time of his death is unknown. From the circumstance of many of his pictures having been destroyed in the religious troubles of the 16th century, his works, though much esteemed, are comparatively rare. His most famous work is the great altar piece, a triptych, representing in the centre Christ on the Cross, with the Brazen Serpent on one wing and Moses striking the Rock on the other, which he painted for the chapel of St. John at St. Bavon, where it still is. The Antwerp Museum contains seven paintings attributed to him (Nos. 23-29) of which six were brought from the church of St. Catherine at Hoogstraeten and are of doubtful authorship. Our National Gallery has a fine portrait by him, 'A Count of Henegau, with his patron Saint, Ambrose' (No. 264), and a small portrait (No. 696) of Marco Barbarigo, painted whilst Barbarigo held the post of Venetian consul in London, 1449.

VANDER NEER, AART, the most famous of the Dutch painters of moonlit landscapes, is noticed as ARNOLD VANDER NEER [E. C. vol. iv. col. 449]. The dates there given of his birth, 1619, and death, 1683, are those of the best authorities, but it has been lately stated that he was living in Rotterdam as late as 1691. The National Gallery has a fine landscape by him (No. 152), with figures and cattle painted by A. Cuypp.

VARNHAGEN VON ENSE, KARL AUGUST [E. C. vol. vi. col. 290]. This celebrated politician and writer died suddenly at Berlin, October 10th, 1858. Since his death many volumes of his letters, diaries, &c., have been published, and excited much discussion on account of the freedom with which many notable persons and institutions have been discussed in them. The chief of these works are two additional volumes of his memoirs, 'Denkwürdigkeiten,' vols. 8 and 9, Leipzig, 1859; 'Briefe von Alexander von Humboldt an Varnhagen aus den Jahre 1827—58,' which has passed through five or six editions in Germany and has been partially translated into English; 'Tagebücher von F. von Gentz,' Leipzig, 1861; 'Tagebücher,' vols. 1 to 6, Leipzig, 1861—62, vols. 7 and 8, Zürich, 1862—65; 'Blätter aus der preussische Geschichte,' 3 vols., Leipzig, 1868.

* VAUGHAN, THE WORSHIPFUL CHARLES JOHN, D.D., Master of the Temple, and a scholar and divine of considerable reputation, was born about the year 1817, and was educated successively at Rugby and at Trinity College, Cambridge. His university career was one of much distinction. He became Craven university scholar in 1836; and in the same year, and again in 1837, carried off the Porson Prize, offered to "such undergraduates as shall make the best translation of

a proposed passage in Shakspeare, Ben Jonson, Massinger, or Beaumont and Fletcher, into Greek verse." He was Sir William Browne's medallist for the Greek ode, and for epigrams, in 1837; in which year he took the Members' Prize for a Latin essay. In 1838, the year of his graduation as B.A., when he was senior classic, he was one of the chancellor's classical medallists, the other being Lord Lyttelton, who was also of Trinity, and with whom he was bracketed equal. He became a fellow of his college in 1839, and proceeded M.A. in 1841; in which year he was admitted to deacon's and to priest's orders. In October, 1841, he became vicar of St. Martin's, Leicester, a parish of which his father had formerly been the incumbent; and continued to discharge the duties of this office until his appointment, December, 1844, to the head mastership of Harrow School. He was created D.D. in 1845; and in February, 1851, was nominated a chaplain in ordinary to the Queen. He resigned the head mastership of Harrow about the close of the year 1859, having distinguished his occupancy of that office by the zeal and success of his academical activity, and the fervour and affection of his pulpit ministrations to his youthful charge. Many of his discourses of this period have been published in volumes entitled respectively, 'Sermons preached in the Chapel of Harrow School,' 8vo, London, 1847, second series, 8vo, London, 1853; 'Nine Sermons for Advent, Easter, &c., preached for the most part in the Chapel of Harrow School,' 8vo, London, 1849; and 'Memorials of Harrow Sundays: a Selection of Sermons preached in the Chapel of Harrow School,' 8vo, London, 1859. On the 4th of July, 1861, being speech-day at Harrow, Lord Palmerston laid the first stone of a new library intended to commemorate the head mastership of Dr. Vaughan, who, early in 1860, refused the bishopric of Rochester when it was offered for his acceptance, preferring to fulfil the humbler, but still important, office of vicar of Doncaster, upon which he entered almost immediately afterwards, assuming also the duties of rural dean and of chancellor of York Cathedral. He performed the functions of a parish clergyman in the most affectionate and exemplary manner, calling in to his aid a number of young men who helped to give efficiency to his labours at the same time that they acquired instruction and experience for their guidance in their own future pastoral avocations. His local discourses of this epoch may be represented by two volumes, entitled respectively, 'Lessons of Life and Godliness: a Selection of Sermons preached in the Parish Church of Doncaster,' 8vo, Cambridge, 1862, and 'Last Words in the Parish Church of Doncaster,' 8vo, London, 1869, second edition, 1870. After a residence of nearly ten years at Doncaster, Dr. Vaughan accepted the mastership of the Temple, in London, to which he was gazetted on the 16th of July, 1869, in succession to Dr. Robinson. In this new sphere he has carried out those plans of extraordinary activity which have elsewhere distinguished him, especially in the holding, during term, of early morning classes for the critical reading of the Greek Testament, and of special services in the Temple Church during Lent, the first of which for the present season he inaugurated with a sermon, on Ash-Wednesday, February the 14th, 1872.

Dr. Vaughan's literary activity has been almost exclusively of a professional kind. Besides various exegetical works on St. Paul's Epistles to the Romans, Philippians, &c., and on the Revelation of St. John, he has published a large number of occasional sermons, discourses, and addresses. They include 'The Personality of the Tempter, and other Sermons,' 8vo, London and Chiswick, 1851; 'Independence and Submission: the Use and Abuse of Each. Two Addresses,' &c., 8vo, 1851, &c.; 'Passages from the Life of Cicero,' 8vo, 1854, a lecture delivered in Exeter Hall before the Young Men's Christian Association; 'A Discourse on Church Discipline and the Burial Service,' 8vo, 1854; 'Epiphany, Lent, and Easter: a Selection of Sermons preached in St. Michael's Church, Chester-square,' 8vo, Cambridge and London, 1860, second edition, enlarged, 1861; 'Revision of the Liturgy: Five Sermons. (1) Absolution; (2) Regeneration; (3) Athanasian Creed; (4) Burial Service; (5) Holy Orders. With an Introduction,' 8vo, Cambridge, 1860; 'The Church of the First Days: Lectures on the Acts of the Apostles,' 12mo, Cambridge and London, 1864, &c.; 'Life's Work and God's Discipline: Three Sermons,' &c., 8vo, Cambridge and London, 1865; 'Characteristics of Christ's Teaching drawn from the Sermon on the Mount,' 8vo, London, 1866; 'Christ the Light of the World,' 8vo, London and New York, 1866; 'Twelve Discourses on Subjects connected with the Liturgy and Worship of the Church of England,' 8vo, London and Cambridge, 1867; 'Foes of Faith: Four Sermons

[(1) Unreality ; (2) Indolence ; (3) Irreverence ; (4) Inconsistency] preached before the University of Cambridge in November, 1868, 8vo, London and Cambridge, 1868 ; ' An Inaugural Sermon [2 Cor. xi. 16] preached in the Church of the Temple, November 7, 1869, 8vo, London, 1869 ; ' Lessons on the Cross and Passion : Six Lectures delivered in Hereford Cathedral, &c., 8vo, London and Cambridge, 1869 ; ' Earnest Words for Earnest Men ; or, the Gospel and the Pilgrimage, 8vo, London and Bungay, 1870 ; and ' Christ Satisfying the Instincts of Humanity : Eight Lectures delivered in the Temple Church, 8vo, London and Cambridge, 1870.

VAUGHAN, REV. ROBERT, D.D. [E. C. vol. vi. col. 301] died on the 14th of June, 1868, in his 73rd year.

VECHTE, ANTOINE, a distinguished French designer and sculptor in metal, was born at Vire-sous-Bil (Côte d'Or), about the beginning of the present century. M. Vechte's designs and works in the precious metals early attracted attention. In 1847 he was awarded a medal of the third class, sculpture, and in the following year one of the first class, he at the same time receiving the decoration of the Legion of Honour. To M. Vechte is due the credit, if not of having revived the almost forgotten art of repoussé in goldsmiths' work, at least of having first shown its great artistic capabilities. To the English public M. Vechte was first formally introduced at the Great Exhibition of 1851, where the Titan vase, and other things by him, attracted much attention. Since then his works have been in as great request here as in France. The International Exhibition of 1862 contained a magnificent collection of his recent productions. Among them were his Milton vase of silver repoussé, the property of the French government ; the great shield in silver and iron, damascened with gold, the subjects dedicated to Shakspeare, Milton, and Newton ; the Centaur and Lapithæ, and the Marine vases, the property of her Majesty ; the Titan vase ; the Ellesmere vase ; and the large and costly vase-candelabrum mounted with engraved gems, made for the Marquis of Breadalbane, and now at Longton. These and subsequent works were of oxidised silver repoussé, and their boldness of relief, accuracy of outline, modelling, surface, and finish, served no less to illustrate M. Vechte's ingenuity and dexterity in manipulation than his artistic power and feeling, the design being often of the most elaborate character, and seemingly made to court difficulties arising from the material. He died in October, 1868.

VENN, REV. HENRY, a zealous and earnest preacher of the Evangelical party in the Church of England, son of the Rev. Richard Venn, Rector of St. Antholin's, London, who represented a line of clerical ancestors from the time of the Reformation, was born at Barnes, in Surrey, in the year 1725. He received his preparatory education at two schools, the latter of which was at Bristol ; and in 1742 was admitted of Jesus College, Cambridge. He took his B.A. degree in 1745, and proceeded M.A. in 1749 ; and, as there was no vacancy in his own college, was unanimously elected by the fellows of Queen's to be one of their society. He vacated his fellowship on the occasion of his marriage in 1757, being at that time settled at Clapham, to the curacy of which he had been elected by the inhabitants. Here he contracted an intimate friendship with Mr. Thornton and Sir John Barnard ; memoirs of whom he afterwards published. In taking leave of his friends at Clapham, on his promotion to the large and valuable vicarage of Huddersfield, Yorkshire, he dedicated to them a volume of ' Sermons, 8vo, London, 1759, in token of the favour and affection with which he had been treated. He found the parish of Huddersfield in a state of " worse than Egyptian darkness ; " and his labours became so indefatigable and so successful that he " might be called the apostle of the district." He made frequent excursions for the purpose of preaching the Gospel in various parts of the kingdom, and was in active connection and co-operation with the Wesleys, Romaine, Madan, Fletcher of Madeley, and Whitefield, and especially with Lady Huntingdon, with whom he had become acquainted at the house of his friend Mr. Thornton. Speaking of his labours, in a letter which he addressed to Lady Huntingdon, December 10th, 1762, he said :—" My congregations are daily increasing. Besides my stated labours on the Lord's day, I generally preach eight or ten sermons in the week in the distant parts of the parish, where many come to hear who will not come to the church. I find my outdoor preaching much owned of the Lord." Mr. Venn's zeal, however, carried him beyond his strength. By his earnest and frequent preaching he had in ten years materially injured his constitution ; so that he was incapable of officiating longer in so exhausting a parish. He therefore accepted, in 1770, the rectory of Yelling, in Hunting-

donsire, a crown living which was offered to him by his friend the Lord Chief Baron Smythe, at that time one of the Commissioners of the Great Seal. Whilst at Yelling, as at Huddersfield, he continued his faithful administrations in the Countess of Huntingdon's chapels, in private houses, in barns, and occasionally in the open air, till some unpleasant litigations, about the year 1782, obliged him and other benefited clergymen to withdraw their services from the Countess. But he still continued the " irregular " practice of preaching in barns and other unconsecrated places in the vicinity of Yelling, and at Surrey and Orange Street Chapels, in London, up to the year 1790, and within a very short time of his death, when inability, and not disinclination, obliged him to cease from labour. He continued at Yelling until December, 1796, when his increasing infirmities compelled him to remove to Clapham, where he died on the 24th of June, 1797.

Mr. Venn was the author of several occasional ' Sermons, ' and of a volume entitled, ' Mistakes in Religion Exposed : in an Essay on the Prophecy of Zacharias, 8vo, London, 1774, 12mo, 1807, &c. But his principal work, and one which has been often reprinted in England, Ireland, and America, is his ' Complete Duty of Man : or, a System of doctrinal and practical Christianity. To which are added Forms of Prayer, ' &c., 8vo, London, 1763, eleventh edition, 12mo, London, 1820, &c., and other editions at Bath and Edinburgh.

VENTURA DI RALICIA, G. D. GIOACCHINO, an Italian orator and divine, and the member of a noble family, was born on the 8th of December, 1792, at Palermo ; where, at the age of fifteen, he entered the Society of Jesus, in whose House he subsequently became professor of rhetoric. Upon the suppression of the Houses of the Jesuits under King Murat of Naples, he joined the order of Preaching Friars, and presently became distinguished for his pulpit eloquence. He devoted himself with considerable ardour to the study of religion and philosophy ; and laid the foundation of his literary reputation by the production of an apology for the regular clergy, entitled ' La Causa dei Regolari al Tribunale del buon Senso, ' and more especially by the articles he contributed to the ' Enciclopedia Ecclesiastica. ' He was appointed censor of the press and member of the royal council of public instruction of Naples, the law barring the state employment of Sicilians out of Sicily notwithstanding ; and introduced and encouraged the popularisation of that new catholic philosophy which had arisen in France, where the Abbé Lamennais was its principal exponent. His funeral oration on the death of Pope Pius VII. (1823), which went through probably more than twenty editions, gained for him the sobriquet of " the Italian Bossuet. " In 1824, having been promoted in his order, he fixed his residence at Rome ; and in the same year, after having been made a member of the commission of censure, was further appointed successively to the chair of public ecclesiastical law, and to the chaplaincy of the University. Already in the possession of substantial favours, the future opened up to him a career of higher promotion, when for some reason not clearly ascertained, but probably based upon the envy of his adversaries, he resigned his professorship. His influence, however, with the Holy See did not diminish ; and Pope Leo XII. employed him in the conduct of various difficult negotiations of a political and ecclesiastical nature. His relations with the Abbé Lamennais gave rise to so much misrepresentation, that at length Ventura quitted the pontifical court, and devoted himself, for ten or eleven years, to preaching and to theological study, and literary production. During this period he was a frequent preacher at St. Peter's ; and delivered a series of Epiphany discourses for eleven consecutive seasons, in the church of St. Andrea della Valle. The accession of Pius IX. in 1846, opened up new prospects to the reforming aspirations of Ventura ; who, in the van of the moderate liberal party, and enjoying immense popularity and influence, for some time trusted to succeed in bringing about a permanent alliance between liberty and the Church. In 1848 he accepted, with the Pope's permission, the post of minister plenipotentiary and commissioner extraordinary of the insurrectionary Sicilian Government, at the Court of Rome ; and about the same time published various political pamphlets, two of which were entitled respectively, ' La Questione Sicula nel 1848 sciolta nel vero Interesse della Sicilia, Napoli, e dell' Italia, ' 8vo, Rome, 1848, 16mo, Palermo, 1848, &c. ; ' Sopra una Camera di Pari nello Stato Pontificio Opinione, ' 8vo, Rome, 1848, 18mo, Naples, 1848, &c. ; and a larger work on the falsehoods of diplomacy, ' Menzogne diplomatiche, ' &c., 8vo, Palermo, 1848, all of which produced a strong interest in the minds of the Italian people. In May, 1848,

Ventura, with other influential persons of his way of thinking, laboured to realise a project for the formation of an Italian Confederation, under the presidency of the Pope; but the scheme failed, as its promoters believed, through the opposition of the Abbé Gioberti and the King of Sardinia. After the flight of the Pope to Gaeta, November 24th, 1848, Ventura remained at Rome, always watching for the opportunity of patriotic action and advice, until the 4th of May, 1849, when he quitted it before the French occupation under General Oudinot; and despairing of being able to benefit his native country, repaired first to Montpellier, where he remained two years, and afterwards to Paris. Whilst at Montpellier he commenced authorship in French with the production of a polemical treatise entitled 'Lettres à un Ministre Protestant,' 12mo, 1849, the object of which was to prove the sojourn of St. Peter at Rome, in opposition to the denial of a minister of Geneva. He also commenced at Montpellier to deliver discourses in the French language; and in 1851 proceeded to Paris, where he presently added by his sermons and his books, to the reputation which had preceded him thither. For several years he attracted large congregations to the churches of the Madeleine and Saint Louis d'Antin; and in 1857 was chosen as Lent preacher at the Tuileries, when he delivered a series of discourses which were afterwards published in an annotated form, and with an introduction, by M. Veuillot, with the title of 'Le Pouvoir Chrétien,' &c., 8vo, Paris, 1858. Ventura died at Versailles on the 2nd of August, 1861; and his remains were conveyed to Rome, where they were buried in the church of his order, and under the pulpit which he had so often occupied.

The most considerable or the most famous of the works of Ventura, besides those already mentioned, are 'Le Bellezze della Fede: ovvero la Felicità di credere in Gesù Cristo e di appartenere alla vera Chiesa,' 3 vols., 8vo, Rome, 1839—42, &c., another edition, 2 vols., 8vo, Bellinzona, 1851, to which a sequel was produced with the title of 'La Madre di Dio Madre degli Uomini,' &c., 2 parts, 8vo, Rome, 1841; 'Discorso Funebre pei Morti di Vienna, recitato il Giorno 27 Novembre, 1848,' 12mo, Rome, 1848, 16mo, Italia, 1849; 'Elogio Funebre di D. O'Connell, recitato pei solenni Funerali celebratigli nei Giorni 28 e 30 Giugno,' &c., 4to, Dublin, 1847, 12mo, Naples, 1848, &c.; 'La Scuola de' Miracoli,' &c., 3 vols., 8vo, Rome, 1850, 2 vols., 8vo, Milan, 1851, &c.; 'Les Femmes de l'Evangile,' 12mo, Paris, 1853, and 'Nouvelles Homélies sur les Femmes de l'Evangile,' 8vo, Paris, 1857, to which was published as a sequel, 'La Femme Catholique,' &c., 2 vols., 8vo, Paris, 1859—60; 'La Tradition et les Semi-Pelagiens de la Philosophie,' &c., 8vo, Paris, 1856, with a sequel entitled 'La Philosophie Chrétienne,' &c., 3 vols., 8vo, Paris, 1861; 'Les Délices de la Piété: Traité sur la Culte de la très-sainte Vierge,' &c., 12mo, Paris, 1860; 'Œuvres Posthumes. Conférences, Sermons, et Homélies,' 8vo, Paris, 1862, otherwise entitled, 'Conférences, Sermons, et Homélies sur les principales Fêtes de l'Année,' 8vo, Paris, 1865.

* VERBOECKHOVEN, EUGÈNE JOSEPH, an eminent Belgian painter, was born at Warneton, West Flanders, June 9th, 1798. M. Verboeckhoven has painted a few portraits, including some of distinguished artists. He has also modelled some figures and reliefs; but those are mere by-play. His true avocation is that of an animal painter, his specialty cattle and sheep, and in this line he has long been regarded as the first in Europe. He has painted a great number of pictures, many of which are of large dimensions, and full of figures; in some instances the animals are the size of life. Cattle-markets and fairs, farm-yards, meadows with sheep and cattle, are frequent subjects of his pencil. After completing, a few years ago, one of the largest and most elaborate of his paintings, 'Cattle leaving a Farm-yard,' M. Verboeckhoven unhappily lost his sight, and he has since of course ceased to paint. He is a knight of the Order of Leopold and of the Legion of Honour, and was long president of the administration of the Museum.—His brother and pupil,

* CHARLES LOUIS VERBOECKHOVEN, born at Warneton, in 1802, also practised at first as an animal painter, but has obtained celebrity chiefly as a marine painter. Examples of his works are in the Antwerp Museum.

VERGNIAUD, PIERRE VICTURNIEN, a leader of the Girondist party in the great French Revolution, was born at Limoges, May 31st, 1753. Having received a good education under a Jesuit teacher, he obtained a scholarship at the Collège du Plessis, Paris. After a brief trial of theology at the Sorbonne, and a probation in a counting-house, both of which proved distasteful to him, he, in 1780, began to study for the bar, at Bor-

deaux; and, in the following year, became bachelor of law, and advocate of parliament. His success at the bar was considerable. He was nominated administrator of the department of Gironde in 1790, member of the Legislative Assembly for the same department in 1791, and at once took part in the stirring politics of the day. Like most of the Girondist deputies, he wavered between monarchism and republicanism. In 1792, when this party came into power, Vergniaud was elected successively vice-president and president of the Assembly. Vergniaud spoke violently against the king in the Assembly, but was one of those who secretly offered to aid him, on condition of the Girondists being allowed to retain office. The king's distrust, the determination of the Jacobins, and the absence of warlike successes, frustrated these schemes. Elected to the Convention, Vergniaud became more violent than before in his speeches; he voted for a republic, although it is known that he would have preferred a representative monarchy. He became secretary of the Convention towards the end of 1792, and was president for a few days in the early part of the following year. The anomalous position in which he had placed himself was shown in the fact that he had to pronounce the sentence of death on the king. He professed to share the opinions of the Convention, over which he presided; but this wavering did not restore him to favour with the excited people. Gasparin openly accused him and two other Girondists, of the secret application to the king in the preceding summer. Vergniaud could not deny it, and did not succeed in justifying himself in the eyes of the Convention. In April, Robespierre gave the signal for a fierce attack; twenty-two Girondists were expelled from the Convention; and being frustrated in a series of counter-manceuvres, Vergniaud and others were taken into custody in June. He was tried for treason on the 25th of October, 1793, before the Revolutionary Tribunal, sentenced to death on the 30th, and executed on the following day. Several years afterwards, by a decree of the Emperor Napoleon I., a statue of Vergniaud was placed on the grand staircase of the Palace of the Senate.

VERNET, ÉMILE JEAN HORACE, known as HORACE VERNET [E. C. vol. vi. col. 323]. This distinguished painter died on the 17th of January, 1863. A month before his death the Emperor, Napoleon III., had conferred upon him the grand cross of the Legion of Honour.

* VERNEUIL, PHILIPPE ÉDOUARD POULLETIER, COMTE DE, geologist and palæontologist, was born at Paris, February 13, 1805. After having served for a time in the office of the Minister of Justice he, in 1836, commenced a series of scientific explorations, in the course of which he visited and examined most parts of Spain, France, Norway, Sweden, and the European portions of the Russian and Turkish kingdoms. He co-operated with Sir R. I. Murchison and Count Keyserling, in the preparation of the well-known geological work, 'Russia in Europe and the Ural Mountains,' to which he contributed the second volume. In conjunction with M. Collomb, he has written several important memoirs on the geology of Spain, of which we may notice the 'Coup d'œil sur la constitution géologique de quelques provinces de l'Espagne,' 4to, Paris, 1853; and the map, the first which showed the geology of the whole peninsula, prepared by him in 1850, of which he and M. Collomb have since issued two or three editions. These maps and memoirs on Spain form the best sketch published of the geology of that country. Verneuil is also the author of the palæontological portion of Tschihatcheff's great work on Asia Minor, published in 1869. He has written numerous other geological papers, is a member of the Academy of Sciences, as well as several other societies, and was president of the Geological Society of France in 1852.

VERNIER, PIERRE, inventor of a mathematical instrument known by his name, was born at Ornans, Franche Comté, in or about the year 1580. From early years he evinced a liking for scientific instruments, which he studied in principle and in construction. He was employed by the Spanish government in various commissions, and on different occasions filled the offices of chatelain or commandant of the castle of Ornans, councillor of state, and director-general of the coinage in Burgundy. In 1631 he published at Brussels, 'La Construction, l'usage, et les propriétés du quadrant nouveau de Mathématiques,' containing among other things, a table of lines, and a method of finding the angles of a triangle when the lengths of the sides are known. But the chief value of the tract (now very scarce), is in the description of a new mode of measuring minute quantities, either linear or angular. This instrument (fully described in VERNIER, E. C., ARTS AND SC. DIV. vol. viii. col. 616), was at first called the *nonius*; but on the suggestion of Lalande towards the close

of the last century, it was named after its inventor, which name has been since retained in usage. Vernier died September 14th, 1637.

VERPLANCK, GULIAN CROMMELIN, an American writer, was born at New York in August, 1786. After graduating at Columbia College in 1801, he commenced the study of the law, was admitted to the bar, and gradually acquired an extensive practice: diversified by occasional visits to Europe. In 1814, he was a candidate for a seat in the New York State Assembly, as a member of the party at that time known as the Malcontents. Thenceforward, politics, law, and literature in turn engaged his attention. In 1820, he was chosen chairman of the Committee on Education in the New York legislature; soon afterward professor of the Evidences of Christianity, in the General Protestant Episcopal Seminary at New York; and from 1825 to 1833 represented New York city in Congress. He was several times member of the Senate in the State Legislature of New York; in 1846 he became president of the Board of Education for that State; and he temporarily or permanently filled various other offices in his native city. Among Mr. Verplanck's published works are the following:—'A Discourse on the Early Friends of America,' delivered before the New York Philosophical Society in 1818, and several times reprinted; 'The State Triumvirate,' with the 'Buckland Bards,' and 'The Epistles of Brevet-Major Pindar Puff,' political satires, 1819; 'Essays on the Nature and Uses of the Various Evidences of Revealed Religion,' 1824; 'Essay on the Doctrine of Contracts: being an Inquiry how Contracts are Affected in Law and Morals by Concealment, Error, or Inadequate Price,' 1825; 'Address on the Law of Literary Property,' delivered at a meeting convened to celebrate the extension of the Copyright Act from twenty-eight to forty-two years, a measure which he assisted in passing through the legislature in 1831; 'The Talisman,' 3 vols. of an Annual, written in conjunction with Messrs. Bryant and Sands, new edition in 1 vol. 1833; 'Discourses and Addresses on Subjects of American History, Art, and Literature,' 1833; Lectures on 'The Rights, Moral Influence, and Use of Liberal Studies,' 1833; oration on 'The Influence of Moral Causes on Opinion, Science, and Literature,' 1834; 'The American Scholar,' a discourse, 1836. He also edited an American edition of Shakspeare, 3 vols. large 8vo, 1844—1847. Nearly all the annual reports of the New York Education Board were drawn up by him, from 1846 onwards; and many of his opinions pronounced in the appeal cases before the Senate, have been published in the American law reports.

VETCH, CAPTAIN JAMES, R.E., was born at Haddington, in Scotland, May 13th, 1789. He entered the Cadet College at Great Marlow, Bucks, in 1804, and the Royal Military Academy at Woolwich, in the following year; assisted in the trigonometrical survey of Berkshire for a few months; received his commission as second lieutenant of Engineers in 1807, and first lieutenant in 1808. From 1810 to 1814 he served in Spain, taking part in the blockade of Cadiz, and in other operations of military engineering. After this, with the rank of captain, he commanded a company of sappers and miners for six years, first at Spike Island, near Cork, afterwards at Chatham. In 1821, on the recommendation of Colonel Colby, he was appointed to the Ordnance Survey, and conducted the operations in the Orkney, Shetland, and Hebrides Islands, with Lieutenants Drummond and Dawson as his assistants. In 1824 Captain Vetch quitted the Royal Engineers, and undertook the control of a group of silver mines in Mexico, comprising the Real del Monte, the Bolenos, and the United Mexican Mines. During eleven years' engagement in this office, his knowledge of engineering enabled him to construct good roads and other public works; while he collected many materials for a map of the country by astronomical, barometrical, and trigonometrical observations. Returning to England in 1835, he was for nearly thirty years engaged in active duties, mostly in the service of the government, undertaking in succession a remarkably diversified list of functions. He was one of the commissioners for settling Irish boundaries; undertook the reclamation of tide-lands and the forming of embankments in Ireland and Scotland; designed a plan of drainage for the city of Leeds, on the invitation of the corporation; aided Sir Henry de la Beche in forming plans for draining Windsor town, castle, park, and forest; prepared for the government a report on the plans submitted by several engineers for the formation of a harbour of refuge at Dover; became consulting engineer to the Admiralty, member of the Harbour Conservancy Board, and afterwards sole conservator of harbours; was

BIOG. DIV.—SUP.

one of the Metropolitan Commissioners of Sewers; proposed a scheme of drainage for Southwark (afterwards adopted with modifications); and, finally, in 1859, was appointed a member of the Royal Commission on Harbours of Refuge. He did not retire from active duties until the 74th year of his age. Among the professional pamphlets which he wrote was 'An Enquiry into the Means of Establishing a Ship Navigation between the Mediterranean and the Red Sea,' 1843; this furnished suggestions which were rendered available in subsequent years in the development of M. Lesseps' Suez Canal. Another related to a plan for an improved water-supply for the metropolis. Captain Vetch belonged to several scientific societies, including the Royal, the Geological, and the Geographical, and contributed papers to their transactions. He died December 7th, 1869.

* VEUILLOT, LOUIS, a French author and journalist, was born in 1813, at Boynes-en-Gatinais, in the department of Loiret; and, having accompanied his father, who was a working cooper, to Paris, in 1818, received or gained sufficient instruction to qualify him at thirteen years old for employment in an attorney's office. In spite of the slenderness of his education, he presently felt the impulse to a literary career; and at nineteen became a contributor to a ministerial journal. He connected himself successively with several provincial newspapers, and as an incidental part of his duties, involved himself in two or three duels, occasioned by the offensive vigour and personality of his style of writing. In 1837 he returned to Paris, and soon afterwards undertook the editorship of 'La Paix,' a doctrinaire journal, in the columns of which he exhibited his constitutional audacity. He was, at this time, an unbeliever and a scoffer at religion; but he returned from Rome, where he had arrived during Holy Week, 1838, and where he was presented to the Pope, the avowed champion of Ultramontane Catholicism. This conversion, which has proved as permanent as it was sudden, was presently signalised by the publication of various works of a devotional and apologetic character, including 'Les Pélerinages de Suisse,' Paris, 1838, eighth edition, 1856; 'Pierre Saintive,' Paris, 1840, a religious romance in the form of letters; 'Le Saint Rosaire médité,' Paris, 1840; 'Rome et Lorette,' Paris, 1841, sixth edition, 1855, being the record of the author's trip to Italy, with an autobiographic introduction; and 'Agnès de Lauvens: ou Mémoires de Sour de Saint-Louis,' Paris, 1842, fifth edition, 2 vols. 12mo, Tours, 1857. Having made the acquaintance of General Bugeaud, he accompanied the latter in the capacity of secretary, to Africa, and afterwards published a work entitled 'Les Français en Algérie. Souvenirs d'un Voyage fait en 1841,' 8vo, Tours, 1845; and upon his return to Paris was appointed to a chief clerkship in the Ministry of the Interior, an office which he vacated after a year and a half, in order to join the staff of 'L'Univers Religieux,' of which he became the principal editor in 1848. In the every-day columns of this paper, the favoured organ of Ultramontanism, M. Veuillot waged war against liberty, reason, science, and progress; and also published some polemical works directed against *universitaires*, philosophers, socialists, and revolutionists, and entitled respectively, 'Les Libres Penseurs,' 12mo, Paris, 1848, second edition, 1850, &c.; 'L'Esclave Vindex,' 12mo, Paris, 1849; 'Le Lendemain de la Victoire,' 12mo, Paris, 1849; 'Petite Philosophie,' comprehending five stories on Christian charity, 12mo, Paris, 1850; 'La Légèrité,' 12mo, Paris, 1852, &c. The bitterness of M. Veuillot's attack upon the bishops for their advocacy of classical learning, brought down upon him the censure of the Archbishop of Paris, against which M. Veuillot repaired to Rome in order to appeal in person. He was exonerated by the Pope; but on account of the whole spirit betrayed in 'L'Univers,' that journal was interdicted in several dioceses, and the reading of it by his clergy was expressly forbidden, in 1853, by M. Dupanloup, Bishop of Orleans. In January, 1860, the manner in which the temporal interests of the Pope were advocated in 'L'Univers,' was so obnoxious as to seem dangerous to the public peace, and directly menacing to the Imperial government, by which it was accordingly suppressed. The practical effect of this sentence was little more than the substitution of 'Le Monde' for 'L'Univers,' as the title of what was in fact the same journal; and the old title itself was restored in April, 1867, when 'L'Univers' resumed its strife with the lukewarm friends, no less than with the secret or open enemies of the Pope, with whose arms it was adorned. M. Veuillot was the special champion of the notorious *Syllabus*, and of the more recent Ecumenical Council, during whose session, December 8th, 1869—July 18th, 1870, he was present at Rome, exercising, so far as was possible to a layman, a vigilant surveillance over its discussions as well as its members.

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The works of M. Veillot, besides those which have been already mentioned, comprise 'L'Honnête Femme,' 2 vols. 12mo, Paris, 1844, first published in 'Le Correspondant,' in 1843; 'Mélanges religieux, historiques, politiques, et littéraires,' 6 vols. 8vo, 1842—56, second series, 6 vols. 8vo, 1856—60; 'Le Droit du Seigneur au Moyen Age,' 8vo, 1854; 'De quelques Erreurs sur la Papauté,' 8vo, 1859; 'Ça et Là,' 2 vols. 16mo, 1860, &c.; 'Historiettes et Fantaisies,' 12mo, 1862; 'Satires,' 12mo, 1863; 'Le Parfum de Rome,' 2 parts, 12mo, 1862, fifth edition, 8vo, 1865; 'Les Odeurs de Paris,' 8vo, and 16mo, 1866, &c.; 'L'Illusion libérale,' second edition, 8vo, 1866; 'A propos de la Guerre,' 8vo, 1866; and 'Pensées de M. Louis Veillot: réunies de tous ses Ouvrages, par l'Abbé J. Charbonel,' 12mo, Paris and Tours, 1868. The pen of M. Veillot is said to have "been in the course of last year (1871) more formidable than ever;" and his recent work 'On the Two Sieges,' 8vo, Paris, 1871, is described by M. Philartès Chasles as "the book of a Catholic Juvenal, caustic, unsparing, admirably unjust, cruelly true, merciless, lawless, epigrammatic, hyperbolic; something between the Prophet Esdras and Martial, between Juvenal, Junius, Churchill and Rabelais."

* VICTOR EMMANUEL I., King of Italy, formerly Victor Emanuel II., of Sardinia. [E. C. vol. vi. col. 346]. During his visit to England in the latter end of 1855, Victor Emmanuel was admitted at Windsor, December 3rd, to the Order of the Garter; and on the 30th of January, 1859, gave his daughter the Princess Clotilde Maria Theresa, of Savoy, in marriage to Prince Napoleon, an alliance which was recognised as identifying the political interests of France more closely with those of Italy, and as being the prelude to the war of Italian independence. In April of the same year, the Emperor of Austria declared war against Sardinia, and Victor Emmanuel placed himself at the head of his troops to defend his invaded territories. The Emperor of the French, from whose co-operation Italy was taught to expect freedom "from the Alps to the Adriatic," followed his army, which had disembarked at Genoa on the 26th of April; and upon his landing at that port on the 12th of May, was received there by the King of Sardinia. A series of brilliant successes, including the victories of Montebello, Magenta, and Solferino, and the hard-won battle of San Martino—where Victor Emmanuel fought in the foremost ranks, and where one in every five of the Piedmontese soldiers was left dead on the field—raised high the hopes of Italian unification, only, however, to be destroyed by the abrupt proposition of an armistice, made by the Emperor of the French to the Emperor of Austria, on the 6th of July. Five days afterwards these two sovereigns met at Villafranca, and on the 12th of July agreed to a peace, the conditions of which were confirmed by the treaty of Zurich, the negotiation of which occupied the Austrian and French envoys from the 8th of August to the 10th of November, when it was signed and concluded. The principal gain resulting from this treaty to the cause of Italian unity and independence was the cession of Lombardy to Sardinia, whilst Venice was still left in the occupation of the Austrians; and for the French co-operation in securing this and other subsequent partial advantages, Victor Emmanuel was called upon to make over to the Emperor the territories of Nice and Savoy, the treaty which sanctioned their transfer being concluded on the 24th of March, 1860. But the national aspirations of the people of Italy outran the calculations of international diplomacy; and Tuscany, Parma, and Modena, impatient of the rule of their own sovereigns, whom they had expelled or deposed, successively declared, August, 1859, in favour of annexation to Sardinia, as representing the idea of a future united Italian kingdom under Victor Emmanuel. On the 3rd of September the Assembly of the Romagna followed the example of the Duchies by the adoption of a resolution expressive of their refusal to live any longer under the temporal dominion of the Pope. The states of Tuscany, Modena, and Parma, were provisionally incorporated; but their rights were reserved by one of the clauses of the treaty of Zurich, which was itself abrogated on the formation of the kingdom of Italy.

The great event of the year 1860 was the conquest of the kingdom of Naples by Garibaldi, who, fettered at nearly every step, especially the earlier ones, by royal proclamations and disavowals, made himself master of the two Sicilies, insular and continental, and condoned his patriotic offence by the splendid offer of his conquests to Victor Emmanuel, whom on his visit to his new dominions, in order to take possession, he saluted as "King of Italy," October 1st, 1860. On the 26th of December, the latter decreed the annexation of the Marches, Umbria, Naples, and Sicily to his dominions; and the title which Garibaldi

had conferred upon him was confirmed on the 17th of March 1861, by the unanimous vote of the Italian Parliament. The new kingdom was immediately recognised by the British Government, and by the Emperor Napoleon on the 23rd of June; and comprised the whole of Italy with the exception of Venice, and so much as was left of the territory of the Pope, who did not fail of energetic protests. "Opportunity," Baron Ricasoli had said, on the opening of the Parliament at Turin, February 18th, 1861, "will open up our way to Venice. In the meantime we think of Rome, which is for Italians not merely a right, but an inexorable necessity."

Interpreting the conduct of Victor Emmanuel with regard to Naples in 1860 as a precedent, Garibaldi believed the King of Italy to be fettered in the accomplishment of his desires after Rome by the French alliance, and did not doubt that the King would willingly accept a conquest which it was not expedient for him to attempt. Accordingly in July, 1862, he proceeded to Catania, in Sicily, for the purpose of raising an army to be directed against Rome; and in spite of a proclamation by King Victor Emmanuel forbidding the enterprise, landed in Calabria, and on the 29th of August was defeated and wounded at Aspromonte, by the royalist troops under Cialdini, who had received orders to "crush, destroy, and annihilate" him. A large number of deserters from the Piedmontese army, who were found in the ranks of General Garibaldi, were shot, whilst the remainder of the expeditionary force were finally admitted, after a substantial term of imprisonment, to the benefit of an amnesty.

Victor Emmanuel was one of the first to accept the suggestion for a Congress of the European Powers which was made, but without practical result, in November, 1863, by the Emperor of the French; with whom, in September, 1864, he concluded a convention which stipulated, on condition of the Papal Government being at that time in a position of self-defence, and of non-interference by the King of Italy, that the evacuation of Rome by the French troops should take place in two years after the settlement of the convention. It was also arranged that Florence should be adopted as the capital of the kingdom; a measure which, although it was the occasion of some discontent and disturbances at Turin, was affirmed by a law passed by the Italian Parliament on the 12th of December, 1864. The King made a formal entry into his new capital on the 1st of March, 1865; and on the 11th of May following, the court was transferred to Florence. On the 27th of March, 1866, the king of Italy concluded an alliance, offensive and defensive, with Prussia, in opposition to Austria, against which power he declared war on the 20th of June, two days after Prussia had taken the same step. The gain to Italy of the short, sharp, and decisive campaign which culminated on the 3rd of July in the Prussian victory of Sadowa, was the long-coveted Venetian territory, which Victor Emmanuel received, October 19th, from Austria at the hands of the Emperor of the French, to whom it had been transferred on the 4th of July, and who claimed to have saved Vienna from the most imminent hostile occupation. On the 7th of November, Victor Emmanuel made his triumphal entry into Venice, three days after the decree which declared its annexation to his dominions. Rome still remained isolated from the rest of Italy, and Garibaldi, whose patriotic impatience had led him to protest against the convention of September, 1864, in pursuance of the terms of which the French troops had evacuated the Eternal City in December, 1866, invaded the Papal territory, and thus brought about a renewal of the French occupation on the 30th of October, 1867, and his own complete defeat at Mentana on the 4th of November, after which, on the 25th of the same month, he was deported to his own island of Caprera, and placed under surveillance.

On the 8th of September, 1870, four days after the deposition of the Emperor of the French, Victor Emmanuel addressed a letter to the Pope, announcing that he was compelled to assume the responsibility of maintaining order in the Peninsula, and the security of the Holy See, and undertaking that his Government and his forces would restrict themselves absolutely to a conservative and tutelary action on behalf of the rights of the Roman people, which would be easily reconcilable with the inviolability of the Sovereign Pontiff and the spiritual authority of his chair. The Pope, who had previously refused to acknowledge the kingdom of Italy, protested against the meditated occupation; and having solicited the intervention of the King of Prussia to stay the execution of the project, received from that sovereign a refusal to disturb or endanger the friendly relations in which he stood to the King of Italy, on account of a question with which the interests of Prussia were not

concerned. The Italian troops accordingly entered Rome on the 20th of September, after a formal resistance from the Pope's soldiers, who had received orders to yield to violence when violence should be offered, and did not prolong the defence of the city after a slight breach had been made in the walls, through which General Cadorna proceeded to make an entrance. A plebiscite of the Papal dominions, taken early in October, resulted in an almost unanimous vote for the incorporation of Rome and its dependencies with the kingdom of Italy. Even the inhabitants of the Leonine city voted for the annexation, which was carried into effect by a royal decree on the 9th of October, and by the arrival, two days after, of General della Marmora as Lieutenant-Governor of the Roman provinces. [Pius IX., E. C. S. col. 997.] At the opening of the Italian Parliament at Florence on the 5th of December, Victor Emmanuel claimed to have "fulfilled his promises, and to have crowned the enterprise commenced twenty-three years before by his magnanimous father." "Italy," the king said, "is free and united henceforth, and depends upon herself for achieving greatness and happiness. We entered Rome by our national right, and shall remain there, keeping the promises solemnly made to ourselves of freedom to the Church and the independence of the Holy See in its spiritual ministry and its relations with Catholicity." The Government further undertook that, whether the Pope determined to continue his residence in the city, or not, his sovereignty should be guaranteed, as well as all the honours and privileges to which he was entitled. In the face of difficulties which opposed the immediate transfer of the capital to Rome, it was decided, at a meeting of the Italian Parliament at Florence on the 23rd of December, that the transfer should be postponed for six months, and should be carried into effect on the 1st day of July following.

On Christmas-Day, 1870, Prince Amadeus, Duke of Aosta, second son of Victor Emmanuel, left Florence for Spezzia and Madrid, in order to assume the crown of Spain; and on the same day the completion of the Mont Cenis tunnel was announced, the inauguration of which was celebrated with much ceremony and rejoicing in September, 1871—the crowning material glory of a reign which, in spite of chronic financial difficulties, has been mindful of industrial and commercial development, as it has of social, educational, ecclesiastical, legislative, and administrative reforms. On Sunday, the 2nd of July, 1871, the King of Italy paid a three days' visit to Rome, to which he had some months previously made a hurried and incidental one, for the purpose of taking formal possession, and of acknowledging it thenceforth as the head-quarters of the Government, from which the royal decrees would in future be issued, and where the ministers were left installed in their new offices. On the occasion of a longer visit to his new capital, where he arrived on the 21st of November, the King was received by Prince Humbert, the Ministers, the Members of the Municipality, and the National Guard, whilst the city was decorated with flags, and immense and enthusiastic crowds thronged the way to the Palace. On the 27th of November, the Italian Parliament was opened in Rome with a speech from the throne, in which, after expressions of pleasure and congratulation, the King renewed his obligations of faithfulness to those principles of liberty and order which had regenerated Italy, and to which he looked for the secret of strength and a reconciliation between the Church and the State. Having recognised the absolute independence of the spiritual authority, he was certain that Rome, as the capital of Italy, would continue to be the peaceful and respected seat of the Pontificate. The bills which would be laid before Parliament to settle the future position of the ecclesiastical corporations would be in harmony with Liberal principles: they would relate only to bodies and landed properties subject to the law, leaving untouched those religious institutions which have a share in the government of the Universal Church. Now that Italy was constituted, it was necessary to devote attention to rendering her prosperous by restoring her finances; and although the King's most ardent wishes were for the maintenance of peace, and nothing led him to fear that it would be disturbed, he claimed a long and searching study for the renewal of the national armaments, and the works for the defence of the national territory. The King proceeded to enumerate various bills concerning the internal administration, and to express a hope that the accomplishment of the national unity would, as one of its results, render party struggles less fierce. He rejoiced at seeing the population giving proofs of love of work; and said that the economical movement must be encouraged, scientific and technical education must be extended, and fresh means of communication and outlets for commerce must be pro-

vided. "The tunnelling of Mont Cenis," the speech went on to say, "is completed and that of St. Gothard is about to be undertaken. Those enterprises will facilitate and increase the friendly relations which already unite us with other countries, and will render more fruitful the legitimate emulation of work and civilisation." At the same time that the ceremony of opening the Italian Parliament was taking place with words of pacification at Monte Citorio, the Pope received three several deputations in his audience chamber at the Vatican, in answer to whose loyal addresses he scouted the idea of the conciliation of which the King was at that moment professing to cherish a hope, and protested that "none could be possible between Jesus and Belial, between light and darkness, between truth and falsehood." The Holy Father further expressed his unshaken faith in the destinies of a Church "accustomed to triumph on Golgotha," and his readiness to "give his life rather than yield to the devices of iniquity." The triumphant royal speech of November 27th, was followed on the 12th of December by a more cheerful financial statement from Signor Sella than had hitherto been submitted to the notice of an Italian Parliament; by whom it was received with strong marks of favour and approbation.

On the last day of the old year, the King of Italy received the members of the diplomatic body resident in Rome, when the United States' minister offered his Majesty the customary congratulations in the name of the other foreign ministers; and on New Year's Day, 1872, the king held a reception of the Ministers, Parliamentary deputations, the great officers of State, the military and municipal authorities, and other deputations. Returning thanks for the congratulations which were offered, he expressed a hope that the concord between the great representative bodies of the people and the state, which essentially contributed to the accomplishment of national unity, would be always maintained.

* VICTORIA ALEXANDRINA, QUEEN. We continue the chronological table, given in E. C. vol. vi. col. 348—57, to the present time.

1857. August 28th, Parliament was prorogued by commission, and the royal speech referred to the peaceful state of Europe then existing, the delay in fulfilling the stipulations of the Treaty of Paris, the barbarities inflicted on her Majesty's subjects in India, the redemption of the Sound dues, and other acts passed during the session. On the 24th of September, a royal proclamation was issued commanding a solemn fast on the 7th of October, in consideration of "the grievous mutiny and disturbances which have broken out in India." November 16th, the Siamese ambassadors were received at Windsor Castle by the Queen, when, in accordance with Siamese court etiquette they approached the royal throne in an attitude between crouching and crawling, and pushed their presents before them as they advanced. On the 3rd of December the Queen opened Parliament in person, the early date being rendered expedient by the failure of certain joint-stock banks and of some commercial firms, which had produced so much distrust as to lead to the authorisation by ministers of a temporary suspension of the Bank Charter Act.

1858. January 24th, took place the marriage of the Princess Royal and Prince Frederick William of Prussia, the ceremony being performed at the Chapel Royal, St. James's, by the Archbishop of Canterbury, in presence of the Queen, the princes and princesses of the two royal households, and a brilliant gathering of invited guests; and on the 10th of August her Majesty and the Prince Consort embarked at Gravesend on a visit to their daughter, the Princess Frederick William of Prussia. June 15th, the Queen assisted at the opening of Aston Park, near Birmingham, where she was received with immense enthusiasm. On her journey to Scotland, her Majesty halted at Leeds, September 6th, to open the new Town Hall. November 1st, the Governor-General of India issued a proclamation from Allahabad, announcing that henceforth all acts of the Government of India would be done in the name of the Queen alone; and on the 5th of November, the funeral car of the Emperor Napoleon I. was presented to France by her Majesty. On the 20th of December the final suppression of the Indian mutiny was announced, the campaign being at an end, so that there was no longer even the vestige of rebellion in the province of Oude; whilst the "last remnant of the mutineers and insurgents had been hopelessly driven across the mountains which form a barrier between the kingdom of Nepal and her Majesty's empire of Hindustan."

1859. January 18th, a warrant under the royal sign-manual was published in the 'London Gazette,' commanding the discontinuance of the special prayers offered up on January 30th,

May 29th, and November 5th. On the 29th of January her Majesty publicly inaugurated Wellington College, the result of a general subscription in commemoration of the "great Duke," after whom it was named; and on the 3rd of February the Queen opened Parliament in person. On the 18th of April the Queen in Council ordered the Archbishop of Canterbury to prepare a form of prayer and thanksgiving for the constant and signal success obtained by the troops in India. April 19th, Parliament was prorogued by commission, and on the 23rd the official notice of its dissolution, as well as writs for the new elections, appeared in the 'Gazette'; and on the 7th of June the new Parliament was opened by the Queen in person, who, in her speech from the throne, announced the policy of a strict neutrality in reference to the war in Italy, the renewal of diplomatic intercourse with Naples, animadverting also upon the increase of the navy, and parliamentary reform. June 17th, the Earl of Derby officially announced the resignation of his Ministry, which, on the 26th of February, 1858, had followed the administration of Lord Palmerston, by whom he was succeeded on the 18th of June, 1859, after the Queen had made an offer of the Premiership to Earl Granville, who became President of the Council in the Palmerston administration.

1860. January 24th, the Queen opened Parliament in person; and alluded particularly in her speech to the treaty of commerce between France and England which had been signed at Paris on the 23rd, and the ratifications of which were exchanged on the 4th of February. March 7th, her Majesty held a levée at St. James's Palace, for the purpose of receiving the officers of the newly-formed volunteer rifle corps, when about 2,500 attended, representing an effective force of 70,000 men. On the 4th of June the Queen wrote to her "good friend," President Buchanan, accepting on behalf of the Prince of Wales, the invitation sent by the President for the Prince to extend as far as Washington the visit he contemplated making to Canada. August 7th, the Queen reviewed her northern army of volunteers in the park adjoining Holyrood Palace, Edinburgh, when a total of 20,522 men of all arms, of whom about 18,000 belonged to Scottish corps, appeared on the ground. December 2nd, her Majesty paid the first visit, since her succession, to Oxford, on the occasion of the Prince of Wales quitting the university.

1861. February 5th, the third session of the sixth Parliament of Queen Victoria was opened by her Majesty in person; who, on the 16th of March, sustained a severe loss by the death of her mother, the Duchess of Kent, upon which addresses of condolence were presented by both Houses of Parliament, and various other corporate bodies throughout the kingdom. Parliament was prorogued by commission on the 6th of August, when the Queen's speech referred to the more important of the measures which had received the royal assent during the session. On the 14th of August was signed in London the treaty between her Majesty and the Grand Duke of Hesse, for the marriage of the Princess Alice Maud Mary with Prince Frederick William Louis of Hesse; and on the 21st of the same month, the Queen, accompanied by the Prince Consort, the Prince of Wales, and Prince Alfred, arrived at Kingston on the third royal visit to Ireland, which comprised a visit to the Curragh on the 24th and to Killybeg on the 26th and 27th. November 1st, her Majesty held, at Windsor Castle, the first investiture of the Most Exalted Order of the Star of India. December 14th, the Prince Consort died, to the great grief of the Queen, who from that time nearly to the present has led a life of comparatively unbroken seclusion, devolving court duties, to a great extent, on the Prince of Wales and other members of the Royal Family. The whole country broke forth into sorrow and expressions of condolence; and has rivalled the Queen herself in its desire to do honour, by monuments and memorials, to the departed Prince. The funeral of the Prince took place on the 23rd of December, in St. George's Chapel, Windsor, but his remains were subsequently removed to the costly mausoleum erected for their reception by her Majesty at Frogmore.

1862. January 23rd, the sympathy of the royal widow was powerfully elicited for the poor women who had been widowed by the great calamity at Hartley Colliery, near Newcastle-on-Tyne. "Her tenderest sympathy," Colonel Phipps wrote, by the Queen's command, "is with the poor widows and mothers, and her own misery only makes her feel the more for them. Her Majesty hopes that everything will be done as far as possible to alleviate their distress, and her Majesty will have a sad satisfaction in assisting in such a measure." July 1st, the Princess Alice was married to Prince Louis of Hesse-Darmstadt, who, by the Queen's writ, July 6th, was invested with the title of Royal

Highness. August 7th, Parliament was prorogued by commission; and on the 21st a memorial cairn was raised at Balmoral "to the beloved memory of Albert the Great and Good Prince Consort, erected by his broken-hearted widow, Victoria R."

1863. February 5th, Parliament was opened by commission, when the first paragraph of the royal speech referred to the treaty concluded with the King of Denmark for the marriage of the Prince of Wales and the Princess Alexandra; which was solemnised with great pomp in St. George's Chapel, Windsor, on the 10th of March. On the 8th of May the Queen visited the invalid soldiers in the Royal Military Hospital at Netley, the foundation-stone of which had been laid by the Prince Consort seven years before; and on the 20th of July caused a letter to be addressed to the Mayor of Birmingham, protesting—in consequence of a fatal accident to the "female Blondin"—against the use of Aston Park, which the Queen had opened, for the purpose of cruel, dangerous, and demoralising exhibitions. July 28th, Parliament was prorogued by commission; and a short time after the Queen made a tour in Germany, from which she returned on the 10th of September, when she disembarked at Woolwich. October 13th, the Queen, with several members of the royal family, was present at the inauguration of the Albert Memorial, at Aberdeen.

1864. February 4th, Parliament was opened by commission. On the 10th of March the Queen gave the names of Albert Victor Christian Edward to the infant son of the Prince of Wales, who was christened in the private chapel of Buckingham Palace; on the 30th her Majesty made her first appearance in public since her widowhood, on the occasion of a flower-show at the Horticultural Gardens, South Kensington; and on the 24th of May the rejoicings which had been customary on the anniversaries of the Queen's birthday, were resumed. July 7th, the Chapel Royal, Savoy, was destroyed by fire; and the Queen, who had greatly improved the building in 1843, undertook the cost of restoring it. July 29th, Parliament was prorogued by commission; and on the 30th of August the Perth Memorial to the Prince Consort was inaugurated in the presence of the Queen.

1865. February 7th, Parliament was opened by commission; and on the 14th of March the Queen visited the Hospital for Consumption at Brompton, where she made a minute inspection of the methods adopted for the relief of the patients. April 14th, President Lincoln was assassinated at Washington; and the Queen addressed an autograph letter of condolence—"from a widow to a widow," as her Majesty expressed it—to Mrs. Lincoln. July 6th, Parliament was prorogued by commission; and was afterwards dissolved by royal proclamation. August 26th, the Queen, being then on a visit to Germany, inaugurated a bronze statue of Prince Albert, at Rosenau, his birth-place. October 18th, Lord Palmerston, at that time Prime Minister, died at Brockett Hall, and was buried in Westminster Abbey at the desire of the Queen, who committed to Earl Russell the conduct of the Government, his accession to the Premiership being gazetted on the 6th of November.

1866. February 6th, the new Parliament was opened by the Queen in person. March 7th, the Queen's warrant was published instituting a new decoration, the "Albert Medal," to be awarded to such persons as should endanger their own lives in rescuing, or attempting to rescue, others from shipwreck or other perils of the sea. March 28th, the Queen addressed an autograph letter to Mr. Peabody, the eminent American philanthropist, offering him a portrait of herself—in default of his willingness to accept a baronetcy, or the Grand Cross of the Order of the Bath—in grateful acknowledgment of his munificent interest in the poor of London. July 5th, the marriage of Princess Helena Augusta Victoria with Prince Christian of Schleswig-Holstein-Sonderburg-Augustenburg, who received from the Queen the rank and title of Royal Highness, was solemnised at Windsor Castle. July 6th, the Russell administration was succeeded by that, being the third, of the Earl of Derby. On the 2nd of August, her Majesty subscribed £500 to the Bishop of London's Fund for the relief of sufferers from cholera in the east end of London; and on the 10th, Parliament was prorogued by commission. November 30th, the Queen visited Wolverhampton, in order to inaugurate the monument erected there to the Prince Consort.

1867. February 5th, the Queen opened Parliament in person, but the royal speech was read by the Lord Chancellor. May 20th, her Majesty attended at South Kensington in order to lay the first stone of the Albert Hall of Arts and Sciences, designed to perpetuate the memory of the late Prince Consort,

when an address to the Queen was read by the Prince of Wales, and a reply was made by her Majesty. June 26th, a royal warrant was signed granting an increase of pay to the army. July 13th, the Queen received, at Windsor, the Sultan of Turkey, who had arrived at Buckingham Palace the day before. July 17th, the fleet was reviewed at Spithead in the presence of the Queen, the Sultan, and the Viceroy of Egypt. On the 22nd of July the Queen received a visit from the Empress Eugénie, at Osborne; and on the 21st of August, Parliament was prorogued by commission, and the Queen visited the Duke of Roxburgh at Floors Castle, on her journey to Balmoral. October 16th, on the occasion of opening the Aberdeen Waterworks, the Queen personally addressed the assembly for the first time since the death of the Prince Consort. November 19th, Parliament was opened by commission, the unusually early date being determined mainly by the expediency of giving sanction to the Abyssinian Expedition.

1868. February 25th, took place the resignation of Lord Derby, who was succeeded as First Lord of the Treasury by Mr. Disraeli. March 12th, an attempt was made at Sydney, New South Wales, to assassinate the Duke of Edinburgh, who had visited the colony whilst cruising in his ship, the 'Galatea.' The Duke was wounded in the back by a bullet from a revolver; but his recovery was complete before his arrival in England, his return to which was judged expedient. On the 12th of May, her Majesty conveyed to the House of Commons, through Lord Royston, Comptroller of the Household, her answer to the address on the subject of the Irish Church. "Relying," she said, "on the wisdom of my Parliament, I desire that my interest in the temporalities of the United Church of England and Ireland in Ireland may not stand in the way of the consideration by Parliament of any measure relating thereto that may be entertained in the present Session." May 13th, the foundation stone of the new St. Thomas's Hospital was laid by the Queen. On the 14th of May an address on the subject of the Irish Church was presented by Irish prelates to the Queen at Windsor. June 19th, Prince Arthur was gazetted to a lieutenancy in the Royal Engineers; and on the 22nd, her Majesty held a "breakfast" in the gardens of Buckingham Palace. July 26th, on the occasion of the inauguration of the Luther monument at Worms, her Majesty forwarded a message to the King of Prussia:—"Pray express to the committee for the erection of the Luther memorial my most hearty congratulations upon the successful completion of this task. Protestant England cordially sympathises with an occasion which unites the Protestant princes and peoples of Germany." July 26th, the Queen had the satisfaction of welcoming the Duke of Edinburgh at Windsor. July 31st, the last Parliament elected under the Reform Act of 1832 was closed by commission, and its dissolution announced for the earliest possible day, in a speech read in the Queen's name by the Lord Chancellor. August 6th, her Majesty, whose health had recently caused much anxiety in the royal household, set out on a journey to Switzerland. She passed from Cherbourg to Paris on the 7th, and arrived on the 8th at Lucerne, which she left for Paris on the 9th of September on her return to England, where, at Windsor, she received Mr. Reverdy Johnson, the United States' minister, on the 14th. November 11th, a proclamation was issued for the dissolution of Parliament; and on the 20th, Mr. Burlingame, special ambassador of the Emperor of China, was presented to the Queen. December 5th, Mr. Gladstone succeeded Mr. Disraeli in the premiership; and on the 15th, the first Session of the eighth Parliament of Queen Victoria was opened by commission, the meeting for the despatch of business being postponed by two successive adjournments till February 16th, 1869.

1869. May 22nd, the 'Dublin Gazette' published the Queen's commands to the Lord Lieutenant, expressive of her gratification at the reception given to Prince Arthur in Ireland, where, however, his visit had been marred by a fatal riot, April 28th, at Londonderry. May 24th, the fiftieth birthday of her Majesty was celebrated in London and elsewhere with special rejoicings. June 28th, a breakfast was given by the Queen in the gardens of Buckingham Palace in honour of the Viceroy of Egypt, who had arrived in London on the 22nd, and who left for the continent on the 1st of July. July 26th, the royal assent was given to the Bill for the Disestablishment of the Church of Ireland. November 6th, the Queen opened the new bridge at Blackfriars, and the Holborn Viaduct.

1870. February 8th, Parliament was opened by commission, the projected Irish Land Bill being spoken of in the royal speech as a measure calculated "to bring about improved rela-

tions between the several classes concerned in Irish agriculture, which collectively constitute the great bulk of the Irish people." On the 11th of May, the Queen, accompanied by the Prince and Princess of Wales, formally opened the new buildings erected for the University of London in Burlington Gardens; and on the same day gave a state concert at Buckingham Palace. May 14th, the Princess Louise, as the representative of her Majesty, opened the new banqueting-hall of the Inner Temple. August 1st, the Irish Land Bill received the royal assent. October 24th, the Queen in council at Balmoral declared her consent to the marriage of the Princess Louise with the Marquis of Lorne, eldest son of the Duke of Argyll. December 5th, her Majesty received a visit from the Empress Eugénie at Windsor Castle.

1871. February 9th, the Parliament was opened by the Queen in person, and the royal speech was read by the Lord Chancellor. March 21st, the Princess Louise was married to the Marquis of Lorne in St. George's Chapel, Windsor; and on the 29th the Queen opened the "Royal Albert Hall of Arts and Sciences." April 3rd, her Majesty paid a visit to the ex-Emperor and Empress of the French, then, as now, March, 1872, resident at Camden House, Chiselmurst; and on the 5th, left Windsor Castle for Osborne, where, on the 15th of July, she received a visit which extended over some days, from her daughter and son-in-law, the Crown Prince and Princess of the German Empire, and their children, and a shorter visit on the 18th from the Emperor and Empress of Brazil. July 20th, a royal warrant was signed by her Majesty's command, to cancel and determine all regulations authorising the purchase, or sale, or exchange for money, of Commissions for the Army; a warrant which came into operation on the 1st of November. This method of abolishing purchase seemed to the ministers to be necessary in consequence of the numerical majority in the House of Lords against the Bill for the Re-organisation of the Army. August 21st, the Parliament was prorogued by commission, when the Lord Chancellor read the royal speech, which opened with an acknowledgment of the "loyal readiness with which you have made provision for my beloved children, Princess Louise and Prince Arthur." November 24th, the Queen left Balmoral for Windsor, where she arrived on the following morning, having been met at Carlisle by a messenger bearing a bulletin from Sandringham about the health of the Prince of Wales, who, a few days before, had sickened of typhoid fever. Her Majesty visited Sandringham on the 29th of November, and returned to Windsor on the 1st of December; renewing her visit to Sandringham on the 8th, when symptoms of gravity and alarm appeared, which culminated on the 13th, so that the death of the Prince for some time seemed imminent. Improvement commenced, however, on the 14th, and the Queen was able to return on the 19th to Windsor, where she spent Christmas for the first time for many years, her custom having been, since the death of the Prince Consort, to reside during that festive season at Osborne. On the 28th of December, her Majesty again repaired to Sandringham, having on the 26th addressed, through the Secretary of State for the Home department, a letter of thanks for the uncommon marks of sympathy and attachment which her people had manifested throughout the critical condition of the Prince of Wales.

1872. January 2nd, the Queen left Sandringham for Windsor, from which she repaired on the 19th to Osborne. The whole nation rejoiced, as it had before sorrowed, with the Queen and Princess of Wales; and on the 21st of January a special form of thanksgiving was used by authority in the Churches of England and Wales. On the 27th of February her Majesty, accompanied by the Prince and Princess of Wales, and other members of her family, attended St. Paul's in state to return thanks for the restoration of the Prince to health. The crowds that thronged every foot of the royal progress from Buckingham Palace to the Cathedral were as unbounded in their loyalty and enthusiasm as they were in their numbers; and their expressions of feeling met with a corresponding acknowledgment in a letter received from the Queen, on the 29th of February, by Mr. Gladstone. "The Queen," she wrote, "as well as her son and dear daughter-in-law, felt that the whole nation joined with them in thanking God for sparing the beloved Prince of Wales' life. The remembrance of this day, and of the remarkable order maintained throughout, will for ever be affectionately remembered by the Queen and her family." On the day last mentioned, February 29th, the Queen held a Court at Buckingham Palace, and afterwards took a drive; on her return from which she was grossly attacked by a lad who pre-

sented an old rusty and unloaded pistol within a foot of her head as she sat in her carriage, with the view, as he professed, of intimidating her into granting a pardon to the Fenian prisoners yet kept in confinement. On the 1st of March, the Queen left town for Windsor, and her departure from Buckingham Palace was signalled by immense and extemporised demonstrations of loyalty and attachment.

Two works, with the production of which the Queen has been intimately connected, may be mentioned at the conclusion of this chronicle. They are 'The Early Years of His Royal Highness the Prince Consort. Compiled under the direction of her Majesty the Queen, by Lieutenant-General the Hon. Charles Grey. [With Notes by the Queen, and two Portraits of the Prince Consort],' 8vo, London, 1867, French translation, 8vo, Paris, 1868, German translation, 8vo, Gotha, 1868, Italian translation, 4to, Venice, 1868, besides translations into other languages; and 'Leaves from the Journal of our Life in the Highlands, from 1848 to 1861. To which are prefixed and added, Extracts from the same Journal, giving an Account of earlier Visits to Scotland, and Towns in England and Ireland, and Yachting Excursions [by Queen Victoria, edited by Arthur Helps],' 8vo, London, 1868, illustrated edition, 4to, 1868, of which translations have appeared in German, Portuguese, Norwegian, Welsh, and other languages.

VIGNY, ALFRED VICTOR, COMTE [E. C. vol. vi. col. 383], died at Paris on the 17th of September, 1863. His latest literary work had been the careful and repeated revision of the poems which were published after his death with the title, 'Destinées. Poésies philosophiques,' 8vo, 1864, and were marked by the vague, morbid, and sceptical philosophy of his earlier poems.

VILLEMAIN, ABEL-FRANÇOIS. [E. C. vol. vi. col. 390.] The last years of this great writer were spent in retirement, but not in idleness. He published 'Essais sur la Génie de Pindare et sur la Poésie lyrique,' 8vo, Paris, 1859; and a pamphlet 'La France, l'Empire et la Papauté,' 1860, and he was engaged on an elaborate work on the history of Pope Gregory VII. almost to the time of his death, which occurred at Paris on the 10th of May, 1870, within a month of the completion of his 80th year.

* VIOLLET-LE-DUC, EUGÈNE EMMANUEL, an eminent French architect and writer on architecture, was born at Paris, January 27th, 1814. He was a pupil of M. A. Leclère. During 1836—37 he studied the ancient remains of Italy and Sicily; and afterwards those of the middle ages in central France. He has since devoted himself exclusively to mediæval architecture, and specifically to the French Gothic of the thirteenth century. For several years he has been the most distinguished champion and leading exponent of French Gothic; and he has exercised a much greater influence on English architects and archaeologists than any other contemporary foreign Gothic architect or writer. M. Viollet-le-Duc was in 1840 appointed inspector of works at the Sainte Chapelle, Paris, and he has since been charged officially with the erection and restoration of a great number of Gothic buildings—his labours being of course chiefly, but by no means exclusively, directed to ecclesiastical structures. Among the secular buildings erected by him are the Hôtels de Ville of Narbonne and St. Tréoutin. His principal restorations have been the costly works at Notre Dame de Paris; at first in conjunction with M. Lassus, but subsequently alone; the abbey church of Verzelay; Notre Dame de Châlons sur Marne; the churches of St. Père, Montréale (Yonne), Poissy, St. Nazarre de Carcassonne; the cathedrals of Sens, Amiens, Laon, &c. But M. Viollet-le-Duc is more widely known out of France by his writings than by his constructions. Of these the chief is his great 'Dictionnaire raisonné de l'Architecture Française du XI^e au XVI^e Siècle,' 10 vols. 8vo, with 4000 engravings, Paris, 1853—70; a work of the most painstaking research and clearness of statement, and of the utmost value to the student. Simultaneously with this appeared a companion dictionary, 'Du Mobilier Français de l'époque Carlovingienne à la Renaissance,' 4 vols. 8vo, 1855, &c., of less general interest, but also of great value. The 'Essay on the Military Architecture of the Middle Ages,' which originally appeared in the great dictionary, was afterwards published separately, and has since been translated into English by Mr. Macdermott, 1 vol. 8vo, 1860. Another important work of M. Viollet-le-Duc is his 'Entretiens sur l'Architecture,' 2 vols. 8vo, 1858, &c., with an atlas of plates in 4to; it forms the substance of an intended course of lectures on the theory and practice of architecture which his professional engagements prevented him from carrying out. Besides these he has published several monographs descriptive of Notre Dame de Paris, the

chateaux of Pierrefondes and De Coucy, and the city of Carcassonne; a series of 'Lettres sur la Sicile,' 8vo, 1860; and a great many papers in architectural and archaeological journals; and he has exhibited a large number of designs. M. Viollet-le-Duc has held the offices of inspector-general of places of worship in France, professor of the history of art and æsthetics in the École des Beaux-Arts, 1864, and architect to the government. He was made a knight of the Legion of Honour in 1849, and officer in 1858.

* VIRCHOW, RUDOLF, physiologist, was born at Schivelbein, in Pomerania, October 13, 1821. He was a pupil of Johannes Müller; took his degree of M.D. in 1843; subsequently became professor of pathological anatomy at Würzburg; and in 1856 removed to the same chair at Berlin, taking also the directorship of the pathological institute of that city. He has taken an active share in the removal of abuses or defects both in the political and medical world of Germany. He has effected a thorough change in the mode of studying pathology, partly by his lectures and partly by his books. In 1859 he was elected a member of the municipal council of Berlin, and he soon after led the opposition party in its attempt to reform the municipal police, the royal privileges, and other matters. He has been a vigorous opponent of Count Bismarck's schemes for developing the military and naval powers of Prussia, and has had more than one struggle with him. Since 1869 he has vainly sought to bring about the reduction of the armies of Europe. As a scientific man he has taken a very high rank. He is the editor of the 'Archiv für Pathologische Anatomie und Physiologie, etc.,' 8vo, which he founded in 1847 in conjunction with Reinhardt. He has written many works and papers. The most important are a work on cellular pathology, which was first published in 1858, and which has been translated both into English and French; 'Die Lehre von den Trichinen,' 8vo, Berlin, 1860, 3rd edition, 1866; 'Gesammelte Abhandlungen zur wissenschaftlichen Medicin,' 8vo, Frankfurt-am-Main, 1866; and 'Untersuchungen über die Entwicklung des Schädelsgrundes im gesunden und krankhaften Zustande,' 4to, Berlin, 1866.

* VITET, LOUIS, a French journalist, politician, and man of letters, was born at Paris on the 18th of October, 1802; and after having completed his studies at the École Normale, to which he was admitted in 1819, devoted himself for some time to the practice of education. His earliest important literary work was entitled 'Les Barricades. Scènes Historiques. Mai, 1858,' first two editions (anonymous), 8vo, Paris, 1826, fourth edition 1830, which attained considerable popularity, and was followed by 'Les États de Blois: ou, La Mort de M^m. de Guise. Scènes Historiques. Décembre, 1858,' 8vo, 1827, by 'La Mort de Henri III. Août, 1589. Scènes Historiques,' 8vo, first two editions, 1829, third edition, 1849, and by 'La Ligne. Scènes Historiques,' &c., 8vo, 1830, &c., new edition, 2 vols. 12mo, 1844. About the year 1824, and two years before the publication of 'Les Barricades,' M. Vitet became a contributor to the 'Globe;' and when the Revolution of July, 1830, opened the way for his friends to power, he obtained from M. Guizot, October 23rd, the office of Inspector-General of Historical Monuments, which had been created expressly for him. On the 10th of April, 1834, he was appointed secretary-general to the Ministry of Commerce, under M. Duchâtel; and in the same year became a member of the Chamber of Deputies, where he sat until 1848. In September, 1836, he was admitted to the Council of State, and during the years 1846—1848, acted as vice-president of one of its sections—that of Finance. Both as a deputy and as a member of the Council of State, M. Vitet was the adherent and upholder of Conservative measures; and as an opponent of the Revolution of 1848, he voted in the Legislative Assembly, to which he was returned, in 1849, by the Department of Seine-Inférieure, against all measures which were introduced in favour of Republican institutions. The coup-d'état of December 2nd, 1851, occasioned his retirement from public life; from which, however, he has lately made a remarkable emergence in accepting, under the Government of M. Thiers, the post of one of the Vice-Presidents of the National Assembly. M. Vitet, whose highest honours are literary rather than political, was elected, December 15th, 1839, an honorary member of the Académie des Inscriptions et Belles-Lettres; and on the 26th March, 1846, was admitted a member of the Académie Française, in succession to Alexandre Soumet, the poet, having, on the 30th of April, 1843, been made an officer of the Legion of Honour.

The principal works of M. Vitet, besides those already mentioned, are 'Monographie de l'Eglise Notre-Dame de Noyon,' 4to, Paris, 1845, Atlas, folio, 1845; 'Eustache Le Sueur, sa Vie

ses Œuvres,' 4to, 1843, 1849, &c., a remarkable estimate of the genius of Le Sueur, a celebrated painter of the 17th century, and one of the founders of the Académie de Peinture; 'Histoire des anciennes Villes de France. Recherches sur leurs Origines, sur leurs Monuments, sur le Rôle qu'elles ont joué dans les Annales de nos Provinces. Première Série. Haute Normandie. Dieppe,' 2 vols. 8vo, Paris, 1833, being, as its title indicates, the first instalment of a projected work of large proportions, of which no more volumes have been issued; 'L'Académie Royale de Peinture et de Sculpture. Étude Historique,' 8vo, 1861; 'Essais Historiques et Littéraires,' 12mo, 1862, and 'Études sur l'Histoire de l'Art,' 12mo, 1864, each of which forms part of the 'Bibliothèque Contemporaine,' 'De l'État actuel du Christianisme en France,' 12mo, Paris, 1867; and 'Le Christianisme et la Société.' (A propos du troisième Volume des Méditations religieuses de M. Guizot) 12mo, 1860.

VOLTAIRE, FRANÇOIS-MARIE AROUET DE. In the memoir of Voltaire in the E. C. vol. vi. col. 441, he is stated to have been born at Châtenay on the 20th of February, 1694, and this was the date given by Condorcet and the best authorities, and distinctly stated by Voltaire himself. Writing in 1765, he says, as quoted in the 'Nouv. Biog. Gen.' in support of this date, "I have entered on my 72nd year, in spite of my portraits (estampes), which, by a printed untruth, make me to have been born on the 20th of November, when I was born on the 20th of February." Yet it has been distinctly shown by M. Gustave Desnoiresterre 'Voltaire et la Société Française. La Jeunesse de Voltaire' (Paris, 1867), that he was born, not at Châtenay, but in the parish of Saint André-des-Arts, Paris, on the 21st of November, 1694. In the Acte de Baptême, November 22, 1694, it is expressly stated that he was born the previous day.

VORSTERMAN, LUCAS, an eminent Flemish engraver, was born at Antwerp, about 1580. He was a scholar of Rubens, by whose advice he gave up painting for engraving. In his own walk, Vorsterman resembled his master in preferring a bold, free, vigorous manner, to minuteness or elegance of finish. He engraved a great many plates from the principal works of Rubens, and under his superintendence; and the style of the great painter was never more characteristically rendered. The 'Descent from the Cross,' the 'Adoration of the Magi,' and the 'Battle of the Amazons'—a print of unusual size, being on six sheets—are among the most famous of his Rubens prints. Vorsterman also engraved the 'Entombment,' a 'Holy Family,' and two or three more after

Raffaëlle; and others after Correggio, Annibale Carracci, Gentileschi, and other Italian masters; also, a 'Bear Hunt,' by Snyders, and several more from the painters of the Netherlands. In 1623 he came to England, and remained here about eight years. He engraved one or two of the pictures in the king's gallery, but was chiefly occupied on the portraits of royal and noble personages by Vandyck, and a few by Holbein. In all, he engraved about one hundred and fifty plates. He died about the middle of the seventeenth century. His son and pupil **LUCAS VORSTERMAN**, the younger, born at Antwerp about 1605, engraved historical and subject pieces after Rubens, Teniers, and others, and many portraits, some of which were from his own designs. He engraved the plates to the Duke of Newcastle's curious work on horsemanship. His plates are far inferior to those of his father.

VROLIK, WILLEM, anatomist, was born at Amsterdam, April 29, 1801. His father, Gerard Vrolik, was well known as an anatomist and botanist, and formed an excellent museum, which he left to his son on his death in 1859. Willem studied at Utrecht, where he took his degree of M.D. in 1823; practised for a few years in Amsterdam; then took the chair of anatomy and physiology at Groningen; was engaged in the Belgian revolution of 1830–31; and afterwards took the professorship of anatomy and physiology at Amsterdam, which he retained till his death, December 22, 1863. He was a laborious student and writer. His attention was chiefly given to the comparative anatomy of the Vertebrata, more especially the Quadrumana, and to teratology. Some of his works on these branches of knowledge are of the highest value, as for instance his 'Tabulæ ad illustrandum Embryogenesein hominis et animalium tam naturalem quam abnormem,' 4to, with 100 plates engraved from his own drawings. 'Handboek der ziektekundige ontleedkunde. Aangeboren geberken,' 2 vols. 8vo, Amsterdam, 1840, 1842, which is essentially the text to the above-mentioned 'Tabulæ,' and monographs on the comparative anatomy of the chameleon, the chimpanzee, the babiroussa or wart-hog, the genus *Stenops* of Illiger, and *Hyperoodon*. Much of his time was, however, taken up in enlarging and classifying the museum which his father left him. The additions consisted partly of objects purchased, but largely of preparations which he made himself. At his death it was one of the finest museums of its kind in the world, more especially as regards the choiceness of the specimens.

W

WAAGEN, GUSTAV FRIEDRICH [E. C. vol. vi. col. 457].

Though well advanced in years Dr. Waagen still continued his journeys and his labours. As the result of a visit made to St. Petersburg, 1861–62, at the request of the Emperor of Russia, to examine and arrange the collection of pictures in the Palace of the Hermitage, he published 'Die Gemäldesammlung in der kaiserliche Eremitage in St. Petersburg,' 8vo, Munich, 1864; and later notes of his examinations of the art collections of Vienna, 'Die vornehmsten Kunstdenkmäler in Wien,' 2 vols. Vienna, 1866–67; and an account of his art studies in Spain in the 'Jahrbüchern für Kunstwissenschaft,' 1868. He died at Copenhagen, July 15th, 1868, aged 74.

* **WÄCHTER, KARL GEORG VON**, a celebrated German jurist, was born on the 24th of December, 1797, at Marbach-am-Neckar; and, after having received his preliminary education at Esslingen and Stuttgart, studied successively, between the years 1815 and 1818, at the Universities of Tübingen and Heidelberg. In 1819 he was appointed assessor to the Court of Appeal at Esslingen; but devoting himself to an academical career, became, in 1820 and 1822, respectively extraordinary and ordinary professor of law in the University of Tübingen, of which, in 1825, he was appointed rector. In combination with the rectorship he held, during the years 1829–30, the office of vice-chancellor; and, at Easter, 1833, migrated as professor of law to the University of Leipzig, from which he returned, in 1836, to

assume at Tübingen the functions of professor and chancellor. The last-named office involved a seat in the Würtemberg Chamber of Deputies, of which he was twice elected, in 1839 and 1845, and each time for a period of six years, to the Presidency. After fulfilling other offices, which varied, as political, academical, and judicial, he was appointed, in 1852, to the professorship of Roman Law in the University of Leipzig; and subsequently became a councillor of state and a privy councillor. In 1866 and 1867 he took part in the discussions which preceded the formation of the North German Confederation.

The works of Professor von Wächter are almost exclusively conversant about jurisprudence; and they include a Manual of the Romano-Germanic Penal Code, 'Lehrbuch des Römisch-deutschen Strafrechts,' 2 vols. 8vo, Stuttgart, 1825–26; Punishments and Prisons of Würtemberg, 'Die Strafen und Strafanstalten des Königreichs Würtemberg,' 8vo, Tübingen, 1832; Dissertations on Criminal Law, 'Abhandlungen aus dem Strafrechte,' 8vo, Leipzig, 1835; Common Law, especially Common Criminal Law, of Germany, 'Gemeines Recht Deutschlands, insbesondere gemeines deutsches Strafrecht,' &c., 8vo, Leipzig, 1844; Contributions to German History, especially with Reference to Criminal Law, 'Beiträge zur deutschen Geschichte, insbesondere zur Geschichte des deutschen Strafrechts,' 8vo, Tübingen, 1845; Discussions, &c., 'Erörterungen aus dem römischen, deutschen, und württembergischen Privatrechte,' 3

Parts, 8vo, Stuttgart, 1845—46; Project for a Civil Code for the Kingdom of Saxony, &c., 'Der Entwurf eines bürgerlichen Gesetzbuches für das Königreich Sachsen. Ein Beitrag zur Beurtheilung desselben,' 8vo, Leipzig, 1853; and Saxon and Thuringian Criminal Law, 'Das Königlich-Sächsische und das Thüringische Strafrecht. Ein Handbuch,' &c., 8vo, Stuttgart, 1857, &c. Professor Von Wächter has contributed articles to legal periodicals, especially to the 'Kritische Zeitschrift für Rechtswissenschaft,' Tübingen, 1826, &c.; and has edited 'Archiv für die Civilistische Praxis,' 8vo, 1818, &c.; and Baron L. T. von Spittler's 'Vorlesungen über Politik,' 8vo, 1828.

WADDINGTON, VERY REV. GEORGE, D.D., late Dean of Durham, a traveller and historian, eldest son of the Rev. George Waddington, vicar of Tuxford, Nottinghamshire, was born on the 7th of September, 1793, and was educated successively at the Charterhouse, London, and at Trinity College, Cambridge, where he took his B.A. degree in 1815, and proceeded M.A. in 1818. In 1811 he obtained Sir William Browne's medal for the Latin ode, 'Ode Latina [Prolium cum Gallis in Busaci Montibus commissum],' 8vo, Cambridge, 1811, and for Epigrams in 1814; won the Davies' University Scholarship in 1814, for the greatest proficiency in classical learning, and in the same year carried off the Chancellor's medal for English verse, of which the prescribed subject was 'Columbus,' 8vo, Cambridge, 1813, and afterwards published in various editions of the 'Cambridge Prize Poems,' of which a "complete collection, new and enlarged edition," was issued in 8vo, Cambridge, 1859. In 1815, the year of his graduation as eleventh senior optime, he was senior Chancellor's medalist; and his several distinctions were rewarded by his election in due course to a fellowship of Trinity. He devoted himself for a considerable period to oriental travel, the literary results of which will be seen in the titles of the works enumerated below; and he held for some years the vicarage of Masham, Yorkshire, a preferment in the gift of his college. On the 25th of September, 1840, he was installed Dean of Durham, in succession to Dr. Banks Jenkinson, promoted to the see of St. David's; and on the death of Archdeacon Thorp, the first Warden of the University of Durham, succeeded him in that office under an order in council of the 4th of June, 1841. Dr. Waddington was also, *ex officio* as dean, principal governor and member of the senate of the university; and, as he was never married, he was enabled to permit his charity to assume almost magnificent proportions. He presented two several sums of 2,000*l.* each to the Durham County Hospital, and a few months before his death filled with stained glass one of the windows of the cathedral, at a cost of about 1,400*l.* He was a large subscriber to London charities, and in the county of Durham was a supporter of nearly every benevolent institution. He was also a strong supporter of liberal opinions in the northern principality. He died at Durham on the 20th of July, 1869, and was interred in the cathedral burying-ground on the Saturday following his decease. The principal works of Dean Waddington are:—'Journal of a Visit to some Parts of Ethiopia,' 4to, London, 1822; 'A Visit to Greece in 1823 and 1824,' 8vo, London, 1825; 'The Present Condition and Prospects of the Greek or Oriental Church, with some Letters written from the Convent of the Strophades,' 8vo, London, 1829, new edition, revised, 1854; 'History of the Church from the Earliest Ages to the Reformation,' 3 vols. 8vo, London, two editions, 1835; 'History of the Reformation on the Continent,' 3 vols. 8vo, London, 1841; and 'Three Lectures on National Education,' 8vo, London, 1845.

WAGNER, RUDOLF, physiologist, was born at Baireuth, June 20, 1805. His education was pursued successively at Baireuth, Augsburg, Erlangen, Würzburg, and Paris. In the last-named city he came under the influence of Cuvier, by whom he was induced to give his close attention to comparative anatomy. In 1833 he was appointed professor of zoology at Erlangen, and in 1840 he succeeded Blumenbach as professor of comparative anatomy at Göttingen, which post he held till his death, October 12, 1864. His writings are very voluminous; but the subjects which he did most to advance were the structure and development of the egg, the structure of the brain of man and the higher mammals, the nervous system of the mammalia, and craniology. He was the editor of the 'Würzburger naturwissenschaftliche Zeitschrift,' 8vo, 1860, etc.; of the 'Handwörterbuch der Physiologie mit Rücksicht auf physiologische Pathologie,' 4 vols. Brunswick, 1842—43; and of the 'Bericht über die Zusammenkunft einiger Anthropologen in Sept. 1861 in Göttingen,' 4to, 1861, in which K. E. von Baer co-operated with him. He wrote, amongst other important text books,

'Lehrbuch der vergleichenden Anatomie,' 8vo, Leipzig, 1834—5; and 'Lehrbuch der speziellen Physiologie,' 8vo, Leipzig, 1839, both of which have passed through several editions. Of original works mention may be made of 'Neurologische Untersuchungen,' 8vo, Göttingen, 1854; 'Menschenschöpfung und Seelen Substanz,' 8vo, Göttingen, 1854; 'Vorstudien zu einer wissenschaftlichen Morphologie und Physiologie des menschlichen Gehirns als Seelenorgan,' 4to, Göttingen, 1860—62; and 'Zoologisch-Anthropologische Untersuchungen,' 4to, Göttingen, 1861.

WAKEFIELD, EDWARD GIBBON [E. C. vol. vi. col. 470], died on the 16th of May, 1862, aged 66.

WALCKENAER, CHARLES ATHANASE, BARON, a man of varied accomplishments, but chiefly known as a naturalist and geographer, was born at Paris, December 25, 1771. His parents died when he was young, and the care of him was undertaken by a rich maternal uncle. He was educated by the best masters in Paris, and went through a short course at Oxford, after which he studied at the École des Ponts et Chaussées and the École Polytechnique. In 1794 his uncle was executed, and he succeeded to his property, having narrowly escaped a similar fate. After the revolution he followed his own inclinations by occupying his time in cultivating general literature and the fine arts. He wrote novels, historical pieces, and compiled or translated accounts of voyages. When the Bourbons returned to power he took a share in the administration of affairs. Thus in 1816 he was mayor of one of the arrondissements of Paris, and from 1826 to 1830 he was a préfet first of the department of Nièvre, then of that of Aisne. In 1823 he was made a baron. In 1839 he undertook the care of the king's library and map collection. In 1840 he was elected the perpetual secretary of the Academy of Inscriptions. He died April 28, 1852. His writings are both numerous and of wide range, but a large proportion are translations or ordinary compilations. A few are of a more original character and of higher merit; such as the 'Histoire Naturelle des Aranéides,' oblong 12mo, Paris, 1806; 'Histoire Naturelle des Insectes, Aptères,' 4 tomes, 8vo, 1837—1847; 'Géographie ancienne historique et comparée des Gaules cisalpine et transalpine, suivie de l'analyse géographique des itinéraires anciens,' 3 vols. 8vo, and a quarto atlas, 1839, second edition 1862; 'Histoire de la Vie et des Ouvrages de J. de la Fontaine,' 8vo, 1820—1824; and 'Mémoires touchant la vie et les écrits de Mde. de Sévigné,' 5 vols. 12mo, 1842—1852, which was left unfinished. He also edited several editions of La Fontaine's works.

* WALCOTT, REV. MACKENZIE EDWARD CHARLES, a divine and ecclesiastical archaeologist, only son of the late Admiral Walcott, of Wintown, M.P. for Christchurch, Hants, and Charlotte, daughter of Colonel John Nelley, B.H.A., was born at Bath in the year 1822, and was educated as a commoner of Winchester College, and at Exeter College, Oxford, where he graduated in honours as B.A. on the 25th of May, 1844, and proceeded M.A. on the 14th of January, 1847. Subsequently he took the degree of B.D. After serving the curacies of St. Margaret's and St. James's, Westminster, and All Saints, Knightsbridge, respectively under the late Dean Milman, the Bishop of London, and the late Rev. W. Harness, he became and for some years continued minister of Berkeley Chapel, Mayfair; and in 1863 was collated precentor and prebendary of Chichester Cathedral.

Mr. Walcott, who is F.S.A., F.R.S.L., and an honorary member of many English and foreign archaeological societies, has been a diligent and successful student of ecclesiastical and general antiquities; and amongst the numerous works of which he is the author may be mentioned, 'The History of the Parish Church of St. Margaret, in Westminster, from its Foundation A.D. 1064,' &c., 8vo, Westminster, 1847; 'Westminster: Memorials of the City, St. Peter's College, the Parish Churches, Palaces, Streets, and Worthies,' 8vo, Westminster, 1849, new edition, 1851; 'The English Ordinal: its History, Validity, and Catholicity. With an Introduction on the three Holy Orders of Ministers in the Church,' 12mo, London, 1851; 'William of Wykeham and his Colleges,' 8vo, Winchester and London, 1852; 'The English Episcopate: Biographical Memoirs of the Bishops of England and her Colonies, from the Earliest Period to the Present Time,' 8vo, London, 1858, &c.; 'A Guide to the Cathedrals of England and Wales. With short Notes of the Chief Objects of Interest in every Cathedral City,' 8vo, London, 1858, second edition, with the modified title of 'The Cathedrals of the United Kingdom,' &c., 8vo, London, 1860; 'Church and Conventual Arrangement. With copious

References, a complete Glossary, and an Index,' &c., 8vo, London, 1861; 'The East Coast of England, from the Thames to the Tweed, descriptive of natural Scenery, historical, archaeological, and legendary,' 8vo, London, 1861; 'The Interior of a Gothic Minster. A Lecture delivered at the Architectural Museum, South Kensington, April 26th, 1864,' 8vo, London, 1864; 'Cathedrals: a Constitutional History of Cathedrals of the Western Church. Being an Account of the various Dignities, Offices, and Ministries of the several Members,' &c., 8vo, London, 1865; 'Memorials of the Cathedral Cities of England and Wales,' 8vo, Oxford, 1865; 'Sacred Archaeology: a Popular Dictionary of Ecclesiastical Art and Institutions, from Primitive to Modern Times: comprising Architecture, Music, Vestments, Furniture, Arrangement, Offices, Customs, Ritual, Symbolism, Ceremonial, Traditions, Religious Orders, &c., of the Church Catholic, in all Ages,' 8vo, London, 1866, a work in which the author brings to bear the entire learning of his life; and 'Traditions and Customs of Cathedrals,' 8vo, London, 1872. Mr. Walcott is the author of several "sacred poems," 'St. Paul at Athens,' 12mo, London, 1851, 'The Death of Jacob,' and 'The Dedication of the Temple,' 8vo, London, 1854, and of a small volume of miscellaneous verse entitled 'Leaflets,' 8vo, London, 1872; and he has also contributed largely to the general literature of the day in the pages of journals, reviews, and magazines, — the 'Ecclesiastic,' 'Ecclesiologist,' 'Sacristy,' 'Reliquary,' 'Musical Times,' 'Annotated Book of Common Prayer,' 'Dictionary of Doctrinal Theology,' 'Gentleman's Magazine,' 'Churchman's Family Magazine,' 'Archæologia Cantiana,' and to the 'Transactions of the Royal Society of Literature.' He also contributed to the 'Church and the World,' 8vo, London, 1866, edited by the Rev. Orby Shipley, an article on 'Cathedral Reform.'

WALDECK, PRINCES OF [E. C., vol. vi., col. 476]. After the war of 1866, the Prince of Waldeck made a proposition for the full amalgamation of Waldeck with Prussia, and after much negotiation a compact was concluded, June 10th, 1867, by which while the prince retained the nominal sovereignty, and obtained a sufficient revenue and important privileges, the government of the country passed wholly into the hands of the King of Prussia. Since the assumption of the title of German Emperor by the King of Prussia the sovereignty of the Prince of Waldeck has become the merest phantom.

* **WALES, ALBERT EDWARD, PRINCE OF**, eldest son of Queen Victoria and the late Prince Consort, heir-apparent to the British throne, was born at Buckingham Palace, on the 9th of November, 1841, and was christened at Windsor, by the Archbishop of Canterbury, on the 25th of January, 1842, with water brought from the river Jordan in 1825. On the 11th of September, 1849, he was gazetted as Earl of Dublin; and having received his early education from the Rev. H. M. Birch, Mr. Gibbs, the Rev. C. F. Tarver, and Mr. H. W. Fisher, was further trained academically at Edinburgh, Oxford, and Cambridge. On the 9th of July, 1860, he left England on a visit to Canada and the United States, accompanied by the Duke of Newcastle, and arrived at St. John's, Newfoundland, on the 24th of the same month. He visited Halifax, July 30th; Quebec, August 18th; Montreal, August, 25th; and Ottawa, September 1st: and, arriving at Detroit, in the United States, on the 20th September, visited Washington, where he was entertained by President Buchanan, on the 3rd of October; Philadelphia, October 9th; New York, October 11th; Boston, October 17th; and embarked at Portland, October 20th, on his return to England, which he reached, after an unusually tedious and disagreeable passage, landing at Plymouth on the 15th of November. In 1858 the Prince of Wales was gazetted a Colonel in the Army; and on the 12th of September, 1861, having been for some months stationed at the Curragh, discharged there his first public function, by presenting a new stand of colours to the 36th Regiment. He opened the Middle Temple Library on the 31st of October, 1861, and upon this occasion was admitted a Benchman of the Inn. On the 6th of February, 1862, the Prince, travelling as Baron Renfrew, as he had previously done in America, left England for a tour in the East, accompanied by General Bruce, Rev. Canon Stanley, at present Dean of Westminster, and others. The party landed at Alexandria on the 1st of March, and on the 5th of that month visited the Pyramids; Thebes on the 15th; Jaffa on the 28th; and Jerusalem on the 31st. On Monday, April 7th, the Prince and a small suite were permitted, as a mark of unprecedented favour, to enter the tombs of the patriarchs at Hebron; witnessed at Mount Gerizim the celebration of the Samaritan Passover; and on Easter-Day, on the shores of the

BIOG. DIV.—SUP.

Sea of Galilee, received the Holy Communion from Dr. Stanley. After spending several weeks in Syria, a homeward route was taken by way of Smyrna, Constantinople, Athens, Cephalonia, and Malta; and on the evening of the 4th of June, his Royal Highness reached Windsor Castle. On the 12th of June, he visited the Emperor Napoleon III. at Fontainebleau; and on the 4th of November, the 'Gazette' announced his intended marriage with the Princess Alexandra of Denmark, which was celebrated at St. George's Chapel, Windsor, on the 10th of March, 1863. At an afternoon sitting of the House of Lords, on the 5th of February preceding, the Prince of Wales took his seat for the first time, wearing a scarlet robe with ermine bars, proper to his rank as Duke of Cornwall, over the uniform of a General in the Army. On the 19th of February, in prospect of the marriage, Lord Palmerston brought forward a motion, which was unanimously adopted by the House of Commons, to settle 100,000*l.* per annum on His Royal Highness; and at the same time 10,000*l.* per annum was voted for the separate use of the Princess of Wales, and 30,000*l.* in the event of her surviving the Prince. Since their marriage the principal residences of the Prince and Princess of Wales have been Marlborough House, London, and Sandringham House, near King's Lynn, Norfolk; but they have constantly paid visits to various parts of the kingdom, and have on several occasions travelled beyond it. In September, 1864, they paid a visit to Denmark; in May, 1867, the Prince visited Paris, and Berlin in January, 1869, when, on the 20th, the King of Prussia invested him with the Order of the Black Eagle, the collar presented being the one previously worn by Prince Albert. In the spring of 1869, the Prince and Princess undertook a journey to the East, landing at Constantinople on the 1st of April, and proceeding to make an extended tour in Egypt, accompanied by scientific and literary men—including Professor Owen, Sir Samuel Baker, and Dr. W. H. Russell, the last of whom was the historiographer of the expedition—whose observations and researches were recognised as particularly valuable in archæology and ethnology. When the Khedive of Egypt visited this country, the pressure of English opinion against the slave-trade as practised in his dominions, was brought to bear upon him; and it was owing to the influence of the Prince of Wales with His Highness, that the expedition of Sir Samuel Baker, which has a distinct anti-slavery intention, and is even now (March, 1872) proceeding successfully, was equipped at the expense of the Khedive. Amongst the progresses, journeys, and public appearances of the Prince which have been limited to his mother's home dominions, may be mentioned the state visit which he paid with his bride to the City, on the 8th of June, 1863, when they were entertained, by the Corporation of London, at a banquet of uncommon splendour in the Guildhall; a like joint attendance at the Oxford Commemoration of June, 1863, when the degree of D.C.L. was conferred upon the Prince; the joint opening of the British Orphan Asylum at Slough, June 24th; the opening, by the Prince, of the new Town Hall at Halifax, on the 3rd of August; the visit, with the Princess, to the University of Cambridge, June 2nd, 1864; the opening of the Dublin International Exhibition, on the 9th of May, and of the Dramatic College at Woking, June 5th, 1865; the presence of the Prince at the annual banquet of the Royal Academy on the 5th of May, 1866, and on subsequent anniversaries; the visit of the Prince and Princess to York, August 9—12, 1866, when 25,000 Volunteers were reviewed in their presence by the Duke of Cambridge, and the Prince Consort memorial window in the Guildhall was formally unveiled; the presence of the Prince at the monster ball given on the 18th of July, 1867, to the Belgian Volunteers, at the Agricultural Hall, Islington; the joint visit of the Prince and Princess to Ireland, April 15—24, 1868, on which occasion, April 18th, the Prince was installed, in St. Patrick's Cathedral, as a Knight of St. Patrick; the joint visit to Glasgow, where, October 8th, 1868, the Prince laid the foundation-stone of the new University buildings; the presidency of the Prince at a meeting of the Royal Institution, June 21st, 1869, to promote the erection of a memorial in honour of Professor Faraday; the opening of the new Alexandra Dock, at Lynn, by the Prince, on the 7th, and the laying of the foundation-stone of the London Orphan Asylum, at Watford, on the 13th of July, 1869; the opening of the new Albert Docks, at Hull, and the unveiling of the statue of Mr. Peabody, the American philanthropist, at the Royal Exchange, respectively on the 22nd and 23rd of July, 1869; the laying of the foundation-stone of the new Grammar School, at Reading, July 1st, 1870; the formal opening, jointly with the Princess Louise, in the absence of Her Majesty, of the Thames Embankment, July 12th, 1870; and the laying of the

foundation-stone, with masonic honours, of the new Edinburgh Infirmary, on the 13th of October, 1870. On the 13th of November, 1871, the Prince of Wales, being then at Sandringham, began to suffer from feverish symptoms, which developed, on the 20th, into those of typhoid fever, and increased in intensity and peril until the 14th of December, on which day, as the tenth anniversary of his father's death from the same disease, there seemed to be a wide spread presentiment that the attack would terminate fatally. The day of his imminent death, was, however, the beginning of recovery : and on the 27th of February, 1872, he accompanied the Queen in her state visit to St. Paul's Cathedral to return thanks for his recovery to health. More than a nation seemed packed in the streets of the capital, and the spontaneous joy and loyalty of the people were unsurpassable. The principal thoroughfares and buildings were brilliantly illuminated for two successive nights ; and the provinces joined in the hilarity and gratitude of the metropolis.

On her first entry into London, March 7th, 1863, the Princess Alexandra met with an enthusiastic reception ; and as Princess of Wales every act and word has but helped to fix and augment the affection of the people. The Princess has borne six children to her husband, the youngest of whom, Prince Alexander John Charles Albert, was born on the 6th of April, 1871, died on the following day, and was buried at Sandringham. The other issue, two sons and three daughters, are named respectively, Albert Victor Christian Edward, born at Frogmore Lodge, Windsor, on the 8th of January, 1864 ; George Frederick Ernest Albert, born on the 3rd of June, 1865 ; Louise Victoria Alexandra Dagmar, born February 20th, 1867 ; Victoria Alexandra Olga Mary, born July 6th, 1868 ; and Maud Charlotte Mary Victoria, born on the 26th of November, 1869.

The Prince of Wales is Duke of Saxony, Prince of Saxe-Coburg and Gotha, Duke of Cornwall, Duke of Rothesay, Earl of Chester, Carrick, and Dublin, Baron Renfrew, Lord of the Isles, Great Steward of Scotland, K.G., K.T., K.P., G.C.S.I., K.T.S., G.C.B., P.C., a General in the Army, Colonel of the 10th Hussars, Colonel-in-Chief of the Rifle Brigade, Captain-General and Colonel of the Hon. Artillery Company, Honorary Colonel of several Volunteer Corps—the Oxford and the Cambridge University, Civil Service, Huntingdon Light Horse, Northern Brigade, Caithness, and the Sutherland Rifles. He was elected President of the Society of Arts, November, 22nd, 1863 ; a Past Grand Master of the Order of Freemasons, September 1st, 1869 ; a member of the United Grand Lodge of Freemasons in England, December 1st, 1869 ; and was installed Patron of the Freemasons of Scotland, at Edinburgh, October 12th, 1870. The Prince of Wales is also an Elder Brother of the Trinity House ; and in April, 1867, became President of St. Bartholomew's Hospital.

WALEWSKI, ALEXANDRE FLORIAN JOSEPH COLONNA, DUC, French diplomatist and senator, was born at the Castle of Walewice, Poland, May the 4th, 1810. After the death of his mother, a Polish countess, he went to pursue his studies at Geneva. In 1830, he joined the Polish patriots at Warsaw, fought at the battle of Grochow, and then accompanied Zamoycki and Wielopolski to London, where an attempt was made to induce the English Government to favour the Polish movement. Failing in this, Walewski went to France, became naturalised as a French citizen, entered the army in 1833, as captain in the Foreign Legion, became captain of the 2nd Chasseurs d'Afrique soon afterwards, and captain in the 4th Hussars in 1835. He went to Algeria, where he managed a confidential mission to Abd-el-Kadir, and was appointed director of the Arab bureau at Oran. In 1837 he published 'Un Mot sur la Question d'Afrique.' Returning to France in 1838, he resigned his commission in the army, entered the arena of political and 'salon' life, published a pamphlet, 'L'Alliance Anglaise,' and founded and edited the 'Messager,' which he afterwards sold to M. Thiers as a Government organ. In 1839 he was said to have been anonymously concerned in writing Alexandre Dumas's 'Madelmoiselle de Belle Isle,' though this was denied in other quarters ; but in 1840 he was the avowed author of 'L'Ecole du Monde, ou la Coquette sans le Savoir,' a comedy in five acts, produced at the Théâtre Français. In this same year he commenced his official career. M. Guizot sent him to Egypt, to negotiate with Mehemet Ali terms proposed by the European powers for the settlement of the Egyptian question. This was followed by missions to various governments, on some of the diplomatic controversies of the day ; among others, to Buenos Ayres, concerning which he published, 'Intervention Anglo-Française dans le Rio de la Plata,' 1848. When, after the French Revolution of 1848, Prince Louis Napoleon rose into power, Count Walewski joined

him, and was rewarded with diplomatic missions of various kinds, to Florence, Naples, and Madrid. In London, as French ambassador, he procured the recognition by England of the assumption of empire by Louis Napoleon, a recognition on which the Emperor placed great value. In 1855 the count succeeded M. Drouyn de Lhuys as Minister for Foreign Affairs ; he acted as plenipotentiary for France in discussing the treaty of peace with Russia on the conclusion of the Crimean war, and signed the treaty on the 30th of March, 1856. He was made senator and grand cross of the Legion of Honour. When the Emperor met the Czar at Stuttgart, Walewski accompanied him. In 1860 the portfolio of foreign affairs was transferred to M. Thouvenel, and Count Walewski became Minister of State. He presided in 1862 over the imperial commission for inquiring into literary and artistic property. Superseded in the premiership by M. Billault in 1863, he was soon afterwards elected to the Corps Législatif, by the department of Les Landes, of which department he had for some time been member of the Conseil Général for the canton of Saint Martin des Seigneaux. In 1865 he was chosen president of the Corps Législatif. He was created duc in 1866 ; resigned his seat in the Corps Législatif in 1867 ; returned to the Senate ; was elected member of the Académie des Beaux Arts in 1868 ; and died at Strasbourg on the 27th of September, 1868. The funeral procession in Paris, from the Madeleine to Père la Chaise, on the 3rd of October, was more than usually magnificent. At a time when the public men of France did not stand high in general estimation, the Duc Walewski bore the character of a man of probity, benevolence, and liberal views ; he never greatly enriched himself ; and a pension of 20,000 francs a year, granted to his widow by the Emperor in 1869, was a recognition of this fact.

* WALKER, ADMIRAL SIR BALDWIN WAKE, BART., K.C.B., sometime Surveyor-General of the Navy, was born in 1803. He entered the Royal Navy in 1812, while a mere boy, and worked up gradually through all the ranks in the service. He received his commission as second-lieutenant in 1820 ; served in the 'Nautilus' on the Jamaica station ; cruised on the African and South American coasts from 1823 to 1826 ; was then promoted to the rank of first-lieutenant, and served on the American station in the 'Rattlesnake' and the 'Ætna.' In 1828, while in the last-named ship, he aided in reducing the castle of the Morea, one of the last strongholds which the Turks possessed in the Peloponnesus, and the fall of which conducted to the final liberation of Greece. After further service in the 'Asia' the 'Britannia,' and the 'Barham,' he advanced to the rank of commander in 1834. In 1838, and many subsequent years, as captain, he commanded in succession the 'Vanguard,' the 'Queen,' and the 'Constance,' in the Mediterranean fleet. During part of this period, in 1841, he assisted Admirals Stopford and Napier in the operations on the coast of Syria. In 1847 he was appointed to the responsible office of Surveyor-General of the Navy. This post, which he filled during a period of thirteen years, was more than usually onerous, owing to the transition state of the ships belonging to the Royal Navy. The substitution of steam for sails had been almost completed, and the substitution of the screw for the paddle was rapidly advancing ; but the ships were still two and three deckers, mounting broadsides of comparatively small guns. The transformation of line-of-battle ships into frigates of great length and fleetness, armed with a few guns of enormous calibre, had not commenced ; still less the construction of ram-headed iron-clads, and the turret system of carrying the armament. Captain Walker, during the whole of his thirteen years at the Admiralty, was engaged in these transition labours. With him rested the main duty of altering the construction of ships already partially built ; cutting wooden sailing ships in two, lengthening them by the insertion of centre timbers, and putting in steam engines ; preparing the way, also, for that virtual reconstruction of the Navy, which commenced about the close of his duties at the Admiralty. Naval critics have disputed the excellence of this or that style of ship, but all admit that the Surveyor of the Navy displayed great judgment in his utilisation of old sailing ships by converting them into screw steamers. Captain Walker, by a baronetcy conferred in 1856, and a rise in naval rank in 1858, became rear-admiral Sir Baldwin Walker. On quitting the Admiralty in 1860, he took command of the fleet on the Cape of Good Hope station, and then of that on the East India station. He was promoted to the rank of vice-admiral in 1865, and admiral in 1870. During a portion of this period he commanded the Sheerness station. Amongst the honorary decorations conferred on him, are those of Knight Commander of the Bath, admiral in the Turkish ser-

vice, knight of the Russian Order of St. Anne, of the Greek Order of the Redeemer, of the Austrian Order of the Iron Cross, and of the Prussian Order of the Red Eagle.

WALKER, JAMES, an eminent civil engineer, was born at Falkirk, September 14th, 1781. He was educated partly at Falkirk School, partly at Glasgow University, and came, in 1800, to London, where he was articled to his uncle, Mr. Ralph Walker, a civil engineer in considerable practice. He derived his first knowledge of that branch of engineering in which he afterwards took the lead, maritime and hydraulic, by taking part in his uncle's operations at the East and West India Docks. In 1803 he formed the Commercial-road, as a new artery of communication from the city to the docks, and later, laid upon it a granite tramway, which has much facilitated the transmission of heavy traffic along that thoroughfare. In 1806, as engineer to the Commercial Docks Company, he planned the works which, with various extensions, have since from time to time been constructed. During a period of nearly sixty years, Mr. Walker was engaged on a large number of engineering works, some of magnitude and importance. He was not much concerned in railway engineering, having planned and executed only two lines, the Leeds and Selby, and the Hull and Selby. When the Liverpool and Manchester Railway was being constructed, and engineers were invited by the directors to suggest the best mode of traction for the trains, Mr. Walker was one of those who advocated the combination of locomotive and stationary power; the Stephensons preferred locomotive traction alone; they gained the day, and this decision may probably have had something to do with Mr. Walker's preference for other than railway engineering works. Among works which he executed in and near the metropolis were Vauxhall Bridge; frequent repairs and reconstructions of Blackfriars and Westminster Bridges, prior to their demolition and rebuilding by other engineers; the river wall of the new Houses of Parliament, with the coffer-dam to aid in its construction. His works in other quarters were, however, far more numerous and important; many of them, partly finished or not commenced, devolved upon him at the time and in consequence of the death of Mr. Telford. Among them may be mentioned the Clyde Victoria Bridge; improvements and river wall to the Clyde at and near Glasgow; repairs of the Caledonian and Crinan Canals; the Tame Valley Canal; the Netherton Tunnel of the Birmingham Canal; the extension of the Bute Docks at Cardiff; the pier and harbour at Granton, near Leith; improvements of Belfast Harbour; Harbours of refuge, or other Harbour works, at Dover, Harwich, Jersey, and Alderney; the Tyne Piers; the completion of Plymouth Breakwater; the foundations for a fort at one end of the Breakwater; the Bishop Rock Lighthouse off the Scilly Isles, a work little less difficult than the Eddystone, Bell Rock, and Skerryvore Lighthouses; numerous constructions and alterations of lighthouses for the Corporation of the Trinity House; and extensive drainage operations in the Middle Level Fen district, whereby 90,000 acres of rich arable land have been reclaimed. More, perhaps, than any other member of the profession, Mr. Walker was called upon by the Government, corporate bodies, and boards and companies of various kinds, for advice and plans on engineering subjects; and his reports on such matters were numerous. The City Sewers and the Thames Embankment were among the number. He was a fellow of the Royal Societies of London and Edinburgh, LL.D (University of Glasgow), Member of the Senate of the University of London, and for thirteen consecutive years president of the Institution of Civil Engineers. He died at his house in Great George Street, Westminster, October 8th, 1862.

WALKER, THOMAS, a magistrate and humorist, was born in the year 1784, at Manchester, where his father and uncle were extensive manufacturers, who, at the breaking out of the French revolution, were unfortunately mixed up with the political agitation of the day. The father was tried for high treason at Lancaster, where he was successfully defended by Erskine, who made one of his most brilliant speeches on the occasion; while the uncle, having left the country, settled at Naples, where he died many years after. Mr. Walker, whose delicate health had necessitated his private education, was entered of Trinity College, Cambridge, where he took his B.A. degree in 1808, and proceeded M.A. in 1811. He was called to the bar by the Society of the Inner Temple, on the 8th of May, 1812, and was appointed, in 1829, to be one of the magistrates of the Lambeth-street Police Court, London. In this position he won great approbation for the soundness and discretion of his practical views, and for the ardour with which he investigated the moral condition of

his district, and applied himself to its amelioration. He was particularly known, however, for the fulness and flavour of his gifts as a conversationalist, and for the humour with which he flooded the intercourse of social life. Towards the latter end of the year 1835, Mr. Walker's health suffered considerably; and, with a view to its re-establishment, he paid a visit to the Continent. He died of pulmonary apoplexy, on the 20th of January, 1836, at Brussels, in the cemetery of which city his remains were interred.

Mr. Walker was not a voluminous writer. He contributed to the literature of what would now be called social science a small work, 'On Pauperism and the Means of reducing it,' 8vo, London, 1826, also published in an abridged form, with the title of 'Observations on the Nature, Extent, and Offices of Pauperism, and on the Means of reducing it,' 8vo, London, 1831. But his chief performance was the production of a weekly periodical called 'The Original,' 8vo, London, 1835, which commenced its career in May, 1835, and, after an issue of twenty-six numbers, came to a close on the 11th of November following. The genial fun and humour of the author sufficed to give character and attractiveness to the most common-place topics, which, as discussed in the pages of 'The Original,' varied as follows:—'Acquaintance'; 'Agriculture'; 'Aristology, or the Art of Dining'; to which nine articles were devoted; 'Art of attaining High Health'; eleven articles; 'Art of Listening'; 'Art of Traveling'; 'Clubs'; 'Crossing the Alps Mathematically'; 'Education'; 'Execution'; 'Good Breeding'; 'Good Feeling'; 'Government'; 'Hot Water'; 'Isacriotism'; 'Mount Vesuvius'; 'My Mother'; 'Pauperism'; 'Poverty and Pauperism'; 'Praise of Wine'; 'Prison Discipline'; 'Prize-Fights'; 'Punctuality'; 'Roasted Apples'; 'Romeo and Juliet'; 'Savings Bank for Seamen'; 'Sick Wives'; 'Silver Threepences and Fourpences'; 'Suppers'; 'Temper'; 'Two-penny Post'; 'Youth and Age'; and various others.

* WALLACE, ALFRED RUSSEL, naturalist and traveller, was born at Usk in Monmouthshire, in 1823. After receiving his education in Christ's Hospital, at Hertford, and London, he assisted his elder brother in his profession as architect and surveyor, chiefly in making parish surveys. At twenty-one he became the teacher of English at a school in Leicester, but had not pursued this occupation long before his brother died. He thereupon resumed the business of surveyor and followed it for some years at Neath in Glamorganshire. While at Leicester he became acquainted with Mr. Bates, and in conjunction with him he formed a scheme for exploring the Amazon valley. The expenses of the journey, which lasted from 1848 to 1852, were defrayed by the sale of objects collected by them and sent over to England from time to time. In 1854 he went to the Malay Archipelago where he remained till 1862. These expeditions yielded many valuable results. They afforded much new information respecting the animals of regions, many of which had not been previously visited by a professed naturalist. A large number of new species and genera were found and have been described by himself, Bates, and others. But, perhaps the special feature in connection with his researches is the constant attention which he paid to the habits and geographical distribution of the animals he met with. He pointed out that the birds and mammals of the Malay Archipelago belong to two distinct faunas, the one inhabiting the northern portion, and the other the southern portion; and that the line of demarcation is naturally indicated by the deep water channel commencing with the narrow Straits of Macassar, which separates two comparatively shallow areas. He also conceived the theory of natural selection, which, however, had been previously and independently started by Mr. Darwin, although not published by him. Indeed, it was the essay 'On the tendency of varieties to depart indefinitely from the original type,' which Mr. Wallace sent to England that led to Mr. Darwin's public enunciation of his views. The two papers appeared together in the 'Proceedings of the Linnean Society' for 1858. He has since written many papers in which his opinions are more fully illustrated by the facts which he has personally observed. In the main his opinions agree with those of Mr. Darwin; but in some of the subsidiary points their views do not coincide. Nevertheless, he is one of the foremost advocates of Mr. Darwin's theory. He is a fellow of the Royal Geographical and other societies; and was president of the Entomological Society from 1870 to 1872. The Royal Society of London and the Geographical Society of France have awarded him gold medals for his researches on the physical geography and natural history of the Malay Archipelago. Amongst his independently published works the most noteworthy are 'A Narrative of Travels on the Amazon and Rio Negro, etc.,' 8vo,

London, 1853; 'The Malay Archipelago; the Land of the Orang-Utan and the Bird of Paradise,' 2 vols., 8vo, 1869; and 'Contributions to the theory of Natural Selection,' 8vo, 1870. Of his papers the most remarkable are those 'On the pigeons of the Malay Archipelago,' in 'Ibis,' vol. for 1865, pp. 365-400; and 'On the phenomena of variation and geographical distribution as illustrated by the Papilionidae of the Malayan region,' in 'Transactions of the Linnean Society,' vol. xxv., pp. 1-71, 1865.

WALLACE, WILLIAM VINCENT, musician and musical composer, was born at Waterford, June 1st, 1814. His father, bandmaster of the 29th Foot, taught him to play on most kinds of military musical instruments, and obtained for him instruction likewise on the pianoforte, violin, and guitar. The youth became so excellent a player that, before his eighteenth year, he had filled the diverse offices of organist of Thurles Cathedral, violinist at the Dublin Theatre Royal, and conductor of concerts in the same city. Being advised to take a long sea voyage as a cure for a malady in the eyes, he quitted Dublin about the year 1833, and for a lengthened period led a singularly adventurous and chequered life. He first went to Australia, where for a time he combined the functions of backwoodsman and herdsman, music being wholly laid aside. Accident placed him, however, on one occasion in circumstances to hear, at Sydney, some amateur playing of one of Haydn's string quartettes. It re-awakened early associations; and he resolved to employ his musical abilities as a means of livelihood. He gave concerts, himself playing the violin; and having won much distinction as a musician, proceeded to Tasmania and New Zealand, where success again awaited him. Then he went to India, where, amongst other events, he played before the Court of Oude. Crossing the Pacific, his next concerts were given at Valparaiso and Santiago in South America. Thence journeying over the Cordillera of the Andes, he reached Buenos Ayres and other towns, where his violin-playing was regarded as of a higher order than had ever before been heard in South America. His next principal places of performance were Havana, Vera Cruz, Tampico, Mexico, New Orleans, and New York. At the last-named city, about eleven years after quitting his native country, he married Miss Helen Stempel, a pianist. His own performance on the pianoforte was only a little less excellent than on the violin; and as a concert-giver and music director he was in much repute. In 1845 he came to London, but could not hold his ground against the great instrumentalists always to be heard here. Then it was that he turned his attention to composing, and speedily produced his 'Maritana,' in three acts, founded on the Spanish story of 'Don César de Bazan.' This met with great success, and has ever since been popular. It was followed in 1847, by 'Matilda of Hungary,' an opera which failed to hit the public taste. He made two visits to the continent, and superintended the bringing out of his operas at Vienna. He undertook to write an opera for the Grand Opera at Paris; but while preparing it, another attack of illness sent him on another sea voyage in search of health. He went to Rio de Janeiro in 1849, gave concerts there, then at New Orleans, then at New York. Having saved some money, he unfortunately invested it in a pianoforte manufactory at New York; lost it all in 1852; resumed his concerts; and returned in 1853 to England, where his chief employment for seven years was composing a large mass of vocal and instrumental music, chiefly for voice and pianoforte. In 1859 he produced 'Lurline,' an opera in three acts. This, and 'Maritana,' were the only two operas of his which had marked success; although he himself preferred the 'Amber Witch,' produced in 1861. Another opera was the 'Desert Flower,' produced in 1863. He contributed numerous pieces to 'Chappell's Musical Magazine,' and other publications. An incurable malady attacked him; he went to France in 1864, and died at the Château de Bagen, Haute Garonne, October 12th, 1865. His remains were brought to England, and buried on the 23rd at Kensal Green. The names of five operas are mentioned, which Mr. Wallace left in an unfinished state, viz., 'The King's Page,' 'Estrella,' 'The Maid of Zurich,' 'Gulnare,' and 'Olga.'

WALLICH, NATHANIEL, M.D., F.R.S. [E. C. vol. vi. col. 1029.]

WALTERS, EDWARD, architect, was born in London, December, 1808. His father, Mr. John Walters, was the architect of the Auction Mart, Bartholomew Lane, Shadwell Church, and other well-known buildings, but dying early, Edward was placed in the office of Mr. J. Clarke, and he was afterwards successively in the offices of Messrs. T. Cubitt, Lewis Vulliamy, and J. Walker. In 1832 he went to Constantinople to superintend

for Sir John Rennie the erection of various works for the Turkish Government. Leaving Constantinople in 1837, he returned home by way of Smyrna, Malta, Sicily, and Italy. After some hesitation, he decided to settle in Manchester, 1839, led thereto partly by a friendship he had formed at Constantinople with Richard Cobden; and one of his first works of any consequence in Manchester was a warehouse he erected for Mr. Cobden in Mosley Street. Mr. Walters made but slow progress for some years, but when his rare ability was recognised he rose rapidly, and for many years held the position of leading architect in the city. He erected some mansions of a superior character; several dissenting churches and chapels, and a few public buildings; but his speciality was in the large and stately warehouses which now form so striking a feature in the street architecture of Manchester. Before Mr. Walters's time the warehouses of Manchester were large, plain, common-place, brick buildings, for the most part mean and repulsive, rather than attractive. Mr. Walters saw that, from their size, the wealth of the firms to which they belonged, and the nature of the business transacted in them, they afforded ample opportunity for architectural character. He selected as his model the Italian Renaissance palaces which Barry had shown might be easily modified and adapted to English urban purposes, and he surprised the citizens by the stateliness, brightness, vigour, and solidity of aspect of his early buildings of this class; and notably those of Messrs. Schwabe & Cooke; James Brown, Portland Street, and Keershaw, Leese, and Co. The desire for such buildings spread fast and far, as it was seen that warehouses of this kind not only gave a certain stamp of solidity to a firm, but were admirably adapted for the display of goods and the transactions of business. Mr. Walters found himself with more commissions on his hands than he could well execute. All his many warehouses are Italian Renaissance in style, with great differences of elevation, outline, mouldings, and decoration, but all treated broadly, with special reference to the site, the business, and the cost; all unnecessary pretence being studiously avoided. His chief public building was the Free Trade Hall, completed in 1856, on the whole, one of the best buildings yet erected in this country for the holding of public meetings. Another good building of this class was the Warrington Public Hall, completed in 1861. The Manchester and Salford Bank, Mosley Street, a very elegant structure, the London, Liverpool, and Globe Insurance Office, and some of the Midland Railway stations were also successful modifications of his favourite Italian style. His chief ecclesiastical edifice was Cavendish Chapel, but Gothic was not his forte; and when, in the competition for the Manchester Assize Courts his carefully elaborated classic design was rejected for Mr. Waterhouse's brilliant Gothic one, and Gothic energy was successfully invading even the warehouse region in which he had long reigned unquestioned monarch, he felt it time to retire. In 1865 he transferred his business to his pupils, Messrs. Barker and Ellis, and by visits and travel, and spending his winters in Italy, he sought to recruit his health. He died at Brighton of pleurisy on the 22nd of January, 1872. (*Builder*, March 16th, 1872, where is a complete list of his buildings.)

WAN-WANG, the founder of the Chinese dynasty of Chow, was born, according to their chronology, about 1230, B.C. Like Confucius, he traced his pedigree back to the semi-fabulous Emperor Hoang-ty. He succeeded his father, Ki-ly, as governor of Chow, in 1185, B.C. By Ti-y, the last emperor but one of the Shang dynasty, he was made commander-in-chief of the Chinese army; but Chow-sin, son and successor of Shang, jealous of Wan-wang's power and popularity, threw him into prison, 1145, B.C., where he remained three years. Whilst in confinement he wrote a commentary, 'Keaou,' on the lines of Fou-hi, which still exists, and is esteemed by the Chinese one of their chief classics. When released and restored to his dignities, Wan-wang betook himself to his principality, reduced to obedience several subordinate chieftains, formed a powerful army, and became virtually independent, having obtained from the emperor the right to make war and peace. Chinese books dwell on his military qualities, the splendour of his court, his patronage of learning, his wisdom, clemency, and various virtues. He died about 1133, B.C., at the age of 97, having governed the Chow country for fifty years. His son, Woo-wang, permitted the tyrant Chow-sin to reign for a few years, when he deposed him and became the first Emperor of China and of the Chow dynasty; but Wan-wang is regarded by the Chinese as the actual founder of the dynasty. In course of time divine honours were decreed to Wan-wang, and temples erected to his honour throughout the empire.

* WAPPERS, BARON GUSTAF, an eminent Belgian painter, was born at Antwerp, August 23rd, 1803. He was a pupil of M. Van Brée, and a student in the Antwerp Academy, but completed his studies in Paris. His picture of 'The Devotion of the Burgomasters of Leyden,' exhibited in 1830, at once secured his position. He has since painted a large number of religious pictures, several of them for churches; historical, genre, and poetical subjects; and portraits of the King of the Belgians and other distinguished persons. His historical pictures refer chiefly to Belgian history, but he has painted two or three incidents in the life of Charles I., one of which is in the Musée Royal of Belgium, and some of other periods of English history. For the King of the French, Louis Philippe, he painted 'The Defence of the Island of Rhodes by the Knights of St. John of Jerusalem,' now at Versailles; and he has received commissions from Queen Victoria. In his own country Wappers has obtained abundant honour. He is member of the several academies; was first professor, and from 1846 to 1850, director of the Academy of Antwerp; was created Baron in 1847; is portrait painter to the King, and commander of the order of Leopold. He is also an officer of the Legion of Honour, France, knight of the Red Eagle of Prussia, the Royal Order of Bavaria, the Order of Christ of Portugal, &c.

WARD, SIR HENRY GEORGE, G.C.M.G. [E. C. vol. vi. col. 523], died at Madras, on the 2nd of August, 1860.

WARD, JAMES, R.A. [E. C. vol. vi. col. 521]. This remarkable painter died at his residence, Roundcroft Cottage, Cheshunt, on the 17th of November, 1859, having just completed his 90th year: he was born, October the 23rd, 1769, not 1770, as stated in the above memoir. His largest and best picture, 'Alderney Bull, Cow, and Calf,' noticed in the original memoir (col. 522), was purchased in 1862 for the National Gallery, where are also his 'Council of Horses,' painted in 1848, and 'Lake and Tower in De Tabley Park,' painted in 1814.

WARD, NATHANIEL BAGSHAW, botanist, son of Stephen Smith Ward, a medical practitioner in the East End of London, where the son was born August 13, 1791. At the age of thirteen his father sent him upon a voyage to Jamaica. An excursion into the interior introduced him to its palms and ferns, and thenceforward the study of botany became the chief occupation of his leisure hours. At an early date his house in Wellclose-square became known by the varied vegetation by which it was surrounded. The climate of Eastern London, however, and more particularly the impurity of the air, were sources of constant disappointment. In the summer of 1829 he happened to place the chrysalis of a moth in a glass bottle, covered by a lid, for the purpose of watching the development of the perfect insect. Upon the surface of the mould there appeared two specks of vegetation, which proved to be a fern and a grass. Their remarkably healthy appearance at once attracted his notice; but it required years of observation and experiment for him to determine what the physical conditions were that conducted to this healthiness. The result was the now well-known "closed or Wardian case," the principle of which mainly consists in affording the plants a proper supply of light and moisture, at the same time that they are protected from atmospheric impurities and sudden changes of temperature. Among the earliest applications of these cases to the transport of living plants between distant countries may be mentioned that of Captain Mallard, who, about forty years ago, brought from Sydney a collection of Australian plants for the Messrs. Loddiges; and that of John Williams, the Polynesian missionary, who took the Chinese banana from the Duke of Devonshire's seat at Chatsworth to the Samoan or Navigator's Islands, whence it was carried by the Rev. George Pritchard to the Friendly Islands and the Fiji, and has thus prevented the recurrence of those famines to which those islands had been previously subject. The chief use of these cases has, perhaps, been in the introduction of the tea and cinchona plants into India. The cinchona is now extensively cultivated on the Neilgherries. The cases have also been of signal service to horticulturists, to botanical gardens, and to the amateur gardeners of large towns. In a modified form they have lately been used for vivaria, and it is thought they may serve for the transport of insects and the smaller animals. Mr. Ward's first publication on the subject appears to have been in 1836, in a letter to the late Sir William Hooker, printed in the 'Companion to the Botanic Magazine' for May of that year. In 1838 Professor Faraday made it the subject of a lecture at the Royal Institution. In 1842 appeared the first edition of Mr. Ward's work, 'On the Growth of Plants in closely-glazed Cases.' He was elected fellow of the Linnean

Society in 1817, and of the Royal Society in 1852. He had a large medical practice, and for the greater part of his life was associated with the Apothecaries Society of London; first as superintendent of the gardens at Chelsea, most of the improvements in which were made at his suggestion; then as examiner in botany; then as master; and lastly, as treasurer. His hospitable home at Clapham Rise is described by Dr. Hooker as "the most frequented metropolitan resort of naturalists from all quarters of the globe since the time of Sir Joseph Banks." From the earlier gatherings in Wellclose-square originated in 1840 the Microscopical Society of London. His fine collection of dried plants, to which his friend the late Dr. W. H. Harvey had largely contributed, was in part purchased by the British Museum after his death. He died at St. Leonard's, June 4, 1868.

(Anniversary Address to the Linnean Society, 1869, by J. Bentham; *Gardener's Chronicle*; *Medical Gazette*, &c.)

WARINGTON, ROBERT, chemist, was born at Sheerness, September 7, 1807, and educated at Merchant Taylors' School, London. In 1822 he was apprenticed to Mr. Cooper, a manufacturing chemist. In 1828 he was appointed professor of chemistry in the London University. From 1831 to 1839 he was the chemist to Messrs. Truman, Hanbury, and Buxton, the brewers. In 1842 he took the position of chemical operator to the Society of Apothecaries, which he held till his death, which occurred at Budleigh Salterton, November 12, 1867. He was an active co-operator in the formation of the Chemical and Cavendish Societies, as also of the Royal College of Chemistry. He has assisted in the revision and drawing up of most of the English Pharmacopœias. The 'British Pharmacopœias' of 1864 and 1867 were, to a large extent, written by him. He wrote many chemical papers. One of the subjects which occupied his attention for several years was the mutually compensating operations which animals and plants exercise on the medium inhabited by them: for instance, animals which would die in a vessel of water when they alone tenant it, will thrive if plants grow in the same water. His observations, which appeared in the 'Annals and Magazine of Natural History,' had a marked influence in popularising the employment of aquaria. His latest paper was a valuable one on the same subject. It appeared in the 'Proceedings of the Royal Society' for 1867, under the title of 'On some alterations in the Composition of Carbonate of Lime Waters depending on the influence of vegetation, animal life, and seasons.' He was the inventor of the portable microscope known by his name.

WASHINGTON, JOHN [E. C. vol. vi. col. 549], was promoted to be rear-admiral in 1862. He died at Frascati, September 16, 1863.

WATERTON, CHARLES, naturalist, was born at Walton Hall, June 3, 1782, and educated first at a school at Tudhoe, near Durham, and then at the College belonging to the Jesuits at Stonyhurst, in Lancashire. In 1804 he went to Surinam, and from this year until 1824, with the exception of a few visits to his home, he rambled about South America. Although he did not attain to much distinction as a scientific man, he was well known as a good and enthusiastic field naturalist, and as he also had a spirited style of writing, his 'Account of Wanderings in South America, the North-west of the United States, and the Antilles, in 1812, 1816, 1820, and 1824, &c.,' 8vo, London, 1828, became popular. Being endowed with remarkable boldness, he frequently had personal contests with some of the larger animals. Thus, in his desire to procure an alligator's skin without any shot-holes in it, he captured one by bridling it, mounting on its back, and compelling it to go the way he wished. He also wrote 'Essays on Natural History' in three series, of which an edition appeared in 1871, with an account of his life by N. Moore, based largely upon autobiographical notes. He was very eccentric and abstemious in his habits. During the last years of his life he resided at Walton Hall, which stands on a small island. Here he had a large number of pets. Even the ordinary inhabitants of the island shared his attentions; for he gave strict orders that nothing should be killed or destroyed; so that the rabbits, sparrows, &c., roamed unmolested. He died May 27, 1865.

WATT, JAMES HENRY. [E. C. vol. vi. col. 569.] This distinguished line engraver died on the 18th of May, 1867, aged 68.

WATTS, ALARIC ALEXANDER [E. C. vol. vi. col. 570], died on the 6th of April, 1864, having just completed his 65th year.

* WATTS, GEORGE FREDERICK, R.A., an eminent historical and portrait painter, was born in London in 1818, and

studied at the Royal Academy. His name occurs in the exhibition catalogues as early as 1836; but he first obtained notice in 1843, when, at the Cartoon Competition, his 'Caractacus' secured a first-class prize of 300*l*. Mr. Watts then went to Italy, in order to study the great masters of religious and historical painting, and in so doing acquired a bias for the severe early Roman manner which has characterised his subsequent productions. On his return to England he engaged in the Fine Arts Competition of 1847, and was again successful, his oil painting of 'Alfred encouraging the Saxons to resist the Danish Invaders' having been awarded a first-class premium of 500*l*, and purchased by the commissioners. But though thus successful in the competitions, Mr. Watts was only employed to paint one of the actual decorations of the new Houses of Parliament—the fresco of St. George, in the Poets' Hall. Mr. Watts has, however, had other opportunities afforded him for displaying his power in mural painting. His most important work of the kind is 'The School of Legislation,' in the great hall of Lincoln's Inn, a picture in which are assembled the chief lawgivers of every age and country, somewhat in the manner in which Raffaele has assembled the great teachers of religion in his 'School of Theology.' The Lincoln's Inn fresco is the largest yet executed in this country, being 50 feet by 34 feet. Another fresco by Mr. Watts is the Majesty in the church of St. James the Less, Westminster. His easel pictures are mostly of classical and poetical subjects, and display subtlety as well as refinement of thought, and breadth of treatment: they include such subjects as—'Fata Morgana,' 'Life's Illusions,' 'Virginia,' 'Ariadne,' 'Thetis,' 'The Wife of Pygmalion,' 'Orpheus and Eurydice,' 'The Red Cross Knight and Una,' 'The Meeting of Jacob and Esau,' 'The Return of the Dove.' Mr. Watts has of late years painted several portraits, which differ much from the fashionable style of portraiture, aiming rather at severe truth than brilliancy. He is understood to be engaged on a series of heads of eminent contemporaries, of which those of Tennyson, Sir H. Lawrence, Millais, Leighton, &c., have been exhibited. He has also exhibited a marble bust of Clytie. Mr. Watts was elected A.R.A. in 1868 and R.A. in 1870.

WATTS, THOMAS, keeper of printed books in the British Museum, was born in London in 1811, and was educated at a school in Finsbury, kept by a Mr. Lymington. At an early age he showed a marked fondness for, and facility in acquiring languages, a passion for reading, and readiness in writing both prose and verse. On leaving school he continued the habit of diligent self-culture, and added to Latin, Greek and French, a mastery over Italian, Spanish, Portuguese, and German, and afterwards of Dutch, Danish, Swedish, Icelandic, Russian, Polish, and Hungarian. A constant and laborious student in the reading-room of the British Museum, when readers were comparatively few, he attracted the notice of the museum authorities and was invited by Mr. Baber, then keeper of the printed books, to examine and catalogue a collection of Russian books, which had been purchased on his recommendation, and the way in which he executed the commission led to his appointment, in January, 1838, as assistant in the library. Whilst conscientiously fulfilling the duties of this laborious and ill-remunerated post, he devoted all his spare hours to linguistic and literary studies, and added to his store on the one hand, Hebrew, Arabic, Persian, Turkish, Chinese, Sanskrit, and at least the principles of the oriental languages generally; and on the other, Welsh, Gaelic, Irish, and other Celtic tongues. Gradually rising in position in the library, Mr. Watts came to be regarded by Mr. Panizzi, who had succeeded to Mr. Baber's post, and who afterwards became principal librarian, as his most efficient auxiliary in re-arranging and improving the library. As a librarian, indeed, Mr. Watts was probably unrivalled. His rare knowledge of languages, of which he is said to have been familiar with nearly forty, and to have known the best books and the best editions of them in each, his prodigious memory and capacity for classification and organisation, enabled him to accomplish tasks which any other man would have shrunk from attempting, and failed in if he had tried. The special duty of arranging the library was devolved on him, and "for nearly twenty years every book that was acquired by the museum passed through his hands for the purpose of classification. It is believed that more than 400,000 volumes [this was stated by Mr. Watts himself, *Art. BRITISH MUSEUM, E. C. Arts and Sciences Div., vol. ii. col. 387*] were examined and classified by Mr. Watts during the period that he was so engaged." (Cowtan's 'Memories of the British Museum,' p. 287.) On the construction of the new reading-room, the arrangement of the large library of reference placed in it was made by him. The

selection of books for purchase was an important part of his official duty, on which he entered, and which he continued, with singular zeal. "The object," as he observed in an official letter addressed to Sir Antonio Panizzi, and printed by order of the House of Commons, "the object which has been kept in view during the last three and twenty years has been to bring together from all quarters the useful, the elegant, and the curious literature of every language; to unite with the best English library in England or the world, the best Russian library out of Russia, the best German out of Germany, the best Spanish out of Spain, and so for every language, from Italian to Icelandic, from Polish to Portuguese. In five of the languages in which it now claims this species of supremacy—in Russian, Polish, Hungarian, Danish, and Swedish—I believe I may say that, with the exception of perhaps fifty volumes, every book that has been purchased by the museum within the last three-and-twenty years, has been purchased at my suggestion. I have the pleasure of reflecting that every future student of the less-known literature of Europe will find riches where I found poverty; though, of course, the collection in all these languages together forms but a small proportion of the vast accumulations that have been added to the library during your administration and that of your successor." And this object, he was able to say, had been accomplished. "The museum is now supposed to possess . . . the best library in every European language out of the territory in which that language is vernacular." (*Art. BRITISH MUSEUM, E. C. Arts & Sciences Div. vol. ii. col. 385.*)

Mr. Watts was appointed the first superintendent of the new Reading Room, and his services were of especial value in facilitating the new arrangements; but he found the employment irksome and welcomed his transfer to the more congenial duty of the library proper. In 1866 he was promoted to be keeper of the printed books, and at once addressed himself with ardour to the task of bringing up the collections to his idea of a perfect library. His labours were incessant, and he regarded with a pardonable pride the results. "Wait another three years!" he said to the writer of this sketch, in the summer of 1869. A month or two later, he went for his annual holiday into South Wales. He was out of health, but he looked forward with confidence to the effect of change of air and scenery. A slip from a carriage as he was alighting at the Crown Hotel, Bridgenorth, caused what seemed but a slight injury to his right leg. Rest and local medical treatment failing to arrest the inflammation, he returned to London. He seemed to improve, but an attack of heart disease supervening, he expired almost suddenly on the 8th of September, 1869, at his residence in the British Museum, and was interred that day week in Highgate Cemetery.

As may be supposed, Mr. Watts's incessant official occupation, the many calls upon his attention when his official duties were nominally over, and the time required for the maintenance and extension of his prodigious range and variety of knowledge—and to the last he was acquiring with the zeal of the youngest student—left him little leisure for original composition. No independent work, indeed, bears his name. Yet he wrote much, and all that he wrote was valuable. At an early age he commenced to contribute to periodical literature, and if there were a complete list of his papers many of them would be found in unexpected quarters. Thus, in a series of papers on the British Museum, published anonymously in the 'Mechanics' Magazine' for 1836 and 1837, he pointed out the advantages offered by the vacant quadrangle of the building as the site of "a reading-room of ample dimensions, surrounded on all four sides by galleries for the books, communicating with each other and lighted from the top," an idea which afterwards suggested itself to Mr. Panizzi, and which in his hands resulted in the erection of the present magnificent Reading Room. In one of his early papers he showed that a newspaper in the museum, which was supposed to be the earliest published, 'The English Mercurie' of 1558, is an entire fabrication. He was a frequent contributor to the Transactions of the Philological Society, his papers on the English, on the Russian, and on the Hungarian languages being particularly valuable; the last, indeed, procured his immediate election into the Hungary Academy. To the unfinished 'Biographical Dictionary' of the Society for the Diffusion of Useful Knowledge, he contributed many memoirs. To the 'English Cyclopædia,' Mr. Watts was one of the most valued contributors. He furnished a very large number of lives of northern worthies to the Biographical Division, whilst for the Division of Arts and Sciences he wrote, among others, the almost exhaustive articles, British Museum; Libraries; and Welsh Language and Literature, the last of which was reprinted for private circulation. But the

articles he wrote, valuable as they are (and they are models of their kind), were far from being the only, or even the chief, assistance he rendered to a work in which from the first he took a singularly warm interest. Mr. Watts also wrote some valuable papers in the 'Athenæum' and other journals, and a few articles in reviews—one of the most noteworthy of which was that on Cyclopædias in the 'Quarterly Review' for April, 1863, probably the most learned and comprehensive essay on the subject ever published.

* WAUGH, SIR ANDREW SCOTT, geographical surveyor, was born in 1810. He entered the corps of Bengal Engineers in 1827, and joined the great trigonometrical survey of India in 1832. He conducted the Rangheer series of observations, which he began in 1834, and completed. He then continued the great arc series to the head of the Anna Series through the Terai country. In 1843 he succeeded Sir G. Everest as Surveyor-General of India and Superintendent of the Trigonometrical Survey; and his first undertaking was the completion of Sir G. Everest's project for the triangulation of the region between the great arc series and Calcutta. This was completed by his measurement of the Sona Khoda base. He then made a gridiron of triangulations west of the great arc series, which not only extended over a far larger area than the one devised by Sir George Everest, but comprised a country remarkably difficult for surveying on account of its mountainous character. It was commenced in 1847—48. In 1856 he instituted a series of levelling operations to determine the heights of the base lines of the interior. His writings are almost wholly connected with the survey, consisting of reports, and survey observations; a large proportion of the latter are unpublished, but form part of several of the MSS. volumes relating to the survey. In 1856 the Royal Geographical Society awarded him a gold medal for his services, and in 1861 he was knighted for the same reason; and, having been appointed major-general, retired from active service. He is a fellow of the Royal, Royal Geographical and other Societies.

* WAUTERS, CHARLES AUGUSTIN, a celebrated Belgian painter, was born at Boom, in 1811. He studied in the academies of Mechlin and Antwerp, and was a pupil of M. Van Brée. He obtained reputation by his 'Departure of Columbus for the New World,' exhibited at Antwerp in 1834, and has since painted a great many historical, religious, and poetical pictures, of which it will be enough to mention 'The Death of Mary of Brabant'; 'Peter the Hermit preaching the Crusade'; 'The Passage of the Red Sea'; 'Dante and Beatrice'; genre subjects, as 'The Day after the Ball,' and 'The Bathers'; and many portraits. M. Wauters was for some years director of the Mechlin Academy. He is a knight of the Order of Leopold.

WAYLAND, FRANCIS, D.D., LL.D., American professor and writer, was born at New York, March 10th, 1796. He graduated at Union College in 1813, studied medicine for three or four years, and became licentiate; but his taste leading him towards divinity, he entered Andover Theological College, obtained a tutorship in Union College, and in 1821 was appointed pastor in the Baptist Church. Without relinquishing his pulpit duties, he accepted in 1826 the professorship of mathematics and natural philosophy at Union College. In 1827 he was appointed president of Brown University, Providence, an office which he filled for twenty-eight years. His great desire was to render the university available for young men intended for commercial, manufacturing, and agricultural pursuits, and not to confine it, as it had until then been, to students in the learned professions. The difficulties in his way were considerable, but he succeeded in introducing marked improvements. He resigned his presidency in 1855; his Sunday preachings as a Baptist minister continued a few years later. Dr. Wayland (he received the degree of D.D. in 1827, and that of LL.D. in 1852) exhibited the same diversity of subjects in his published works as in his studies and professional avocations. The following writings were from his pen:—'Elements of Moral Science,' 1835, abridged for the use of schools in 1836; 'Elements of Political Economy,' 1837; 'University Sermons,' 1838, enlarged and republished under the title 'Salvation by Christ,' 1858; 'On the Limitation of Human Responsibility,' 1840; 'Thoughts on the Collegiate System of the United States,' 1842; 'Christianity and Slavery,' a controversy between Dr. Wayland and Dr. Fuller, in which the former strongly advocated the anti-slavery side, 1845; 'Life of the Rev. Adoniram Judson, D.D.,' 2 vols. 1853; 'Intellectual Philosophy,' 1854; 'Notes on the Principles and Practice of the Baptists,' 1856; 'Occasional Discourses,' 1858; 'Letters to the Churches on the Ministry of the Gospel,' 1863; 'Memoir of

Thomas Chalmers, D.D.,' 1864. Dr. Wayland died September 26th, 1865, while preparing a new edition of his 'Elements of Moral Science.'

(*Memoir of the Life and Labours of F. Wayland, D.D., including a Selection from his Personal Reminiscences and Correspondence*, by F. Wayland, jun. 2 vols. 8vo, New York, 1867.)

WAYNE, ANTHONY, a distinguished American general, was born at East Town, Pennsylvania, January 1st, 1745. A land surveyor by profession, he was, in 1773, elected a member of the Pennsylvania Assembly. In 1775 he joined the army, and received the rank of colonel. He accompanied General Thomas into Canada in the spring of 1776, and his conspicuous gallantry especially in the affair at Three Rivers, did much to lessen the discredit of that disastrous expedition. Wayne was created brigadier-general, and served with distinction at Brandywine, Monmouth, &c. For a daring night attack, July, 1779, on a fortress at Stony Point, on the Hudson, he received the thanks of Congress and a gold medal. His retreat from a superior British force at Jamestown, Virginia, was greatly commended by military critics. For his services in Georgia, the Legislature voted him a valuable farm. After the peace he was elected a member of the Pennsylvania Convention for considering the federal constitution. His last employment was the command of the war with the North-Western Indians in Ohio, 1792—95. A few months after its successful termination, he died at Presque Isle, now Erie, Pennsylvania, December, 1796.

WEBBER, JOHN, R.A., was born in London in 1752. His father, a Swiss, settled in London as a monumental sculptor, sent him to Paris to learn painting. He returned to London in 1775, entered as a student at the Royal Academy, and soon after practised as a landscape-painter. He received the appointment of draughtsman to the last expedition, commanded by Captain Cook, for the discovery of the North-West Passage, which sailed in 1776. Webber returned to England in 1780, and was employed by the Lords of the Admiralty to superintend the execution of the engravings made from his drawings. He afterwards pursued with success his calling as a landscape-painter, and engraved and published on his own account a series of views in aquatint of the principal places he had visited. His pictures are carefully drawn and finished, but exaggerated in colour. Webber was elected A.R.A. in 1785, and R.A. in 1790. He died May the 29th, 1793. Some of his water-colour drawings are in the South Kensington Museum.

* WEEKES, HENRY, R.A., was born at Canterbury, Kent, in 1807. He was a pupil of the sculptor Behnes, and in 1823 became a student in the Royal Academy. On leaving Mr. Behnes, he was engaged as assistant by Sir Francis Chantrey. On the death of Chantrey in 1841, Mr. Weekes, as his chief assistant, was entrusted with the completion of his principal unfinished works. From that time, working on his own account, he has steadily made his way to a foremost place among living English sculptors. Mr. Weekes has executed a few imaginative works, as the bas-relief of 'Jacob's Vision,' 1845; 'The Suppliant,' 1850; 'The Young Naturalist,' 1857; 'The Mother's Kiss,' 1858; 'Ariel,' 1863; 'Luna,' 1866; 'Cleopatra,' 1869; the colossal statue of 'Sardanapalus,' for the Egyptian Hall of the Mansion House, and one of the great groups for the Albert Memorial. But Mr. Weekes is better known by his memorial and monumental statues and busts. Of the former class are Provost Goodall, for Eton College; the Duke of Wellington; Sir Robert Peel; Sir T. F. Buxton; the monuments to the poet Shelley and his wife, Mary Wollstonecraft Shelley, executed in 1853 for the Priory Church, Christchurch, Hampshire; Lord Bacon, for Trinity College, Cambridge; John Hunter, for the Museum of the Royal College of Surgeons; William Harvey, for the Oxford Museum; Archbishop Sumner, for Canterbury Cathedral; Charles II., for the New Palace, Westminster; the Queen, for Calcutta. His busts include—the Queen; the Earl of Shaftesbury; Dr. Buckland; Professor Sedgwick; Sir G. C. Lewis, for Westminster Abbey; Sir Tatton Sykes; Mulready and Stothard, for the entrance-hall of the National Gallery; R. Jones, R.A., for the Royal Academy; and many other distinguished personages. Mr. Weekes was elected A.R.A. in 1851, R.A. in 1863. He is the author of a 'Treatise on the Fine Arts Section of the Great Exhibition of 1851.'

WEISHAUP, ADAM, a German jurist, and founder of the sect of the Illuminati, was born on the 6th of February, 1748, at Ingolstadt, in Bavaria, and was educated at the university of his native town, where he took his doctor's degree in the faculty of law in 1768. He became a teacher of law (repetent) in the university; and in 1772 and 1775 respectively was appointed

extraordinary and ordinary professor of natural law and of canon law. The chair of canon law had up to this time been regarded as a *peculium* of the regular clergy; and Weishaupt's appointment to this position excited considerable enmity, a feeling which he reciprocated, especially against the Jesuits, under whose influence and at whose hands he had received his earlier education. He associated himself, in 1776, with other persons of a kindred way of thinking, in an order of men called Illuminati, forming with them a powerful secret society in the interests of cosmopolitanism and universal human fraternity, and took advantage of the popularity which his lectures commanded amongst students of all the faculties to turn his chair into a propaganda. From his lecture-room, as from a centre, radiated the principles of cosmopolitanism until they had spread into the whole of Germany; and in 1782 he made a great but unsuccessful attempt to amalgamate his order with that of the Freemasons, for which purpose he attended a grand masonic congress which assembled in the last-named year at Wilhelmsbad. In 1784 the order of the Illuminati was suppressed, in common with other secret societies, by the Elector of Bavaria, and in the following year Weishaupt was deprived of his professorship. Hereupon he found a patron in Ernest, Duke of Saxe-Gotha, from whom he received the appointments successively of legationsrath, or embassy-counsellor, and of hofrath, or aulic counsellor. Professor Weishaupt died at Gotha on the 18th of November, 1830.

His principal works are 'Jus civile privatum ac Determinationes Juris Boici,' 2 vols. Ingolstadt, 1771—73; an Apology for the Illuminati, 'Apologie der Illuminaten,' 8vo, Frankfurt and Leipzig, 1786, a reply to a work produced by J. von Utzschneider; 'Apologie des Misvergnügens und Uebels,' &c., 3 parts, 8vo, Frankfurt and Leipzig, 1787, second edition, 2 vols. 8vo, 1790; On Materialism, &c., 'Ueber Materialismus und Idealismus,' 8vo, Nürnberg, 1787, second edition, 1788; Introduction, &c., 'Einleitung zu meiner Apologie,' 8vo, Frankfurt and Leipzig, 1787; the Amended System of the Illuminati, with all its Orders and Degrees, 'Das verbesserte System der Illuminaten, mit allen seinen Einrichtungen und Graden,' 8vo, Frankfurt and Leipzig, 1787, third edition, 1818; Supplementary Vindication of my Purposes, 'Nachtrag zur Rechtfertigung meiner Absichten,' 8vo, Frankfurt and Leipzig, 1787; Pythagoras: or, a Consideration of the secret Art of the World and of Politics, 'Pythagoras: oder, Betrachtung über die geheime Welt- und Regierungskunst,' 8vo, Frankfurt and Leipzig, 1790; On Truth and Moral Perfection, 'Ueber Wahrheit und sittliche Vollkommenheit,' 3 vols. 8vo, Ratisbon, 1793—97; the Lantern of Diogenes, &c., 'Die Leuchte des Diogenes: oder, Prüfung unserer heutigen Moralität und Aufklärung,' &c., 8vo, Ratisbon and Sulzbach, 1804; Materials towards a Knowledge of the World and of Men, 'Materialien zur Beförderung der Welt- und Menschenkunde,' 3 vols. 8vo, Gotha, 1810; and other works in politics, philosophy, and jurisprudence.

WEISSE, CHRISTIAN SAMUEL [E. C. vol. vi. col. 583], mineralogist, died on the 2nd of September, 1856, aged 76.

*WELLS, HENRY TANWORTH, R.A., portrait-painter, was born in London, in December, 1828. After practising some years as a miniature-painter, he, about 1860, abandoned that branch of art for full-sized portraiture in oil, and soon established his position among the leading portrait painters of the day. He has since exhibited an immense number of portraits, not always of persons of public interest, for the fidelity of his likenesses and the elegance of his manner have attracted a very wide range of sitters; but among his pictures have been some in which he has departed from the ordinary routine of portraiture, as in 'Preparing a Tableau-Vivant: Portraits of Florence, Mary, and Ada Bell,' 1865; 'Volunteers at a Firing-Point,' 1866; 'Earl and Countess of Spencer at a Firing-Point, Wimbledon,' which has been engraved; and 'Letters and News at the Loch-side,' 1868. One of the best of his recent portraits is that of Sir Charles Lyell, 1870. He has also exhibited a 'Roman Labourer,' 1864; a 'Reaper,' 1871; and 'The Outskirts of a Farmyard at Twilight,' 1865. Mr. Wells was elected A.R.A. in 1867, and R.A. in 1870.

WELSH, JOHN, was born at Boreland, in the stewardry of Kirkcudbright, on the 27th September, 1824. He was educated at Castle Douglas, and afterwards at the University of Edinburgh, with a view to the profession of an engineer; but in consequence of his success in the study of natural philosophy, he was engaged by Sir Thomas Brisbane, Bart., president of the Royal Society of Edinburgh, as an observer for his Magnetical and Meteorological Observatory at Makerstoun. When the period for the duration of this observatory was completed, Mr.

Welsh, in 1850, became assistant to Mr. Ronalds at the Kew Observatory, of which he was afterwards the superintendent. From this time until his death, in 1859, he rendered this physical observatory more and more efficient. In the 'Philosophical Transactions of the Royal Society for 1856' is a paper entitled, 'An Account of the Construction of a Standard Barometer, and Description of the Apparatus and Processes employed in the Verification of Barometers at the Kew Observatory;' and in the 'Proceedings,' vol. vi., a report of the general process adopted in graduating and comparing the standard meteorological instruments for the Kew Observatory; also a report on the graduation of thermometers, &c. The reports of the British Association likewise bear witness to the value of Mr. Welsh's services. In 1852 he made four balloon ascents for scientific objects. He contrived a sliding rule for hygrometrical calculations, and one for converting the observed readings of the horizontal and vertical force magnetometers into variations of magnetic dip and total force. As one of the members of the committee appointed by the British Association for the magnetic survey of the United Kingdom, Mr. Welsh undertook the North British division. The many useful labours in which he was engaged were cut short by an affection of the lungs, which terminated fatally on the 11th May, 1859, at Falmouth, to which he had retired for the benefit of a milder climate. He was elected a fellow of the Royal Society in 1857.

WERLHOF, PAUL GOTTLIEB, a distinguished German physician, was born March 24th, 1699, at Helmstädt; studied there, and settled at Hanover, where he became physician to George II. of England. He died July 26th, 1767. Werlhof was one of the ablest physicians of his time, and an excellent teacher. He wrote a valuable Latin treatise on fevers, in which, by his lucid classification, he considerably advanced the knowledge of the subject; also essays, some of them in German, on the small-pox, &c. His medical works were published in a collected form in 3 vols., 4to, in 1757. His letters were collected and published by Engel, 'Epistolæ Anecdote,' Berlin, 1784; his poems by Haller, in 1756.

WESTMORLAND, JOHN FANE, ELEVENTH EARL OF [E. C. vol. vi. col. 653], died on the 16th of October, 1859, and was succeeded in the title by his eldest surviving son, Francis William Henry Fane, twelfth Earl of Westmorland, born 1825.

*WESTWOOD, JOHN OBADIAH, entomologist, was born at Sheffield in 1805, and educated at Lichfield. In 1855 the Royal Society awarded him one of their royal medals for his long-continued researches in entomology, relating to all families of insects from every quarter of the world. He has done much good work in describing and systematising insects, as also in elucidating the true principles of classification. He has not, however, confined himself to these branches, but has given considerable attention to the structure, metamorphoses, and distribution of this group of creatures. He has written numerous excellent monographs, amongst which the most important are those on the *Cleridæ*, *Lucanidæ*, and *Pausidæ*. In 1861 he was appointed professor of zoology at Oxford; and is now president of the Entomological Society of London. Amongst his published works may be mentioned the 'Catalogue of Orthopterous Insects in the British Museum,' 4to, 1859, &c.; the second volume of Doubleday's 'Genera of Diurnal Lepidoptera;' 'A Catalogue of Hemiptera in the Collection of the Rev. F. W. Hope,' 8vo, London, 1842; 'The Butterflies of Great Britain, with their Transformations Delineated and Described,' 8vo, London, 1855, new edition, 1858; 'Facsimiles of the Miniatures and Ornaments of Anglo-Saxon and Irish MSS.,' folio, London, 1868; and, in co-operation with Mr. Spence Bate, a 'History of British Sessile-eyed Crustacea,' 8vo, 1861—69.

WHATELY, the MOST REV. and RIGHT HON. RICHARD, ARCHBISHOP OF DUBLIN [E. C. vol. vi. col. 660]. Though advanced in years, the archbishop continued his literary as well as his clerical activity, publishing, besides various Visitation Charges, 'Lectures on Some of the Parables,' 1859; a Lecture on Paley's Writings, 1859; and editions, with annotations, of Paley's 'Evidences of Christianity' and 'Moral Philosophy,' 1859; 'Introductory Lessons on the British Constitution,' 1859; 'The Parish Pastor,' 1860; 'Thoughts on the Proposed Revision of the Liturgy;' 'Miscellaneous Lectures and Reviews,' 1861; 'The Jews, a Lecture,' 1861; 'Election, an Essay,' 1862; and 'Habits, a Lecture,' 1862. He died on the 8th of October, 1863, at the age of 76. His 'Miscellaneous Remains,' edited by Miss E. J. Whately, appeared in 1864; a 'Memoir' of him by Mr. Fitzpatrick, 8vo, 1864; and a fuller 'Life,' by Miss Whately, in 1866.

WHEATSTONE, SIR CHARLES. [E. C. vol. vi. col. 1029.]

WHEWELL, REV. WILLIAM, D.D., F.R.S. [E. C. vol. vi. col. 1033], was born 24th May, 1794. The love of reading, and the promise of future ability displayed by him when a boy, induced his parents to remove him from the grammar-school in Lancaster, to that of Heversham, where he might have the chance of obtaining an exhibition for admission into Trinity College, Cambridge, the vicarage of Heversham being in the gift of that college. This he secured, and was admitted as sub-sizar in the October term of 1812, and he afterwards became full or foundation sizar, and obtained a scholarship. He graduated in 1816 as second wrangler and Smith's prizeman. In 1813 he obtained the Chancellor's prize for the best English poem on Boadicea. He became assistant tutor in mathematics, and in 1823 full tutor of one of the "sides," which he held during sixteen years. Soon after this appointment he took his Master's degree, entered into holy orders, and in due course graduated as D.D. He did not accept a college living, preferring to devote his powers to furthering the objects of the university as a place of education, and to the improvement of its system of instruction in those great branches of mental culture in which it was felt improvement was needed—namely, in the principles of the analytical methods as applied to physical subjects. He supplied the want of adequate elementary treatises, by publishing, in 1819, an 'Elementary Treatise on Mechanics,' a 'Treatise on Dynamics,' in 1823; an 'Introduction to Dynamics,' 'First Principles of Mechanics,' 'Treatise on the Free Motion of a Point, and on Universal Gravitation,' in 1832; 'Analytical Statistics,' 1833; and 'Mechanical Euclid,' 1837. This last work contained a section, 'On the Logic of Induction,' in which the leading idea which forms the basis of his 'Philosophy of the Inductive Sciences' is expressed, namely, "that induction consists in *superinducing* upon an assemblage of observed phenomena a conception, the creation of the mind, which is not in the phenomena, but which serves to bind them under a common aspect, and so give them an ideal unity."

By means of these works, and by his position as moderator in 1820, and in 1828 and 1829, he was enabled to influence the examinations for degrees, and thus bring about the desired improvement in the mathematics of the university.

Whewell was not only well versed in mathematical and physical science in all its forms, but his knowledge embraced classical and continental literature, metaphysics, and history, ethics, social and political economy, botany, architecture and engineering, and a large number of other subjects which served him in good stead in his 'History of the Inductive Sciences,' 1837. He also wrote the Bridgewater treatise on 'Astronomy and General Physics, considered in reference to Natural Theology.' In this work we have the idea which he afterwards elaborated, that the origin of even the axioms of mathematics is not due to any innate *a priori* intuition, but to experience, or a slow process of inductive observation.

Whewell was one of the founders of the Cambridge Philosophical Society in 1819, and contributed various papers to its Transactions. During the summers of 1826 and 1828, he joined Mr. Airy in a series of experiments for ascertaining the mean density of the earth, by comparing the rates of the same pendulum in deep mines and at the surface. These experiments were made in Dolcoath mine, in Cornwall. They failed in producing any result, from two singular accidents—one was the catching fire of the basket containing the apparatus while being drawn up; the other was the flooding of the mine.

In 1828 Whewell became professor of mineralogy, having studied that science in Germany under Professor Mohs. In 1824 he sent to the Royal Society (of which he had, in 1821, become fellow), an elaborate memoir 'On a General Method of calculating the Angles made by any Planes of Crystals.' Several papers by him, in the same department, were published by the Cambridge Society in 1822, 1827, and 1828. He resigned this appointment in 1832.

In 1827 Whewell became a fellow of the Geological Society, and next year its president. His paper on the Distribution of Scandinavian boulders was communicated to the society in 1847. He also took a lively interest in the meetings of the British Association, and was its president in 1841. He was one of the originators of the reports on the present state and progress of the several branches of science. He contributed reports on the tides, and on the mathematical theories of heat, magnetism, and electricity. His researches on the progress of the tide-wave in different regions of the ocean were published in the 'Philosophical Transactions' from 1833 to 1850, and were

BIOG. DIV.—SUP.

distinguished by the award of one of the royal medals. They led to a clear and satisfactory view of the Atlantic tides, one remarkable result being that there exist two points in the North Sea, one between Harwich and Amsterdam, the other near the entrance to the Baltic, in which there is no rise and fall of the tides.

In 1838 Whewell accepted the chair of Moral Theology and Casuistry. At that time Paley's work on moral philosophy was the text-book. In this, the basis of moral obligation is made to rest on expediency; but Whewell was strongly opposed to the utilitarian theory of morals, and endeavoured to substitute for it the Platonic or ideal system of philosophy, which refers all our knowledge, so far as it assumes a systematic form, to innate and primarily implanted conceptions, co-ordinated with facts by mental operations; that is, he insisted on the inward teaching of a divinely implanted conscience enlightened and guided by reason. His views were embodied in his sermons 'On the Foundation of Morals,' his 'Elements of Morality,' his 'Lectures on the History of Moral Philosophy in England,' and his 'Lectures on Systematic Morality,' 1846. These works, in conjunction with his other claims to scientific distinction, procured for him a place as corresponding member of the French Academy in the department of "Sciences Morales et Politiques—Section de Philosophie."

In 1839 Whewell retired from the tutorship of his college. Between 1835 and 1845 he published various essays on what he considered ought to be the special objects of a university education. His essay entitled 'Thoughts on the Study of Mathematics, as a part of a liberal Education,' led to a controversy with Sir Wm. Hamilton, who endeavoured to show that such studies, so far from being an essential means of cultivating the noblest faculties in the highest degree, effected their purpose, at best, in the most inadequate and precarious manner, and have less claim to encouragement than any other object of education.

In 1841 Whewell published his 'Mechanics of Engineering,' a work much wanted at the time. In this year he married Cordelia, the second daughter of John Marshall, Esq., M.P., of Hallsteads and Patterdale Hall, Cumberland. He also succeeded Dr. Wordsworth as Master of Trinity College, an office which he held during the remainder of his life. It was feared that the new master would be despotic, but his government proved to be that of a constitutional monarch. During many years "the Lodge" received a constant succession of distinguished guests. His wife, however, died in December, 1855, and Whewell, in order to obtain relief from the melancholy associations of his college residence, resigned his professorship of casuistry and visited Rome. In 1858 he married a second time, his partner being the widow of Sir Gilbert Affleck.

In 1849 Whewell sent to the Cambridge Philosophical Society a series of 'Remarks on Induction with reference to Mr. Mill's Logic.' His 'Novum Organum Renovatum' appeared in 1858, and in 1860 his 'Philosophy of Discovery,' being partly a reproduction of certain portions of the 'Philosophy of Inductive Science,' and several essays on Plato, Aristotle, &c., published by the Cambridge Society. His devotion to the Platonic view of the ideal world increased upon him, and in 1860 and the two following years his 'Platonic Dialogues' appeared, a work "not lightly executed," but the labour of many years. His work on Political Economy originated in a request in 1861 on the part of H.R.H. the Prince Consort that he would deliver a short course on that subject for the express instruction of the Prince of Wales (then a student of Cambridge).

In 1865 Whewell again became a widower. He was deeply touched by this event, for however hard and stern his character might appear, he is said to have been very susceptible to the gentle influences of female society. He was cheered by the society of an attached relative of his former wife, and gradually resumed his active literary life. He contributed to Macmillan's Magazine an article on 'Comte and Positivism,' his last production. On the 24th of February, 1866, while riding a horse which had already thrown him twice, he was thrown a third time, and was taken up senseless, from a concussion of the brain. He died on the 6th March, and was buried in his college chapel, at the feet of the statues of Newton and Bacon (the latter his own gift). He left no family, but provided by his will for the endowment of a professorship and studentships of international law. He also left to his college a large and valuable piece of adjacent ground together with funds for building on the site according to the wants of the college.

It is not necessary to point out the noble qualities of Whewell's character. They are impressed upon his works, and his roughnesses are forgotten in the long and permanent influence

for good that he exercised upon his college. The wide range of subjects which occupied his intellectual powers, great as they were, would probably have been fatal to anything like success, had it not been that his long training, first at a good grammar school under a master who understood method, and then at the University of Cambridge, where he was daily brought in contact with such men as Herschel, Airy, Babbage, &c., gave him such an amount of intellectual ballast as to insure proficiency in at least the pursuit of his choice—mathematical physics. The firm grasp he had on science is sufficiently proved by his 'History of the Inductive Sciences.' His grasp on some of the other subjects on which he published was necessarily in some respects faltering; so much so as to justify the well-known sarcasm of Sydney Smith.

Two excellent biographical sketches of Whewell have appeared,—one in 'Macmillan's Magazine,' No. 78, entitled 'William Whewell—In Memoriam,' by G. W. Clark, M.A., Public Orator in the University of Cambridge; the other in the 'Proceedings' of the Royal Society, vol. xvi. p. li., from the pen of his friend, Sir John Herschel, who has since found his rest in Westminster Abbey by the side of Newton, as Whewell reposes under the shadow of his statue.

* WHITTIER, JOHN GREENLEAF, American poet and miscellaneous writer, was born at Haverhill, Massachusetts, December, 1807. His parents, who were members of the Society of Friends, gave him a home education until his 18th year, when he went for two or three years to the Town Academy. In 1829 he commenced his literary career by editing the 'American Manufacturer,' a Boston paper which defended home industry against a proposed free-trade tariff. In the following year he took the editorship of the 'New England Weekly Review,' Hartford. He then returned for a time to his father's occupation of farming, diversified by two years' membership in the State Legislature of Massachusetts (1835—36). Identified warmly with the anti-slavery cause, he was chosen secretary of the American Anti-Slavery Society in 1836; and on removing to Philadelphia in the following year, he edited for two or three years the 'Pennsylvania Freeman,' in which his own writings contributed to the strengthening of the cause. In 1840 he removed to Amesbury, in Massachusetts, where he settled down to literary labour, which has since met with little interruption. He was for many years Massachusetts correspondent to the Washington 'National Era.'

Mr. Whittier's published works are numerous and varied, and more frequently in verse than in prose. Chief among them are the following:—Mémorial prefixed to a new edition of Brainerd's Poems, 1830; 'Legends of New England,' 1831, a work from which he afterwards drew materials for some of his poems on early colonial and Indian subjects, such as 'Mogg Megone,' 'The Bridal of Pennacook,' 'Cassandra Southwick,' and 'Mary Garvin'; 'Literary Remains of J. G. Brainerd,' 1832; 'An Essay on the Justice and Expediency of Slavery, considered with a view to its Abolition,' 1833; 'Leaves from Margaret Smith's Journal,' 1836; 'Collected Poems against Slavery, with letters from John Quincy Adams, 1837; 'Lays of my Home, and other Poems,' 1843; 'Ballads, and other Poems,' 1844; 'The Supernaturalism of New England' (contributed to Wiley and Putnam's 'Library of American Books'), 1845; 'Old Portraits and Modern Sketches,' a series of biographical essays, 1850; 'Collected Edition of his Poems published down to that date, 1850; 'Songs of Labour, and other Poems,' 1851; 'The Chapel of the Hermits, and other Poems,' 1853; 'Literary Recollections and Miscellanies,' 1854; 'The Panorama, and other Poems,' 1856; 'Complete Edition of his Poetical Works, 1857; 'Home Ballads and Poems,' 1859; 'In War-Time, and other Poems,' 1864; 'Snow Bound, a Winter Idyl,' 1866; 'Selections from his Prose Works, 1866; 'Later Complete Edition of his Poems, 1867; 'The Tent on the Beach, and other Poems,' 1867; 'Among the Hills, and other Poems,' 1869; 'Illustrated Edition of his Poetical Works, 1869.

* WHITWORTH, SIR JOSEPH, BART., F.R.S., LL.D., recognised as the leading mechanical engineer of the age, was born at Stockport, December 21st, 1803. He first attended a school kept by his father, then another school at Idle, near Leeds, and in 1817 went to live with his uncle, a cotton spinner in Derbyshire. Four years' daily familiarity with the machines in this factory was virtually his apprenticeship to the trade in which he has become so eminent. The knowledge hence acquired was strengthened by engagements at various cotton-machine factories in Manchester. Removing to London in 1826, he worked with Messrs. Maudslay, then with Messrs.

Holtzapffel, and then assisted Mr. Clements in making Mr. Babbage's celebrated calculating machine. Thus thoroughly grounded in the details of machine-making, he was joined by a partner, and in 1833 commenced the firm of Joseph Whitworth and Co. at Manchester. Not only has that establishment produced the most perfect mechanical workmanship in iron and steel, but Mr. Whitworth, by his published papers, has made known processes which enabled other machinists to improve the construction of machine-tools or engine-tools to a high pitch of excellence. In 1840 he read before the British Association at Glasgow a paper 'On the Preparation of Plane Metallic Surfaces,' describing a mode adopted by him of giving to plates of metal a truth of surface never before attained. His plan has since been generally adopted, and has contributed greatly to the perfection of machine-work, by lessening the friction of surfaces moving in contact, and increasing the accuracy of fittings. He next took up the subject of screw threads. Until then nuts and screws had been made at random, or at least without any definite system for regulating the number of threads in an inch. In a paper, 'On a Uniform System of Screw-Threads,' read before the Institution of Civil Engineers in 1841, he developed a plan which has since been generally employed by machine-makers for establishing a clearly defined relation between the finenesses or measurements of all kinds of screw-threads. In the same year he invented and introduced a new street-sweeping machine, which is much employed in the great towns of the north. Among his other inventions are the duplex lathe, a reversing tool to use with the planing machine, and standard gauges for metal plates, sheets, and wire. At the Great Exhibition in 1851 he showed his measuring machine, a small and exquisite piece of apparatus by which one-millionth part of an inch can be measured; the commissioners' council medal was awarded to him for this invention. (The apparatus was again shown at the London International Exhibition in 1871.) In 1853 he visited America, at the request of the Committee of Council, to examine and report upon the machinery at the New York Exhibition. In 1855 he turned his attention to arms of precision, and began a series of experiments for the War-Office on the best mode of rifling muskets. In 1857 his first rifle, with a hexagonal rifled bore, was tried at Hythe, and achieved more accurate shooting than had ever before been known; and then, applying the same principle to large ordnance, he rifled a 68-pounder, which sent a shot completely through a 4-inch armour-plate—a degree of penetrating power which had not until then been attained. On a particular trial for great range in 1862, he attained, with a 9-inch 310-pounder, the unprecedented distance of 11,343 yards. He has also experimented on the advantages of flat-headed projectiles, and on the kind of metal best fitted for making large guns. In perfection of mechanism, the Whitworth guns have never been excelled, though circumstances have led to the choice of Fraser guns and Snider rifles in the English service. In 1867 he was awarded one of the few grand prizes at the Paris Exhibition. In the following year he published, 'Miscellaneous Papers on Mechanical Subjects.' In 1869 he was created baronet; and has had conferred on him the degrees of LL.D. (Dublin) and D.C.L. (Oxford), the decoration of the Legion of Honour, and the Albert gold medal of the Society of Arts. Sir Joseph is honourably distinguished by the founding of the "Whitworth scholarships" for students in the mechanical arts. He invested 100,000*l.*, the interest of which is to be appropriated for thirty scholarships of 100*l.* each, to be held either two or three years. The scholars must be under twenty-six years of age, and must pass a test examination in mechanical arts and the sciences on which they depend; beyond this test, competition is to determine the selection. The Committee of Council are to be the trustees, while the Science and Art Department is to conduct the examination and competition, with the personal aid of Sir Joseph Whitworth as long as he lives. The plan came into operation in 1869.

WIERTZ, ANTOINE-JOSEPH, Belgian historical painter, was born at Dinant, February 22nd, 1806. He studied under M. Van Brée in the Antwerp Academy, where in 1832 he won the grand prize of Rome by his painting of 'Scipio.' At Rome he painted a 'Patroclus,' and one or two other pictures on a large scale, and was, in 1837, elected a member of the Academy of St. Luke. Returning to Brussels, he set to work upon several historical and religious compositions of colossal proportions, maintaining himself during their progress by painting smaller genre pictures and portraits. M. Wiertz, like our Haydon, was an enthusiast for "high art" and grandeur of scale, and employed his pen as well as pencil in supporting his own opinions and demolishing those of his opponents. Further to propagate his

views, he opened a large atelier for the free instruction of young painters. He was, however, more fortunate than Haydon, inasmuch as he secured the sympathy of the government, who, in 1851, built him a public atelier at a cost of 64,000 francs, to which, in 1861, a further sum of 23,000 francs was added for its enlargement. In 1840 he received the cross of the order of Leopold. M. Wiertz painted many immense pictures, and many of more moderate dimensions. Among them are—in the church of the Augustines, one fifty feet high, representing the Struggle between the Principles of Good and Evil; a huge allegory on the exterior of his atelier; 'A Martyr under Diocletian,' and many more. His later works were painted according to a method invented by him, and which, in a pamphlet on the subject, 'Peinture Morte: Procédé nouveau,' Brussels, 1859, he asserts to be easier of execution, superior in effect, and more permanent than any hitherto employed. M. Wiertz also wrote 'Étude sur Mathieu van Brée'; and an 'Éloge de Rubens,' which was crowned by the Academy of Antwerp in 1840. He died, June 18th, 1865. His atelier is now the property of the nation, a sum of 85,000 francs having been voted in 1866 by the Belgian House of Representatives in order to complete the purchase. On the walls are seven large paintings, 'Eve,' 'Christ in the Sepulchre,' 'The Triumph of Christ,' 'The Revolt of the Angels,' 'Satan,' 'Ambition,' 'The Homeric Contest'; and fifty or sixty of his easel pictures, and some pieces of sculpture fill the rooms. The 'Wiertz Museum' is open to the public. The street in which it stands is named after the painter.

WILLEHAD, an Anglo-Saxon bishop and missionary, was born in Northumberland in the first quarter of the eighth century and was educated at York. He was not ordained priest till turned of thirty, when he obtained permission to go as a missionary to the pagans of Friesland and the adjacent parts, where St. Boniface had been recently martyred. He met there with much opposition and much success; was more than once driven from the country, on one occasion his companions and disciples being nearly all massacred; was encouraged to persevere by Charlemagne and by Pope Adrian I.; and, finally, was rewarded by the general conversion of both Frieslanders and Saxons, and the quiet foundation of the diocese of Wigmodia, afterwards Bremen. Willehad was consecrated bishop, July 13, 787; and he immediately set about building a noble cathedral at what is now Bremen, ordaining priests, &c. He died during a visitation of his diocese, November 8, 789. Bishop Willehad wrote a commentary on the epistles of St. Paul and other works, MSS. of some of which are extant. Willehad ranks as a saint in the Romish calendar, the 8th of November being set apart as his festival. His Life, written by Ansharius (about 850) is printed by Mabillon, 'Acta Sanct.' iv., 364; Langebek, 'Script. Rerum Danicarum,' vol. i., and Pertz, 'Mon. German. Hist.' ii., 378, &c.

* WILLEMS, FLORENT, Belgian painter, was born at Liège about 1812, and studied at Mechlin Academy. He formed his style on the Dutch masters, and especially Terburg, whom he follows closely, alike in choice of subjects and manner of treatment, with the necessary qualification for differences arising from the fact that each deals with the familiar habits of the higher classes of his own time. But if Terburg's chef d'œuvre was the famous Satin Gown (as the picture entitled 'Paternal Instruction,' is almost invariably called), so a white satin gown is the chief feature of several of Willems' most admired pictures, and it is painted with scarce inferior dexterity or finish to the original. Silk and velvet dresses, and almost all kinds of costume are, however, painted by him with equal skill, appreciation of texture, and taste. Willems is essentially a costume painter, his figures serving rather to set off his mechanical art than any higher purpose. The subjects are such as 'The Coquette at her Glass,' 'A Conversation,' 'A Musical Party,' 'The Toilette of the Bride,' 'The Message,' 'The Presentation,' &c. Occasionally, as in his 'Interior of a Silk-mercer's Shop in 1661,' he has adopted the period as well as the manner of Terburg. In treatment Willems' pictures are always refined; the persons have an air of birth and style, and the technical qualities are of a very high order. M. Willems settled in Paris in 1839, and has since held his place as one of the most fashionable painters of the day. He received the cross of the Legion of Honour in 1853, and was promoted to be officer in 1864.

* WILLIAM I., FREDERICK WILLIAM LOUIS, EMPEROR OF GERMANY, AND KING OF PRUSSIA, second son of Frederick William III., and brother of Frederick William IV., King of Prussia [E. C. vol. ii. col. 1031, and E. C. S. col. 551], was born on the 22nd of March, 1797, and was early

destined for a military career. He took part in the campaigns of the period 1813–15 in the war against France; and on the accession of his brother, in June, 1840, was made lieutenant or viceroy of the province of Pomerania. On the 6th of March, 1848, he was appointed governor-general of the Rhine Provinces; but he continued at Berlin until the 20th of that month, when, considerable odium having been excited against him on account of his supposed share in causing the fusillade of the troops upon the people, which afterwards led to a sanguinary encounter, he left Berlin in disguise, and repaired to this country, ostensibly on a special mission from the King of Prussia to Queen Victoria. Considerable difference of opinion was expressed with regard to the expediency of his recall, which by some persons was judged to be necessary; but having been elected a member of the Assembly appointed to discuss the Prussian constitution, he left England for Berlin on the 28th of May, although he took no part in the deliberations. In June, 1849, he took the field as commander of the Prussian army of intervention against the insurgents of Baden and Bavaria, whose last stronghold of Rastadt he entered in triumph on the 23rd of July; and in October following, he established himself at Coblenz in the capacity of military governor of the Rhine Provinces. In 1854, at which time he was either the proprietor or commander of several regiments in the Prussian, Russian, and Austrian services, he was made colonel-general of the infantry, and governor of the federal fortress of Mayence; and, as a variety from his military associations, became president of the aggregate lodges of the Prussian Freemasons. He protested with considerable energy against the attitude of neutrality assumed by Prussia during the Crimean war, an attitude which, being practically disastrous to the allies, occasioned such a loss of prestige in Europe that when Prussia at the last moment was invited to send representatives to the Peace Congress, which sat in Paris, March, 1856, it was, in the words of Lord Palmerston, "not to negotiate the treaty of peace, but to accede to the result of the negotiations of those who were more directly interested in the matter." On the 10th of July, 1856, the Prince and Princess of Prussia arrived in England on a visit to her Majesty, which continued until the 29th, when they left Osborne on their return to the Continent. On the 24th of October, 1857, the mental and bodily health of the King of Prussia being in an unsatisfactory condition, the Prince, in virtue of a mandate signed on the previous day by the King at Potsdam, assumed the Regency for three months, and expressed his firm desire to conform faithfully to the Constitution and the laws of the country, and to direct the affairs of the Government according to the intentions of the King, which were known to him. He paid a short visit to England on the occasion of the marriage of his eldest son to the Princess Royal, on the 25th of January, 1858. His term of office as Regent was from time to time periodically prolonged; until, in pursuance of a royal mandate, dated October 7th, 1858, he two days afterwards assumed the Regency "until the day when his Majesty should be again in a state to exercise the royal power himself." On the 26th of October, the day of the closing of the session of the Legislative Bodies, he took the prescribed oath to maintain the Constitution; and on the 5th of November dismissed the Manteuffel administration, for which he substituted that of the Prince of Hohenzollern-Sigmaringen, which early manifested a desire to augment the naval force of the country, and a tendency also to increase the war-budget. He succeeded to the throne on the death of his brother, King Frederick William IV., on the 2nd of January, 1861; and on the occasion of his coronation, which took place at Königsberg on the 18th of October following, he placed the crown on his own head, declaring that he held it from God alone. On the 1st of January, 1862, he decreed the substitution of the German language instead of French, in Prussian diplomatic despatches; and on the 11th of March dissolved the Prussian Chambers on account of their resistance to the military expenditure of the Government. The difficulties in which he found himself involved with the Chambers on the same subject in September following, obliged him to summon Herr von Bismarck from France, to which he had been accredited as ambassador scarcely four months previously, in order to undertake the Premiership and the Ministry of Foreign Affairs. From this time the public career of the King, as well as the interests of Prussia and of Germany, become all but personal to the career of the powerful minister who became successively Count and Prince Bismarck [E. C. S. col. 245]. Extricated by the quarrel with Denmark, which ended victoriously for Prussia in April, 1864, from the critical and threatening position in which a series of disputes with the Chambers on the question of the reconstruction

tion of the army, of military finance, and of the royal prerogative, had involved the King and his ministers, the latter were again brought face to face with a kindred difficulty by the refusal of the Chambers, July 1865, to vote supplies for the development of the navy. Hereupon the King issued a decree, countersigned by all the ministers, placing at the disposal of the Minister of Marine a sum not exceeding 500,000 thalers for the construction of heavy cast steel guns for the fleet, for the expenditure of which grant the Ministers of Marine and Finance were to be held jointly responsible to the King. The combined operations of Prussia and Austria against Denmark, and even the conclusion of the treaty of Gastein, August 14th, 1866, which defined the co-domination of Prussia and Austria in Schleswig and Holstein, were but episodes of superficial concord between powers who were really at deadly feud for the leadership of Germany. When, therefore, on the 16th of June, 1866, Austria announced her intention to afford Saxony military aid against Prussia, the latter power was prompt to consider this as a *casus belli*, and on the 18th, formally declared war against Austria. On the 29th of June, the first tidings of victory arrived at Berlin; next day, the King, with Count Bismarck in attendance, left the capital for the seat of war; and on the 3rd of July, the Austrians sustained the disastrous and decisive defeat of Sadowa. In the final days of the same month the preliminaries were settled in Count Mensdorff's Castle of Nicolsburg, resulting in the peace of Prague; and on the 4th of August the King returned to Berlin, where he was enthusiastically received, and where, on the next day, at the solemn opening of the Diet, he returned thanks "for God's gracious goodness" as manifested in the success of the Prussian arms. On the 20th of September, the triumphal entry of the troops into Berlin was made in grand pageant, in which the King and Queen, the Princes and the Generals, took a prominent part. Peace treaties with individual states—as Bavaria, Württemberg, and Baden—now occupied the King's ministers, together with the consolidation of the conquered provinces, and the formation of the North German Confederation, the constitution of which was finally framed and ratified on the 16th of April, 1867. The chief extraneous event of the year was the settlement of the pressing difficulty with France, relative to the fortress of Luxemburg, the neutralisation of which was, with mutual satisfaction, achieved by a Conference of European Powers—England, France, Austria, Prussia, Russia, and Holland—which sat in London from the 7th to the 11th of May. In June, 1867, the King visited the great Exhibition of Art and Industry at Paris, where he stayed from the 5th to the 14th; and on the 10th of September of the same year, the North German Confederation met for the first time under the new constitution. On the 1st of January, 1870, the Prussian diplomatic agents abroad were accredited as representing the North German Confederation alone; and at the opening of the North German Parliament on the 4th of February, the King of Prussia announced that union with South Germany on national grounds was the object of his incessant attention, and expressed his confidence in the continuance of peace. Peace, however, was not to continue; and the approximate unification of Germany was to be precipitated by hostile pressure from without.

On the 15th of July, 1870, the Emperor of the French declared war against Prussia, ostensibly because the King would not undertake that the candidature of Prince Leopold of Hohenzollern-Sigmaringen for the crown of Spain, which he had already declined, should never be renewed; and because of an alleged insult to France in the person of her ambassador, Count Benedetti, who intrusively preferred his demands upon the King whilst the latter was walking with Count Lehndorff, his adjutant, in the Kurgarten at Ems, on the 13th of July. On the day after this occurrence the King returned to Berlin; and on the 19th of July, in his address to the North German Parliament, claimed to have done all that his honour and dignity permitted to preserve peace to Europe, and expressed his confident reliance on the united will of the German governments, whether of the North or South. The co-operation of Bavaria had been already notified on the 16th; and at the close of the King's speech, the Saxon minister, Baron von Friessen, called for cheers for the head of the North German Confederation, which were heartily given again and again by the whole Assembly. This enthusiasm was the falsification of the dream of the Emperor Napoleon, who had fancied that Bavaria, Württemberg, and Baden, would abandon their engagements with the North German Confederation so soon as war should be declared. On the 31st of July the King of Prussia set out for the seat of war; and, notwithstanding his

advanced age, distinguished himself by his cheerful endurance of the privations and dangers of the campaign, and for the pious gratitude which characterised the bulletins which he transmitted to Queen Augusta after the several successes of the arms of the German hosts. On the 2nd of September, he received the personal surrender of the Emperor, to whom he allotted Wilhelmshöhe, near Cassel, for his residence; and on the same day ninety thousand French troops laid down their arms as prisoners of war, and were sent to join the immense number of their comrades who had preceded them into captivity in Germany. On the 10th of December the North German Parliament, by a large majority, passed a bill authorising the insertion of the words "empire" and "emperor" in the Constitution; and on the 18th of the same month a deputation from that body waited on the King, whose head-quarters were at that time at Versailles, with authority to offer him the imperial crown of Germany, a dignity which had for sixty years been in abeyance. On the 1st of January, 1871, the King held a New Year's reception in the palace of Versailles; where, on the 18th, in the Hall of Mirrors, in the presence of all the German princes, under the standards of the army before Paris, and surrounded by the representatives of the different regiments, he was proclaimed Emperor. On the 28th of January, after a siege of 131 days, Paris surrendered; and on the 1st of March, the Germans made their triumphal entry into the city, previous to which, February 26th, a treaty of peace had been concluded at Versailles, the conditions of which were reluctantly adopted by the National Assembly on the 28th, and the ratifications of which were exchanged at Frankfurt in May following. This treaty imposed upon France the loss of a fifth part of Lorraine, including Metz and Thionville, and Alsace, less Belfort, as well as the payment of a war indemnity of five milliards of francs, or 200,000,000*l.*, which enormous sum was to be paid by successive instalments, extending over a period of three years, or up to the month of May, 1874. Meanwhile various cities and departments of France were to be held as guarantees by a German army of occupation, whose numbers, and the area which they occupied, were to be diminished proportionately with the decrease of the balance of the war indemnity. The Emperor returned to Berlin on the 17th of March, and was received with a brilliant enthusiasm; and on the 16th of June took part in the triumphal entry of the German troops into Berlin, and assisted at the inauguration of the statue of Frederick William III. On the 21st of March he presided at the opening of the Reichstag, and concluded his speech with the expression of a prayer that "the re-establishment of the German Empire might be a promise of future greatness; that the German Imperial war, fought so gloriously by us, might be followed by an equally glorious peace of the Empire; and that the task of the German people henceforth might be to prove victorious in the universal struggle for the products of peace. God grant it!" The expression of a similar wish characterised the speech with which the Emperor closed the session of the Reichstag on the 15th of June. On the 8th of June he received the Emperor of Russia, as the latter passed through Berlin on his way to Ems; and early in September, interchanged visits with the Emperor of Austria at Gastein and Salzburg. He opened the Reichstag on the 16th of October, with a speech longer and more various in its topics than is generally heard from a throne. On the 27th of November, the Prussian Diet was opened by the Emperor in person, who promised some administrative reforms, and directed attention to finance and the furtherance of education, and mingled with the congratulations which he addressed to the representatives of his ancestral kingdom, an argument upon the necessity of being forearmed against future dangers.

A grand banquet was given at Berlin on the 18th of January, 1872, in connection with the meeting of the Chapter of the Order of the Black Eagle, when the Emperor-King spoke of the occasion as the celebration of a double anniversary of the most important events of Prussian history. "On this day 171 years ago," said his Majesty, "the first King of Prussia was crowned; this day last year my acceptance of the Imperial German crown, unanimously offered me by all the Princes and free towns of Germany, was proclaimed. Conscious of the obligations I have assumed, I, on the first anniversary of this great event, again express to the illustrious persons who offered to me my new position, in presence of their representatives, my deeply felt thanks, hoping that by our united efforts we shall succeed in fulfilling the just hopes of Germany." The Bavarian minister then, in the name of the King of Bavaria and the illustrious Federate Allies in the Empire proposed "The health of the German Emperor, William the Victorious."

The Emperor of Germany, at that time Prince Frederick William Louis of Prussia, married, on the 11th of June, 1829, Marie Louise Augusta Catherine, now the Empress Augusta, daughter of the late Charles Frederick, Grand Duke of Saxe Weimar, by whom he has two children, a son and a daughter, the former of whom, FREDERICK WILLIAM NICOLAS CHARLES, Crown Prince of Prussia and of the German Empire, was born on the 18th of October, 1831, and was married at the Chapel Royal, St. James's, on the 25th of January, 1858, to Victoria Adelaide Mary Louisa, Princess Royal of England, by whom he has several children. The Prince is favourably known for the liberalism of his political opinions, which formerly placed him in something like antagonism to the extra-constitutional proceedings of his father; whilst as a soldier he highly distinguished himself in the campaign against Austria in 1866, and in the more protracted war against France in 1870—71. He took advantage of the leisure of peace to visit this country, with the Princess and their family, in July, 1871. He is a general in the Prussian service, and a field-marshal of Prussia, October 28th, and of Russia, November 8th, 1870; and inspector-general of the fourth inspection of the army of the German Empire. He is also a commander or proprietor of regiments in the Austrian and Russian services.

WILLIAM III. (ALEXANDER PAUL FREDERICK LOUIS), KING OF THE NETHERLANDS, Prince of Orange-Nassau, Grand Duke of Luxemburg [E. C. vol. vi. col. 726.] The personal sympathy of the King of the Netherlands for his subjects was elicited by the disastrous inundations which in January and February 1861, submerged about 40,000 acres of land, and reduced nearly 30,000 of the Dutch peasantry to destitution. On the 2nd of August following, the government of the Netherlands recognised Victor Emmanuel as the King of Italy; and in 1861, and again in 1862, the King paid a visit to the Emperor Napoleon III., whose invitation for a proposed European Congress, issued in November, 1863, he promptly accepted. In August, 1862, the government of King William remonstrated against the severities of Russian administration in Poland; and on the 1st of July 1863, in accordance with a law which had been passed in the preceding August, slavery was abolished in the Dutch West Indian colonies, where, at the period of emancipation, there were 44,645 slaves, for all of whom the owners received compensation. On the 17th of November, 1863, a jubilee commemoration of the deliverance of the Netherlands from the usurpation of France, was celebrated with general enthusiasm. In 1866, the Grand-Duchy of Luxemburg, which had formed a part of the Germanic Confederation from its institution in 1815, became more closely connected with the Netherlands, the King of which, as Grand-Duke, administers its government, separately from that of his kingdom, by a lieutenant, who, at present, is his brother, Prince Henry. The rumoured negotiations for the cession of Luxemburg to France in March, 1867, gave rise to an amount of jealousy which threatened a quarrel between France and Prussia, which was averted by the conclusion of the treaty of London, May 11th, in accordance with which the city of Luxemburg, up to that time a fortress of immense strength, was disarmed and neutralised. The reign of King William has been distinguished by the advances which have been made in the social life of Holland and its dependencies, by the conclusion of various commercial treaties, by the increased facilities which have been accorded to the internal communications of the country, and by the encouragement which has been given to the investigation and the historical exposition of the rise and progress of Dutch nationality. The King of the Netherlands is proprietary colonel of the 63rd Regiment of Austrian Infantry, and commander of the Russian regiment of Ukraine Dragoons, and of the 11th Regiment of Prussian Hussars. The elder of his two sons, WILLIAM NICOLAS ALEXANDER FREDERICK CHARLES HENRY, Prince of Orange, who was born at the Hague on the 4th of September, 1840, is a lieutenant-admiral, a general of infantry, inspector of cavalry, and proprietor of the Russian Ufa Regiment of Infantry; whilst the younger son, Prince WILLIAM ALEXANDER CHARLES HENRY FREDERICK, who was born at the Hague on the 25th of August, 1851, is a naval lieutenant of the first class, a captain in the regiment of grenadiers and chasseurs, as well as in the 4th regiment of hussars, and in the horse artillery.

* WILLIAMS, MONIER, an Oriental philologist, was born in 1819, at Bombay, of the presidency of which his father, the late Lieutenant-Colonel Monier Williams, was surveyor-general. He was educated successively at King's College, London, and at Balliol College, Oxford, where he was entered in 1838. He left

the university, however, shortly after, upon his nomination to an Indian writership, and spent some time as a student at the East India College, Haileybury, where he distinguished himself by his singular proficiency in Oriental learning. Relinquishing the idea of an Indian career, he repaired a second time to Oxford, where he became a member of University College, and took his B.A. degree on the 15th of May, 1844, proceeding M.A. on the 30th of April, 1846. In 1843 he was elected to the Boden scholarship, "for proficiency in the Sanskrit language and literature;" and in 1844 was appointed Sanskrit professor at Haileybury, where he remained until the suppression of that institution in 1858. For two years he acted as teacher of the Oriental languages at Cheltenham College; and in December, 1860, was elected by Convocation, after a hard contest with Professor Max Müller, to the Sanskrit professorship at Oxford, which, like the scholarship he had previously gained at the university, had been founded in accordance with the will of the late Colonel Boden, who was of "opinion that a more general and critical knowledge of the Sanskrit language would be a means of enabling his countrymen to proceed in the conversion of the natives of India to the Christian religion, by disseminating a knowledge of the sacred scriptures amongst them, more effectually than all other means whatsoever."

The works of Professor Monier Williams are almost entirely philological, and include 'An Elementary Grammar of the Sanskrit Language, partly in the Roman Character, arranged according to a new Theory, in Reference especially to the Classical Languages. With short Extracts in easy Prose. To which is added, a Selection from the Institutes of Manu, with References to the Grammar, and an English Translation,' 8vo, London, 1846, &c.; 'A Dictionary, English and Sanskrit,' 4to, London, 1851, published under the patronage of the Honourable East India Company; 'An Easy Introduction to the Study of Hindustani, in which the English Alphabet is adapted to the Expression of Hindustani Words,' &c., 12mo, London, 1858; 'Original Papers illustrating the History of the Application of the Roman Alphabet to the Languages of India. Edited,' &c., 8vo, London, 1859; 'Hindustani Primer: containing a first Grammar suited to Beginners, and a Vocabulary,' &c., 12mo, London, 1860; 'The Study of Sanskrit in Relation to Missionary Work in India: an Inaugural Lecture. With Notes and Additions,' 8vo, London and Oxford, 1861; 'Sanskrit Manual. Containing, Part I. The Accidence of Grammar. Part II. Progressive Exercises,' 12mo, London and Oxford, 1862, second edition, enlarged, 8vo, London, 1868; 'A Practical Hindustani Grammar: containing the Accidence in Roman Type, a Chapter on the Use of Arabic Words and a full Syntax, &c. Also Hindustani Selections, &c. With a Vocabulary by C. Mather,' &c., 8vo, London and Hertford, 1862; 'Indian Epic Poetry: being the Substance of Lectures recently given at Oxford. With a full Analysis of the Rāmāyana and of the Maha-Bhārata,' 8vo, London and Oxford, 1863. Professor Williams has likewise produced editions of the Sanskrit drama, 'Vikramorvasi,' 1849; of the Sanskrit drama, 'Śakuntalā,' with notes and literal translations, 1853, of which he further published a free translation, entitled 'Śakuntalā: or, the Lost Ring. An Indian Drama. Translated into English Prose and Verse, from the Sanskrit of Kalidasa,' 4to, Hertford, 1855, third edition, 8vo, 1856.

WILLIAMS, REV. ROWLAND, D.D., a divine and biblical critic, son of the Rev. Rowland Williams, M.A., rector of Ysceiog, and prebendary of St. Asaph, was born in Flintshire, in 1817, and at ten years of age was sent to Eton, where he became Newcastle medallist in 1835, and whence he proceeded, with a scholarship, to King's College, Cambridge. His university career was one of considerable distinction; and in his first year of residence, 1838, he obtained Battie's University Scholarship for the greatest proficiency in classical learning. He graduated as B.A. in 1841, and was elected to a fellowship of his college; proceeded M.A. in 1844; took his B.D. degree in 1851, and that of D.D. in 1857. He received deacon's orders in 1842, and priest's orders in 1843, both from the Bishop of Lincoln. For a short time he was assistant-master at Eton, which post he was compelled to relinquish through illness. In 1842 he became classical tutor of his college, where he remained eight years, until January, 1850, when he became vice-principal and senior tutor of St. David's College, Lampeter, and chaplain to the Bishop of Llandaff. In 1849, he gained the prize of 500*l.*, offered by Dr. Muir, for an essay on the comparative merits of Hinduism and Christianity—a like premium having been offered on the same terms, but not awarded, in the University of Oxford—which, in an expanded and modified form, was afterwards

published under the title of 'Hinduism and Christianity compared,' 8vo, 1856, which has been regarded as his greatest literary production, and as a valuable contribution to modern English theology. The earliest published work of Dr. Williams appears to have been a volume of poems called 'Lays from the Cimbric Lyre,' a work redolent of piety, patriotism, and tolerance, but exhibiting few traces of that mental movement under which he was even then suffering. He was appointed select preacher at Cambridge in 1854, and the sermons which he preached in that capacity awakened thought, enquiry, and some little alarm. These sermons, together with others preached at Lampeter, were published with the title of 'Rational Godliness after the Mind of Christ and the written Voices of His Church,' 8vo, Cambridge and London, 1855, a volume which contains the first published enunciation of those views which were afterwards identified with his name. The views referred to may be summarised as follows:—The Bible is the written voice of the congregation, the record of the spiritual exercises of past time; and by Inspiration is to be understood not the infallibility of such record, but the fact that its authors were moved by that Divine Spirit, who is everywhere and at all times the source of all holy desires, all good counsels, and all just works. In this sense Inspiration is the Divine source and law of *all* truth and excellence; and, therefore, is not to be limited to any given time or to any particular church or nation. The controversies in which the publication of 'Rational Godliness' involved the author, determined him to sever his connection with Lampeter, and in 1859, he resigned his fellowship at Cambridge, and was presented to the living of Broadchalke, Wilts, which was in the gift of King's College. About the same time, he married, remaining, however, at work at Lampeter, whilst his vicarage-house was building, under a licence of non-residence from the Bishop of Salisbury. He finally left Lampeter, where he had spent twelve years in elevating the tone and position, and promoting the efficiency of that institution, in 1862, from which date he devoted himself personally to the care of his parish. A volume entitled 'Essays and Reviews,' which has been productive of an almost immense amount of controversy, was published in February, 1860; and to this volume—which in June, 1864, was condemned by both Houses of Convocation—Dr. Williams contributed an article on 'Bunsen's Biblical Researches,' for which he was prosecuted by his diocesan, Dr. Hamilton, in the Court of Arches. The judgment of the Court was adverse to Dr. Williams; and he, together with his fellow-essayist, Mr. Wilson, was sentenced, December 15th, 1862, to a year's suspension. However, on appeal to the Judicial Committee of the Privy Council, the judgment was reversed, February 8th, 1864, when Lord Chancellor Westbury, who allowed the costs of the appeal, determined that the opinions expressed by Dr. Williams were not inconsistent with his position as a clergyman of the Church of England. The Archbishops of Canterbury and York did not entirely concur in the judgment, and pastoral letters on the subject were afterwards issued by both these prelates. Dr. Williams continued his pastoral and literary activity, especially devoting himself to his favourite field of Hebrew literature and biblical criticism, until his death, which occurred after a few days' illness, on the 18th of January, 1870, at his vicarage of Broadchalke.

The works of Dr. Williams, besides those which have been already mentioned, include 'Orestes, and the Avengers,' 8vo, London, 1857, an adaptation to English readers, of the 'Eumenides' of Æschylus, in which some of the main features of the author's classical prototype are accurately preserved and presented; a volume of sermons entitled 'Broadchalke Sermon-Essays on Nature, Mediation, Atonement, Absolution,' &c., 8vo, London, 1867; 'Owen Glendower: a Dramatic Biography. Being a Contribution to the Genuine History of Wales. And other Poems. By Goronva Camlan [i.e., R. W.],' 8vo, London and Hertford, 1870, a work of posthumous publication, of considerable interest as embodying the author's well-known opinions on several subjects, religious and otherwise. The *magnum opus* of Dr. Williams, left unfinished at the time of his death, has received a partial publication, the first volume by himself, and the second, embracing all he had completely prepared, introduced by a touching preface from the pen of his widow, informing the reader that the Rev. W. W. Harvey conducted it through the press. The first volume, entitled 'The Prophets of Israel and Judah during the Assyrian Empire,' 8vo, London, 1866, contains in chronological order, Joel, Amos, Obadiah, Hosea, Micah, Isaiah (first part), and Nahum, to each of which is prefixed an introduction, whilst a new version from the Hebrew is given,

with critical notes and a commentary. The second volume, presenting generally the same characteristics as the first, bears the title of 'The Hebrew Prophets, translated afresh from the Original, with regard to the Anglican Version, and with Illustrations for English Readers,' 8vo, London, 1872. Dr. Williams contributed largely to the periodical literature of his time, and especially furnished articles to the 'Archæologia Cambrensis,' and on Welsh subjects to the 'Quarterly Review,' in which he treated, 'Welsh Methodism,' the 'Welsh Church,' and 'Welsh Barda.'

WILLIS, NATHANIEL PARKER [E. C. vol. vi. col. 737]. This popular writer died at New York, February, 1867.

WILLMORE, JAMES TIBBITS, Associate Engraver in the Royal Academy [E. C. vol. vi., col. 741], died on the 12th of March, 1863, in the 63rd year of his age.

WILSON, RIGHT REVEREND DANIEL, D.D., Lord Bishop of Calcutta and Metropolitan in India and Ceylon, son of a substantial silk-manufacturer in London, was born in Church Street, Spitalfields, in the year 1778, and in November, 1798, entered into residence at St. Edmund's Hall, Oxford, where he took his B.A. degree on the 2nd of March, 1802, and proceeded M.A. on the 10th of October, 1804. He was created D.D. by diploma, April 12th, 1832. In 1803 he carried off the Chancellor's prize for an English essay, of which the prescribed subject was 'Common Sense,' and which afterwards found a place in the second volume of 'Oxford English Prize Essays,' 12mo, Oxford, 1836. He was ordained deacon on the 20th of September, 1801, by Dr. Brownlow North, Bishop of Winchester, and became curate of Chobham and Bisley, Surrey, where under the guidance of the incumbent, the Rev. Richard Cecil, he began to distinguish himself as an earnest and powerful preacher. He vacated his curacy in November, 1803, and returned to Oxford, where from January, 1804, to January, 1807, he was assistant-tutor at St. Edmund's Hall; and from January, 1807, to June, 1812, was sole tutor and vice-principal. During half of this period of between eight and nine years, he combined with his academical duties the charge of the small parish of Worton, a few miles distant from Oxford. In 1809 he resigned the curacy of Worton, and entered upon a wider sphere of clerical duty by becoming assistant-curate of St. John's Chapel, Bedford Row, Bloomsbury; of which he became sole minister in 1812, when he resigned his collegiate offices in order to devote himself the more exclusively to his pastoral duties. During his twelve years' incumbency of St. John's Chapel, he was known as one of the foremost champions of the Evangelical party in the metropolis; and the constant crowds of intelligent auditors attested the power of his preaching and the influence of his doctrine. On the 4th of June, 1824, he was instituted to the vicarage of St. Mary's, Islington, of which the patronage was vested in his family, and in which he exercised a kind of episcopal oversight throughout a parish nearly as populous as a diocese. Immediately after his induction, which took place on the 2nd of July, he set himself to develop its resources. Under his hand new churches sprang up in a district till then remarkable chiefly for its decorous quietude; and the spiritual campaign became a complete victory. After eight years of conscientious and efficient parochial work, he was nominated, through the influence of Lord Glenelg and his brother, Sir Robert Grant, to the bishopric of Calcutta, with episcopal jurisdiction over the entire peninsula of Hindustan and the island of Ceylon, as well as over Australia, New Zealand, and Tasmania, which are now divided into twelve separate dioceses. The letters patent appointing him to this perilous dignity were dated April 16th, 1832, and he was consecrated on the 29th of the same month. The acceptance of such an office, in which three of his immediate predecessors had died within nine years, was a matter of much seriousness and solemnity; and he regarded his entry upon its duties, to use his own expression, as a "baptism for the dead." The overwhelming cares of his immense diocese were somewhat lightened by the foundation successively of the new see of Madras, in 1835; of Bombay, in 1837; and of Colombo, in 1845; over which the Bishop of Calcutta now substituted a quasi-metropolitan jurisdiction for his former episcopal superintendence. For a quarter of a century Bishop Wilson administered, with his accustomed zeal, courage, and power, the affairs of his diocese; and a cathedral at Calcutta arose under his care as naturally as district churches had formerly arisen in his London parish. He died at the Bishop's Palace, Calcutta, on the 2nd of January, 1858.

Bishop Wilson was the author of various 'Tracts,' 'Expository Lectures,' 'Letters,' 'Sermons,' 'Pleas for Missions and Episcopal

Charges; but their sometime interest and value can hardly be said to be preserved in their integrity. The following works may be specially mentioned:—*'The Divine Authority and Perpetual Obligation of the Lord's Day asserted in Seven Sermons delivered in 1830,'* 12mo, London, 1831; *'Travels on the Continent of Europe, in the Summer of 1823,'* which, having gone through several editions, was reproduced in the 5th volume of the *'Christian Library,'* 8vo, London, 1836; *'The Bishop of Calcutta's Farewell to England. Five Sermons delivered on Public Occasions during a temporary Visit to England, together with the Addresses to the Propagation Society,'* 12mo, Oxford, 1846; and a volume of posthumous publication, entitled *'Bishop Wilson's Journal Letters: addressed to his Family during the first nine Years of his Indian Episcopate,'* 8vo, London, 1863. The last volume was produced under the editorial care of the Rev. Daniel Wilson, M.A., Wadham College, Oxford, who, upon his father's elevation to the episcopate, succeeded him in the vicarage of St. Mary's, Islington, where he still continues filially to follow out the principles by which his predecessor was actuated.

* WILSON, DANIEL, LL.D., was born in Edinburgh, January 3rd, 1816. He was educated in his native town, and displayed a taste for archaeological pursuits, preferring to explore the works of man in the Old Town, the result of which appeared in the year 1848, in his *'Memorials of Edinburgh in the Olden Time,'* 2 vols. 8vo. In 1851, he published *'Pre-historic Annals of Scotland,'* 2 vols.; while his great work entitled *'Pre-historic Man'* appeared in 1862. Numerous papers on archaeological subjects have also issued from his pen. He is also the author of a *Life of Chatterton* and one of *Oliver Cromwell*. In 1853 he was appointed professor of History and of English Literature in the University of Toronto, in which he still continues.

* WILSON, ERASMUS, F.R.S., surgeon and dermatologist, was born in 1809. In 1831 he was elected a member of the Royal College of Surgeons. He has written several anatomical and medical works, but his most important writings are those which relate to cutaneous diseases. He has been for many years the consulting surgeon to St. John's Hospital for Diseases of the Skin, and is the editor of the *'Quarterly Journal of Cutaneous Medicine and Diseases of the Skin.'* In 1869 he presented his fine collection of specimens illustrative of the normal and abnormal structure of the human skin to the Royal College of Surgeons, as also the sum of 5000*l.* for the endowment of a professorship of dermatology. He has accepted the offer made to him to be the first occupier of the chair, and in February, 1870, he commenced his first series of dermatological lectures.

WILSON, GEORGE, M.D., F.R.S.E., younger brother of Daniel Wilson, LL.D., was born at Edinburgh, February 21, 1818. He was one of a numerous family, many of whom were carried off early, his twin brother John surviving until the age of eighteen. He was educated at a private school, on leaving which he entered the laboratory of the Royal Infirmary of Edinburgh as an apprentice, and afterwards the University as a medical student; he also worked in Professor Christison's laboratory. In 1838—9 he visited London, and passed some time as a student in Professor Graham's laboratory at University College. Returning to Edinburgh, he graduated in medicine, and in 1840, received a licence from the Royal College of Surgeons as a lecturer on chemistry, his certificates qualifying the students for the diplomas of that body. He opened a laboratory in Brown Square, near the University, lecturing every day besides teaching a practical class and instructing private pupils. He was very successful as a lecturer on account of his lively wit, cheerful manner, benevolent nature, enthusiasm for his subject, and sweet clear voice. His health, however, suffered from these exertions, and he soon became a permanent invalid. A disease in the foot had troubled him for some years, and in January, 1843, it was amputated. He also suffered from a disease of the lungs and other maladies, in spite of which he displayed a wonderful amount of intellectual activity not only in science, but in literature, including poetry, of which he was very fond. In 1843, he became lecturer on chemistry to the Edinburgh Veterinary College, and held a similar appointment in the School of Arts, where his lectures were very popular. During an illness which confined him to his room, he dictated his *'Text Book of Chemistry,'* published in Chambers' Educational Course. He also wrote for the Cavendish Society, the *'Life of the Hon. Henry Cavendish,'* in which the claims of that distinguished man to the great discovery of the composition of water are minutely discussed and compared with the rival claims of Priestley, Watt and Lavoisier. In the same year, 1851,

he published the *'Life of Dr. John Reid,'* the physiologist. In 1855, he was appointed to the chair of Technology and keeper of the Industrial Museum established in connection with the University. Here he continued to work with great effect during a few years, when in November, 1859, having to pay a professional visit to Glasgow, he caught cold, which brought on inflammation of the lungs and pleurisy. He died on November 22nd of that year, at the early age of 41. A memoir by his sister Jessie (now Mrs. Sime) was published in 1860, appended to which is a list of his works and papers, which includes six volumes, thirty-five papers on scientific subjects, seventeen published lectures and addresses, five biographical sketches, viz., Dalton, Wollaston, Boyle, Black, and James Wilson, two pamphlets and several poems published in Blackwood and Macmillan. His friend, Dr. J. H. Gladstone, has contributed to the memoir an estimate of Dr. Wilson's scientific work, in which he says: "He added to our store of knowledge in chemistry, in physiology, and in natural philosophy; but not so much by actual discoveries as by elucidating points that were previously involved in obscurity. . . . As he published much, with little leisure for quiet research, he also frequently suggested thoughts and processes which others have pursued to a successful issue." His papers on the presence of fluorine in recent fossil plants and animals, in blood, and milk, &c., and in ocean waters, first showed how widely diffused is that remarkable element. But perhaps the most complete of his investigations are his researches on colour-blindness, which are collected in a remarkable volume. He tested the vision as to colour of his brother professors, of his pupils, of the police, of the attendants of a lunatic asylum, and of whole companies of soldiers, infantry, artillery, and hussars, and was thus able to determine with some accuracy, the proportion of the colour-blind, about two per cent. being found defective, in mistaking greens, reds, and browns, and sometimes calling red black; while about five per cent. were found subject to this peculiarity in a minor degree. He showed the danger attending the use of red and green signals on railways, and of the red and green lamps on the port and star-board sides of steam-vessels and of the use of the same colours in light-houses, and he directed the attention of railway companies to the necessity of examining their engine-drivers as to their ability to distinguish coloured signals. All Dr. Wilson's miscellaneous writings are marked by his own fervent piety, but it may be added that none of his writings convey an adequate idea of the inexpressible charm of manner that distinguished the man.

WILSON, HORACE HAYMAN [E. C. vol. vi, col. 748]. This eminent Oriental scholar died on the 8th of May, 1860, aged 64. A complete list of his writings, drawn up by himself a fortnight before his death, is printed at the end of the memoir of him in the *'Annual Report of the Royal Asiatic Society,'* 1860.

WILSON, RIGHT HON. JAMES [E. C. vol. vi, col. 749], political economist, died on the 11th of August, 1860. He had resigned his post as financial secretary, on account of failing health, some months before his death.

WINDHAM, LIEUTENANT-GENERAL SIR CHARLES ASHE [E. C. vol. vi col. 756]. Shortly after his return to England from the East, General Windham was elected member for East Norfolk, April, 1857, but in the following August he went to India on account of the Sepoy mutiny, to take command of a column under Lord Clyde. He was unsuccessful at Cawnpore, but rendered good service at Lahore and elsewhere. In 1861 he received the colonelcy of the 46th regiment; in 1863 was promoted to the rank of lieutenant-general; was nominated K.C.B. in 1865, and in 1867 was appointed commander of the British forces in North America. He was holding this command when the circumstance occurred which led to his death. Whilst in Kansas whither he had gone to inspect some land he had purchased, he was attacked with heart disease and advised to remove to a milder locality. He removed to Jacksonville on the St. John River, and whilst still suffering from illness, the house in which he was residing was destroyed by fire, January 27th, 1870. Exposure and excitement increased the malady and he died on the 3rd of February following, in his 60th year.

WINER, GEORGE BENEDICT. [E. C. vol. vi col. 759.] This distinguished theologian died at Leipzig on the 12th of May, 1858, aged 69.

* WINSLOW, FORBES, M.D. [E. C. vol. vi col. 1034.]

WINSTON, CHARLES, archaeologist, was born in 1814. He was called to the bar in 1845, and practised with success; but his inclination was for the study of antiquities, and espe-

cially those of the art of painting on glass, on which subject he came to be regarded as the leading authority. Mr. Winston examined most of the known examples of ancient glass in this country, made many hundreds of sketches of the more remarkable specimens, and much of that on the Continent, and with the help of Messrs. Powell made numerous experiments with a view to a closer approximation to the pigments and material of the old glass-painters. The results of his earlier investigations are given in his 'Inquiry into the Difference of Style observable in Ancient Glass-Paintings. With Hints on Glass-Painting,' 8vo, London and Oxford, 1847, second edition, 1868. His later inquiries were mostly embodied in memoirs read before the Archaeological Institute, and the Institute of British Architects, and, having appeared in the journals of those societies, were posthumously collected and published as 'Memoirs Illustrative of the Art of Glass-Painting,' with a biographical memoir, 8vo, 1866. These works were of great service in elucidating the history and early practice of the art. But Mr. Winston wrote and thought as an amateur rather than as an artist, and whilst his research was of the highest value, his æsthetic opinions were often misleading. The introduction of the feeble Munich transparencies into Glasgow Cathedral was in a great measure owing to Mr. Winston's advice and influence; and his opinion, there can be little doubt, had much weight in determining to a like unhappy choice the authorities of St. Paul's Cathedral, London. Mr. Winston died suddenly of heart-disease at his chambers in the Temple, on the 3rd of October, 1864. His drawings from ancient stained glass, nearly 800 in number, were exhibited in the rooms of the Archaeological Institute and the Arundel Society in April, 1865, prior to their removal to the British Museum, to which institution he had bequeathed them.

* WINTHROP, ROBERT CHARLES, American politician, orator, and writer, was born at Boston, May 12th, 1809. In 1828 he graduated at Harvard University, then studied law under Daniel Webster, and was admitted to the bar in 1831. Soon abandoning the legal profession, however, he gave his attention to politics; entered the State Legislature of Massachusetts in 1834; filled the office of Speaker of the House of Representatives in 1837 and two following years; and was elected member of Congress in 1840. After a European tour, he became Speaker of the House of Representatives in Congress in 1847. In the contests of that period between Democrats, Whigs, and Free-soilers, Mr. Winthrop shared the alternations of success and defeat—failing to get re-elected to Congress in 1849; obtaining a seat in the Senate in 1850; losing it again in the following year, being defeated in a contest with Mr. Sumner; and experiencing another failure (also in 1851) in a struggle for the governorship of the State of Massachusetts. Since that time Mr. Winthrop has devoted the chief part of his attention to literature. During his parliamentary career he had delivered many speeches and addresses which attracted notice by their logical clearness and scholarly finish. These, or some of them, were afterwards collected, and republished under the title, 'Addresses and Speeches on various Occasions,' 8vo, Boston, 1852. Later publications by him have been 'Lectures on Algernon Sidney,' Boston, 1853; 'Second Series of Addresses and Speeches on various Occasions, delivered in 1852—57,' Boston, 1857; 'George Washington, an Address on laying the Corner-Stone of the Boston Public Library,' Boston, 1855; 'On Christianity, as a Remedy for Social and Political Evils,' Boston, 1857; 'An Address on Learning and the Fine Arts,' delivered on the occasion of unveiling a statue of Washington, Boston, 1859; 'Memoir of the Honorable R. Appleton,' Boston, 1861; 'Life and Letters of J. Winthrop,' 2 vols. Boston, 1864—67; 'Massachusetts and its Early History,' lectures delivered before the Massachusetts Historical Society, Boston, 1869; 'Eulogy pronounced at the Funeral of George Peabody, on the 8th of February, 1870' (twenty-four privately printed copies), 4to, Boston, 1870.

WISEMAN, CARDINAL NICHOLAS. [E. C. vol. vi. col. 766.] Notwithstanding the demands on his time and attention arising from his high position and episcopal duties, Cardinal Wiseman continued to cultivate his literary tastes, and even to appear in the walks of original authorship. In 1858 he published 'Sermons, Lectures, and Speeches, delivered during a Tour in Ireland;' and a little later, a more original and entertaining work, 'Recollections of the Four Last Popes,' 8vo, 1858. He also brought out a new edition of his romance 'Fabriola.' He died on the 15th of February, 1865, and was interred in the Roman Catholic Cemetery, Kensal Green. He was succeeded as Archbishop of Westminster by the Rev. Edward Manning.

Large subscriptions have been raised for the erection of a cathedral at Westminster, as the most fitting memorial of Cardinal Wiseman, the first Roman Catholic archbishop of Westminster. Cardinal Wiseman was the author of the article 'Catholic Church,' in E. C. Arts and Sci. Div. vol. ii. col. 673.

WITHERINGTON, WILLIAM FREDERICK, R.A. [E. C. vol. vi. col. 771.] The veteran landscape-painter continued, despite his advancing years, and, it must be admitted, failing powers, to practise the art in which he had so long delighted. To every exhibition of the Royal Academy he continued to contribute till 1863, in which year he sent no fewer than four pictures. But he sent no more; and, after months of illness, he died, April 10, 1865, aged very nearly 80: he was born on the 26th of May, 1785.

* WÖHLER, FRIEDRICH, a distinguished German chemist, was born at Eschersheim, near Frankfurt-am-Main, July 31st, 1800. In 1812 he entered the Gymnasium at Frankfurt, and in 1819 the University of Marburg, where he made considerable advance in medical studies, which he further pursued at Heidelberg University in 1820—22. Under the tuition of Gmelin, he paid great attention to chemistry and mineralogy. In 1823, after receiving the degree of doctor of medicine, he removed to Stockholm, and placed himself under Berzelius, whom he accompanied on a geological and mineralogical tour. Removing to Prussia in 1825, he was appointed teacher in the newly established Technical School at Berlin, and a year or two afterwards professor in the same establishment. In 1827 he was the first to isolate the metal aluminium, although it was not obtained in masses large enough for manufacturing purposes till many years afterwards by St. Claire Deville. In 1831 he settled at Cassel, where he became professor of chemistry in the Technical School. His first scientific publication of importance, after some papers in the journals, was a German edition of Berzelius's 'Lehrbuch der Chemie,' 1833, fifth edition, 1843. A portion of Wöhler's own work on the principles of chemistry was, indeed, published before this, viz., 'Grundriss der Chemie,' Berlin, 1831, fourteenth edition, Leipzig, 1868. This relates to Inorganic Chemistry; the second part, Organic Chemistry, appeared in 1840, seventh edition, 1868. A French translation of this valuable work, by Grandeau, was published in 1858. During part of his residence at Cassel he carried on, with two partners, a nickel manufactory, having discovered a new method of obtaining that metal in a state of great purity; and published a paper on sulphur mineral-water springs, 'Die Schwefelwasserquellen zu Nenndorf.' Removing to Göttingen in 1836, he was appointed professor of medicine, director of the Chemical Institution, and inspector-general of pharmacy for the kingdom of Hanover. In 1847 he published a forensic-chemical essay on poisoning by arsenic. In 1853 appeared his 'Practische Uebungen in der chemischen Analyse,' Göttingen; of which an English translation by Lieber was published in the same year, and another by Hofmann in 1854. In 1861 he published 'Die Mineralanalyse in Beispielen,' Göttingen. Amongst his other labours has been the translation of eighteen volumes of Berzelius's 'Jahresbericht über die Fortschritte der physischen Wissenschaften.' He has written numerous papers in Liebig's 'Annalen der Chemie und Pharmacie,' Poggendorff's 'Annalen der Physik und Chemie,' and other journals, as well as in the Transactions of the Philosophical Society of Göttingen. In 1864 he was elected foreign member of the Institute of France, as successor to Mitscherlich. He is also a member of the Academy of Sciences of Göttingen, of Vienna, and elsewhere.

WOOD, NICHOLAS, mining and colliery engineer, was born at Sourmires, near Newcastle-on-Tyne, April 24th, 1795. He was educated at the village school of Crawcrook; after which he was sent, in 1811, by Lord Ravensworth, to the Killingworth Collieries, there to learn the occupation of coal-viewer. George Stephenson was there at the time, and the two youths formed an intimacy which lasted till death parted them. Nicholas was consulted by George in reference to the invention of a safety-lamp for the use of pitmen, prepared the first drawing of it, shared the danger of a first experimental trial in a very foul mine, and ever afterwards defended the 'Geordie' against the 'Davy'—asserting the priority of Stephenson over Sir Humphry Davy. Later in life, George Stephenson placed his son Robert under Wood, to learn practical details concerning mineral surveying and engineering. In 1815 Wood published communications to a local journal on this subject, and thus made himself favourably known. Studying the action of the crude locomotives known up to that time on colliery tramways, he, in 1822, boldly advocated the use of such means of traction on tramways

and railways generally, in preference to ropes and stationary engines. In 1825, when the Stockton and Darlington Railway had proved successful, he published his 'Treatise on Railroads,' the first work on the subject, of which several editions have since appeared. He rejected the idea that locomotives could be made to run twenty miles an hour, but nevertheless had great confidence in them; and the sagacious suggestions contained in his 'Treatise' contributed largely to the fostering of railway enterprise. In 1827 he gave evidence before the Parliamentary Committee on the Liverpool and Manchester Railway; and in 1829 acted as one of the judges to award the premium offered by the directors for the best plan of a locomotive. In 1830—31 he communicated two papers to the Natural History Society of Northumberland and Durham, on the geology and palæontology of the district. In later years he pursued the inquiry in papers read before the British Association for the Advancement of Science, on the formations, strata, dykes, and denudation of the coal-fields. In 1844 he removed from Killingworth to Hetton, and was engaged in extensive operations as manager and part proprietor of the Hetton and other collieries, mineral adviser to the Durham Bishopric estates and to Lord Ravensworth, and as a kind of consulting engineer in relation to numerous railway schemes. In 1845 he joined in the "Battle of the Gauges," taking sides with the Stephenson and the narrow gauge. He proposed an official registration of mining industry, as a measure likely to be equally useful to economic geology and to commercial statistics—a suggestion that bore good fruit some years afterwards. He was a member of the local Committee on Colliery Accidents, which procured the passing of the Mines' Inspection Act in 1851. In 1852 he founded the North of England Institute of Mining Engineers, of which he remained president until his death: his annual addresses, and fourteen papers on mining subjects, possessed great practical value. A paper, 'On Improvements in the Working of Coal Mines,' was published in the 'Proceedings of the Institution of Mechanical Engineers.' At Hetton, in 1855, he endeavoured to establish a school or college "for the cultivation, improvement, and teaching of mining science, especially as applicable to coal mines;" it failed at the time, but led to the founding of the Government School of Mines. Mr. Wood, who was a fellow of the Royal and Geological Societies, and a member of the Institutions of Civil Engineers and Mechanical Engineers, died on the 19th of December, 1865.

WOODWARD, BERNARD BOLINGBROKE, F.S.A., was born at Norwich, in 1816, and was the eldest son of Samuel Woodward, author of the 'Geology of Norfolk.' On leaving school he was placed in Messrs. Gurney's bank; but his thoughts turned towards the ministry, and he entered Highbury Theological College; at the end of his term there he graduated B.A. at the London University, and accepted a call to the pastorate of the Independent Church at Harleston, near Bungay. Whilst here he edited 'Barclay's English Dictionary,' and otherwise assisted Messrs. Child in carrying various works through the press. Removing to London, in 1850, he devoted himself mainly to literary work, wrote a 'History of Wales from the Earliest Times,' 1851, a 'History of America to the End of the Administration of President Polk,' and contributed to various journals. He found, at length, his right place on receiving from Prince Albert the appointment of Royal Librarian. The books in the royal library required rearranging, and the collection of drawings by the old masters was in a state of utter confusion. Encouraged by the Prince, who watched his labours with great interest, Mr. Woodward thoroughly examined the long-hidden treasures, and rearranged, remounted, and classified the drawings and prints, photographed the choicer specimens, and placed the whole in excellent order for exhibition and reference. On the death of the Prince Consort Mr. Woodward's labours were more arduous and responsible, and he received the title of Librarian in Ordinary to the Queen, and Keeper of Prints and Drawings at Windsor Castle. The examination of the Windsor drawings led him to devote more attention to art, with which he eventually acquired a considerable acquaintance. In May, 1863, he published the first number of the 'Fine Arts Quarterly Review,' and he continued to edit it as long as it appeared; but it was a post for which he had no special qualifications, and to that, no doubt, the non-success of the work is to be partly attributed. Mr. Woodward continued diligently occupied on his various labours till his death, which occurred somewhat suddenly, from heart disease, at his residence, Royal Mews, Piccadilly, October 12th, 1860. He had just completed the descriptive text of a richly illustrated monograph of Windsor Castle; also that of a series of photographic reproductions entitled 'Specimens of the Drawings of Ten Masters from the Royal Collection at Windsor

BIOG. DIV.—SUP.

Castle,' folio, 1870; and he commenced a chronological dictionary which has been completed by Mr. W. L. R. Cates, under the title of an 'Historical and Chronological Encyclopædia.' A revised edition of his 'Natural History of the Year,' was published in 1872.

WOODWARD, SAMUEL PEARCE, naturalist, brother of the preceding, was born September 17th, 1821. In 1838 he entered the London University (now University College), and obtained temporary employment in the British Museum library. From 1839 to 1845 he was subcurator of the museum belonging to the Geological Society of London. In 1845 he became professor of botany and natural history at the Royal Agricultural Society, Cirencester. In 1848 he was appointed an assistant in the department of geology and mineralogy in the British Museum. Shortly before his death he was appointed one of the examiners in geology and palæontology to the University of London. He died at Herne Bay, July 11th, 1865. From his earliest youth he had delicate health, and for the last twenty years of his life suffered from chronic asthma. He, nevertheless, worked hard, and contributed numerous articles to the scientific literature of the day. Amongst these may be mentioned his paper on the family *Rudistes*, in the 'Quarterly Journal of the Geological Society,' vol. xi., for which the Wollaston donation fund of 1854 and 1857 was awarded him. He prepared the geological map of England and Wales published by the Society for the Diffusion of Useful Knowledge, under the superintendence of Sir R. I. Murchison; and he assisted Professor Owen in the portion of his 'Palæontology' which relates to the invertebrates. His principal work was a 'Manual of Recent and Fossil Shells,' 8vo, London, 1851—56, second edition, 1866. He was one of the founders of the Cotteswold Naturalists' Field Club, and a fellow of the Geological and of the Linnean Society.—A younger brother,

* HENRY WOODWARD, F.G.S., F.Z.S., has also attained distinction as a geologist and writer on palæontology. He has given special attention to the structure and classification of the fossil Crustacea, on which subject he has written several reports for the British Association; as also several papers which are contained in the 'Geological Magazine,' the 'Quarterly Journal of the Geological Society,' &c. He also contributed the first portion of a monograph on the *Merostomata*, to the volumes of the Palæontological Society. Mr. Woodward is assistant keeper of the geological department of the British Museum, and editor of the 'Geological Magazine.'

* WOOLNER THOMAS, A.R.A., sculptor, was born about 1822. His earliest appearance as an exhibitor at the Royal Academy, was in 1843, with a model of 'Eleanora.' A model of 'Alastor,' in 1846, and various other works of a like ambitious order, followed; but, before settling down in London, Mr. Woolner paid a visit to Australia, and secured friends and friendly commissions there. His earliest decided success was obtained by the medallions in high relief of eminent contemporaries, including Wordsworth, Carlyle, Tennyson, Browning, Millais, &c., and which procured him commissions for numerous similar portrait-medallions. Later he executed a like series of marble busts, among them being vigorous and characteristic portraits of Rajah Brooke; Sir William Hooker; Sir Francis Palgrave; the Rev. J. H. Newman; Archdeacon Hare; Professor Sedgwick, and Alfred Tennyson, for Trinity College, Cambridge; Gladstone, for the Bodleian Gallery, Oxford (the pedestal having reliefs from Homer); Darwin, Carlyle, Sir Hope Grant, Sir Bartle Frere, Bishop Temple, &c. Mr. Woolner has executed several admirable statues, of which that of Lord Bacon, in the Oxford Museum, may be cited as an example for purity of line and form, largeness of style, characteristic expression, variety and truth of surface. His poetic statues and groups and reliefs take a wide range, including, among others, such subjects as 'Puck,' 'Ophelia,' 'Love,' 'Elaine with the shield of Sir Lancelot,' and 'Virgilia bewailing the Banishment of Coriolanus,' 1871. Mr. Woolner has also designed several monumental works and some of an ornamental character. He was elected A.R.A. in 1870.

WROTTESELEY, JOHN, F.R.S., SECOND BARON, a distinguished astronomer, was born at Wrottesley Hall, near Wolverhampton, August 5th, 1798. In 1817 he graduated first class in mathematics at Oxford University. He then studied law, and for a while practised at the equity bar; but, directing his attention to astronomy, he became more and more absorbed in the pursuit, and in 1829—31 built and fitted up an observatory at Blackheath. Amongst other apparatus, he furnished it with a fine transit-instrument of sixty-two inches focal length, and three and three-quarter inches clear aperture; and set himself a definite work to do, of lasting usefulness to practical astro-

nomers, though not likely to lead to brilliant discoveries on his own part. Taking the Astronomical Society's Catalogue of 2881 stars, he selected 1318 of the sixth and seventh magnitudes, of which he proposed to determine the right ascension with great accuracy, by means of eight or ten observations on each star. This work occupied him and his assistant, Mr. Hartnup, for four years, during which time they made 12,007 observations and measurements. The memoir and tables recording these labours were printed in the tenth volume of the Royal Astronomical Society's 'Memoirs,' and were rewarded with the gold medal of the Society in 1839. Mr. Baily, the president, on presenting the medal, drew attention to the lasting importance of the observations. In 1835 Mr. Wrottesley (he did not succeed his father in the peerage till 1851) furnished a Supplementary Catalogue of Fifty-five Stars to vol. xii. of the Society's 'Memoirs.' In 1842 he commenced the erection of an observatory at Wrottesley Hall, and provided it with a fine equatorial, ten and three-quarter feet focal length, by seven and three-quarter inches aperture; the object-glass having a flint-glass lens by Guinaud, and a lens of crown glass by Dollond. He devoted several years to a patient examination of such stars as seemed most likely to exhibit sufficient parallax to determine their distance; and the result of these observations was printed in the 'Philosophical Transactions' of the Royal Society in 1851. He next devoted three years to an examination of 1009 stars in the British Association Catalogue, made five observations on each, and determined their right ascensions with great accuracy; the results were published in vol. xxiii. of the Royal Astronomical Society's 'Memoirs.' From 1841 to 1843, he was president of the Royal Astronomical Society, and delivered many addresses on the presentations of medals, &c. From 1854 to 1858 Lord Wrottesley was president of the Royal Society. In 1859 he communicated to the Royal Society a memoir 'On the Application of the Calculus of Probabilities to the Results of Measurements of the Positions and Distances of Double Stars.' It relates to small but singular discrepancies in the measurements made by different observers on the same night, and by the same observers on different nights. This was one of the instances in which he devoted a large amount of

patient research to a subject intended to facilitate the computations of other astronomers, rather than to add to his own fame. In 1860 he completed a 'Catalogue of the Positions and Distances of 398 Double Stars,' which was printed in vol. xxix. of the Astronomical Society's 'Memoirs.' Lord Wrottesley died on the 27th of October, 1867. He was an active member of the Council of the Society for the Diffusion of Useful Knowledge during the whole term of its existence, and wrote the 'Treatise on Navigation,' published in the Society's 'Library of Useful Knowledge.'

* WURTZ, CHARLES ADOLPHE, a French chemist of eminence, was born at Strasburg, November 26th, 1817. He studied at the Protestant Gymnasium in his native city, went through a course of medical tuition, and received the degree of doctor in 1843. He then removed to Paris, where, in 1845, he prepared a course of studies on organic chemistry. In 1846 he was appointed chemical director of the School of Art and Manufactures; in 1851, professor in the Agronomic Institution of Versailles; and in 1854, professor of medical chemistry and pharmacy, performing the duties which had previously devolved upon Dumas and Orfila. In 1856 he was chosen member of the Academy of Medicine, after this a member of the Committee on Hygiene, and then a member of the Philomathique Society and of the Chemical Society. In 1865 he obtained the Imperial biennial prize of 20,000 francs on the recommendation or nomination of the Academy of Sciences. In 1867 he succeeded Pérouze in the chemical section of the Academy; and in 1869 was made commander of the Legion of Honour. Besides papers in the 'Annales de Chimie et de Physique,' the 'Répertoire de Chimie Pure,' and other scientific journals, M. Wurtz has published, 'Sur l'Insalubrité des Résidues provenant des Distilleries,' 1859; 'Leçons de Philosophie Chimique,' 1864; 'Traité Élémentaire de Chimie Médicale,' 1864—65; 'Leçons Élémentaires de Chimie Moderne,' 1866—68; and his principal work, 'Dictionnaire de Chimie Pure et Appliquée,' large 8vo, 1868 and subsequent years. The valuable introduction to this work has been published in English as 'A History of Chemical Theory from the Age of Lavoisier to the Present Time,' translated by H. Watts, 8vo, London, 1869.

X

XIMENES DONOSO, DON JOSEF, a celebrated Spanish painter, was born at Consuegra in 1628. He learned the rudiments of painting of his father, Antonio Ximenes; then studied in the school of Francisco Fernandez; and afterwards went to Rome, where he stayed seven years, devoting much of his time to architecture. As a painter, he imitated the Italian manner, which he is said to have introduced into Madrid. His chief works are the frescoes in the convent of S. Francisco at

Madrid; the chapel of S. Juan de Letran, Valencia; the chapel of Val de Christo, Segorbia; and in the cathedral of Toledo. He also painted many pictures for private patrons. By Spanish writers he is praised for his correct academic style; but he was deficient in original power. Ximenes Donoso practised also as an architect. Several buildings are attributed to him, but none of any consequence, and his taste in architecture was corrupt. He died September 14th, 1690.

Y

YARRANTON, ANDREW, a promoter of many ingenious schemes for the advancement of industry and commerce, was born at Larford, Worcestershire, in 1616. In early life he was engaged in a linendraper's shop at Worcester, but soon quitted it; and on the breaking out of the civil war joined the Parliamentarians, and rose to the rank of captain. Little is known of his military career, except that he discovered and frustrated one of the plots of the Royalists, for which he was thanked and rewarded by Parliament in 1648. When Oliver Cromwell rose to power, Yarranton, like many of the Presbyterians, quitted the army. In 1652 he commenced ironworks near Bewdley, and, aided by his wife, established a small linen factory for the employment of the villagers around. He made, at his own cost, improvements in the navigation of the Severn, near Bewdley. After two years' imprisonment (1660—62) for supposed plotting against the Royalists, he published a vindication, 'A Full Discovery of the Presbyterian Sham Plot.' He

engaged in works of river engineering—deepening the Salwarp between Droitwich and the Severn, improving the Stour between Stourport and Kidderminster, planning a canal from the Severn to the Thames (almost exactly in the line of route practically adopted a century later), and improving the Avon from Tewkesbury to Stratford. His active and inventive mind was always at work on new plans. He urged the Worcestershire farmers to adopt rotation of crops, and published a treatise, of which the second edition bore the title, 'The Improvement Improved by a Second Edition of the Great Improvement of Lands by Clover,' 12mo, London, 1663. He surveyed and planned docks for London; he went to Saxony in 1665, learned how tin plates were made, and afterwards established a manufactory of them in his native county; he went to Holland to inquire into the causes of the prosperity of that country, and returned home full of projects for the encouragement of trade and industry—fisheries, river improvements, linen manufac-

tures, new developments of the iron and woollen manufactures, the establishment of land registry, and of loan banks on the security of land, the formation of new harbours, improvements in the navy, &c. These projects supplied the subjects of 'England's Improvement by Sea and Land. In two parts,' 8vo, with folding plates and maps, 1677, which was published about 1680; both attacked in a pamphlet, 'Coffee-House Dialogues between Captain Y. and a Baronet of the Middle Temple,' and defended in 'England's Improvements Justified, and the Author thereof, Captain Y., Vindicated,' &c. Dunkirk was at that time held by the English; and one of his pamphlets, or rather broadsheets, was, 'A New Map of the Town of Dunkirk, Harbour, and Castle on the Sea, with Reasons for their Demolition,' folio, 1681—to prevent them from falling into the hands of the French. Nothing beyond this date (1681) seems to be known of this remarkable man.

* YOLLAND, COLONEL WILLIAM, R.E., was born in 1810. After studying at the Royal Military Academy, Woolwich, he received his commission as second lieutenant of Royal Engineers in 1828. From 1830 to 1835 he served in Canada. On his return he joined Colonel Colby in the operations connected with the Ordnance Survey, in which duties he was engaged from 1838 to 1854. He was stationed successively at the Survey offices at the Tower, Southampton, Dublin, and Enniskillen. The results of these labours, and of some which were completed before he joined the Survey, were recorded in 'An Account of the Measurement of the Lough Foyle Base in the North of Ireland during the Years 1827—8—9,' 'Astronomical Observations made with Ramsden's Zenith Sector,' and especially 'Astronomical Observations made with Airy's Zenith Sector between the Years 1842 and 1850, for the Determination of the Latitudes of various Trigonometrical Stations in Great Britain and Ireland,' 4to, 1852. He wrote the article 'Geodesy' in the 'Mathematical Course' prepared and published for the Royal Military Academy. In 1854 he was appointed one of the inspectors of railways under the Board of Trade—an office which he has filled to the present time (1872). In 1856 he was nominated a member of a military commission appointed to inquire into the best mode of training officers for the scientific corps of the army, i.e., the Artillery and the Royal Engineers; and in pursuance of this inquiry, he visited the military establishments of France, Prussia, Austria, and Sardinia. Colonel Yolland has passed through all the grades of promotion from second lieutenant to colonel of Royal Engineers; but his duties are now chiefly concerned with civil-engineering and surveying, in connection with the Board of Trade.

YOUNG, JOHN, a mezzotinto engraver of some ability, who flourished at the end of the last and early part of the present century. His most noted print is from Mortimer's picture of the 'Great Fight between Broughton and Stevenson.' In 1815 he engraved for the Sultan Selim III. 'A Series of Portraits of the Emperors of Turkey, from the Foundation of the Monarchy to the Year 1815,' atlas folio, of which nearly the whole edition was sent to the Ottoman court. Young is now chiefly remembered by his etchings and catalogues of the Stafford, Grosvenor, Angerstein, Miles, and Leicester galleries (4to, 1820, &c.), which, though the etchings are often incorrect in drawing, and the descriptions superficial, are handy and useful works of reference. Young was engraver in mezzotinto to the king, and for several years keeper of the British Institution. He died March 7th, 1825.

* YVON, ADOLPHE, a distinguished French painter, was born at Eschwiller (Moselle), in 1817, and was a pupil of Paul Delaroche. His first exhibited picture was a portrait at the Salon, 1842. In 1843 he went to Russia, and from the studies which he made there he painted several pictures, exhibited at the Salon in 1847 and following years. In 1846 he exhibited the 'Remorse of Judas,' and he painted 'The Seven Capital Sins' and other theological and allegorical subjects. But he discovered the path in which he was to achieve success when he painted his Russian battle-pieces (1850, &c.), especially 'Ney leading the Rear-Guard in Russia' (1855). These pictures procured him the honour of being sent to the Crimea to represent the achievements of the French arms. His first great picture of the series, 'The Capture of the Malakoff,' was assigned the post of honour at the Salon of 1857, and, with the rest of the series, was placed at Versailles. The success of these led to his receiving a command to accompany the staff of Napoleon III. in the Italian campaign. Of his pictures of leading events in these campaigns, painted for Versailles, four reductions made by him for the Emperor—three of scenes at the Malakoff, and the fourth, 'The Battle of Solferino'—were exhibited in the International Exhibition of 1862. At the International Exhibition of 1871 appeared only 'Russian Peasants.' M. Yvon's battle-pieces are regarded as the perfection of art by his countrymen. They are usually of episodes in a battle; extremely clever in treatment; full of life, vigour, and movement; well drawn, bright in colour, and perspicuous in arrangement. But they are theatrical in effect, and deliberately inexact, everything being rendered subservient to the glory of France and the Emperor. M. Yvon received the cross of the Legion of Honour in 1855, and the great medal in 1857.

Z

* ZAHN, JOHANN KARL WILHELM, a celebrated German archaeologist, was born at Rodenberg, in Schaumburg, August 21st, 1800, and studied architectural design in the Cassell Art Academy. During 1822—24 he studied at Paris, and then proceeded to Italy, where he devoted himself particularly to the remains of Pompeii. On his return to Germany he published the result of his examination of the wall-paintings of that city, 'Neuentdeckten Wandgemälde in Pompeji,' Stuttgart, 1828. This work attracting much notice, he was nominated professor in the Berlin Art Academy, and in 1830 directed to return to Italy to complete his inquiries. He accordingly spent that and the three following years in studying, drawing, and modelling the antiquities in the cities and galleries of Naples, Pompeii, Calabria, and Sicily. During those years appeared his great work on the pictures and ornamental art of Pompeii, &c., 'Die schönsten Ornamente und merkwürdigsten Gemälde aus Pompeji, Herculanium, und Stabia,' folio, Berlin, 1828—30. He was also, through the interest of Prince Metternich, employed in making casts, models, and reproductions of the principal bronzes, vases, &c., in the Museo Borbonico. After his return to Berlin he published, 'Auserlesene Verzierungen,' Berlin, 1840—44; 'Ornamenten aller klassischen Kunstepochen,' folio, third edition, 1861, &c.; and various essays and designs of much value.

* ZIEBLAND, GEORG FRIEDRICH, a distinguished German architect, was born at Regensburg, on the 7th of February, 1800, and studied in the Munich Academy under J. M. Quaglio and

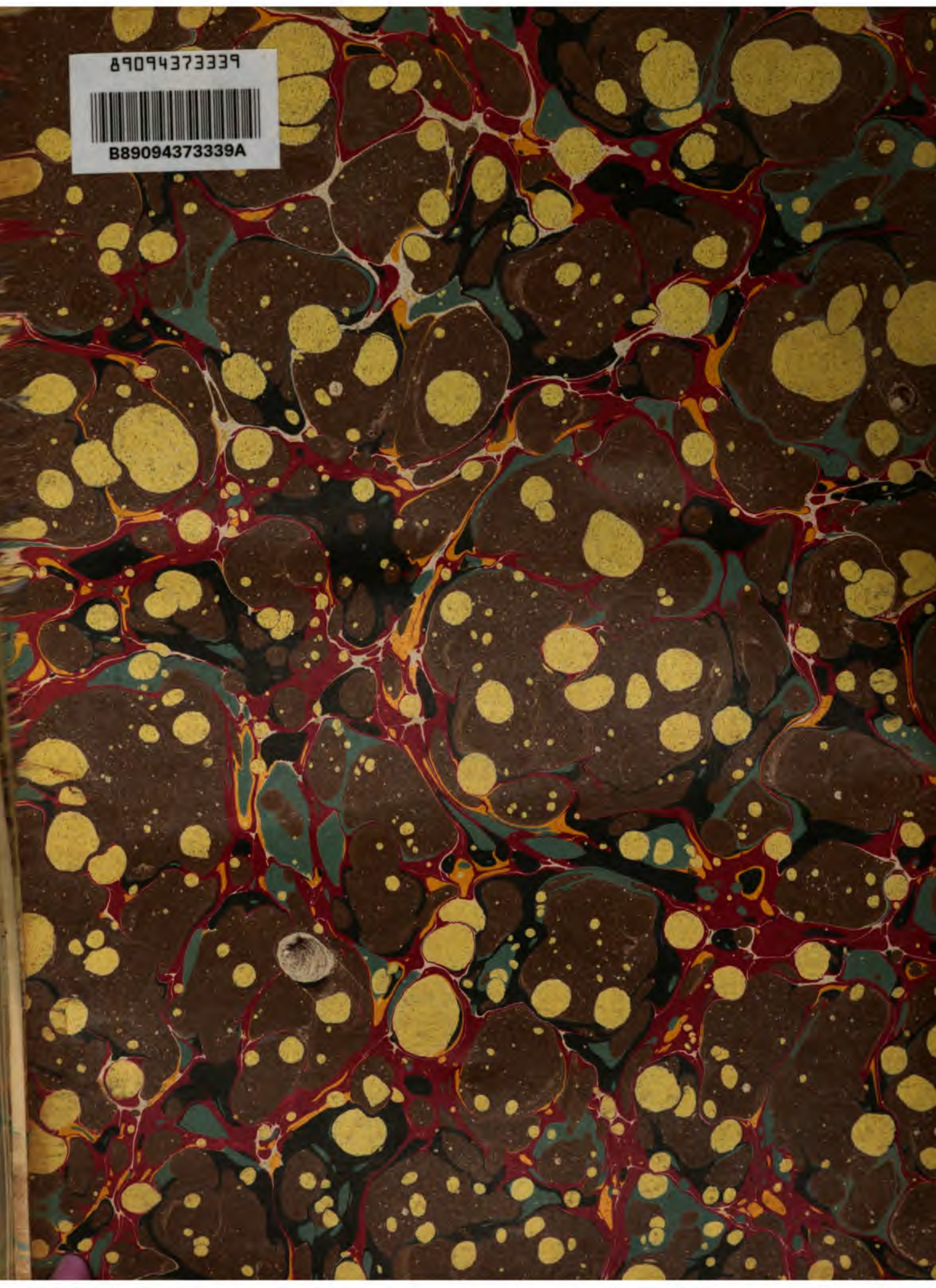
Fischer. Some designs made by him having attracted the notice of Ludwig I. of Bavaria, he was sent by the King in 1827 to study the early ecclesiastical architecture of Italy. While at Rome he decorated the walls of Ludwig's residence, the Villa Malta, with paintings copied from those of Pompeii. On his return to Munich in 1829 he was appointed a member of the Council of Architecture, and erected the land-tax commission's house, and some other official buildings; completed the Maria-Hilf Church in the suburb of Au, commenced by Ohlmüller; and erected royal and other monuments in the church of St. Cajetan, at Aibling, &c. But the work which has made Ziebland's great reputation is the Basilica of St. Bonifacius, commenced in 1835, and completed in 1850, at the cost of King Ludwig, the most perfect reproduction hitherto made of a Roman basilica. It is 283 feet long, and 113 feet wide; and is of red brick, the interior being supported by sixty-four monolithic columns of grey Tyrolean marble, with white marble capitals. The pavement is of marble; the roof, open timber-work, elaborately painted; on the walls are Hess's most celebrated series of frescoes. St. Bonifacius is the largest and most splendid of the modern churches of Munich, and of its class the finest in Germany.

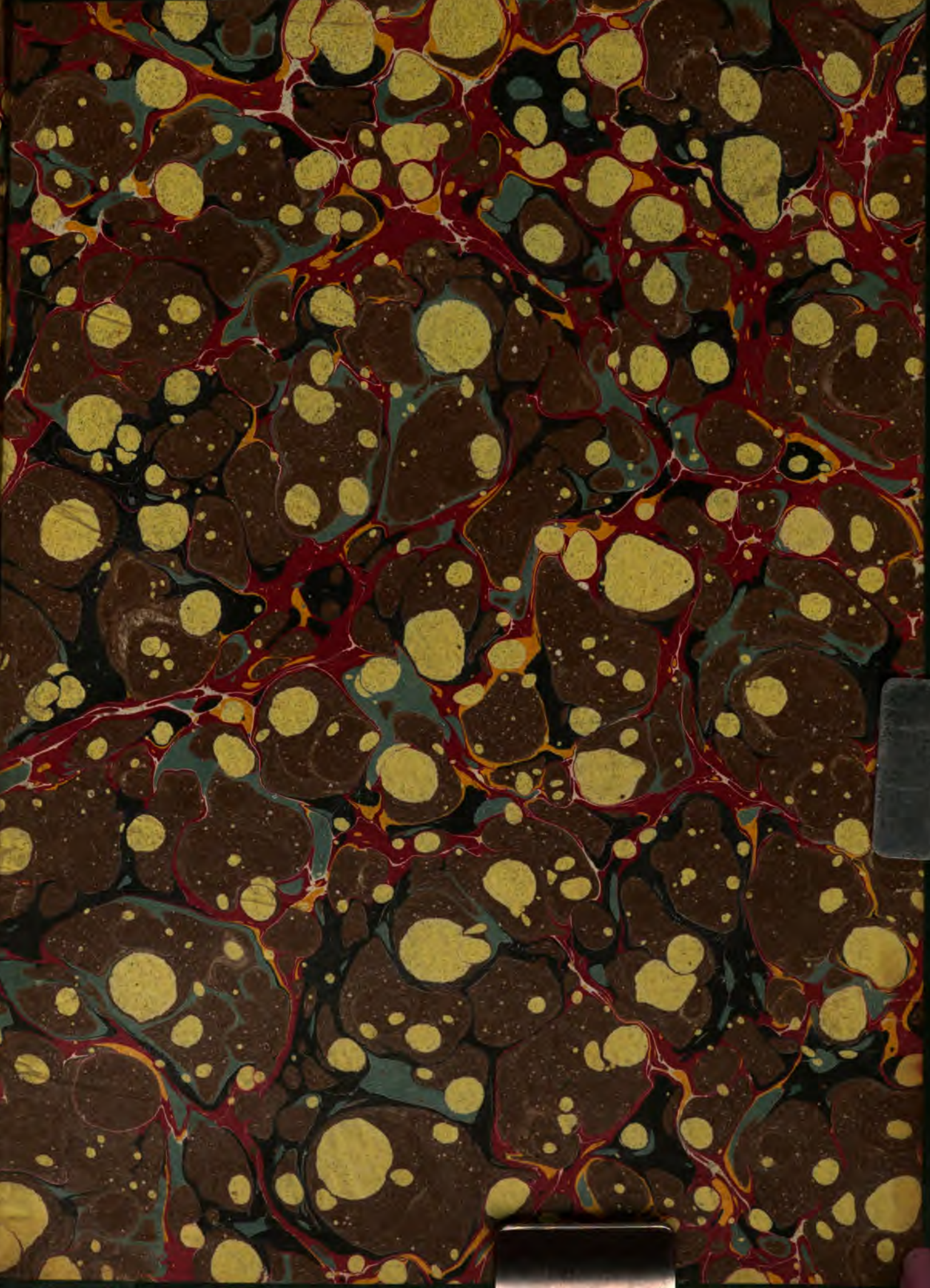
ZIEGLER, CLAUDE LOUIS, French painter and designer in ornamental art, was born at Langres in 1804, and studied under M. Ingres. His early works—'Giotto and Cimabue,' the 'Death of the Foscari' (1830), and the portrait of Marshal de

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